

Women's Entrepreneurship Policy Research: A 30-year review of the evidence

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Abstract

This paper focuses on women's entrepreneurship policy as a core component of the entrepreneurial ecosystem. We use a systematic literature review (SLR) approach to critically explore the policy implications of women's entrepreneurship research according to gender perspective: feminist empiricism, feminist standpoint theory and poststructuralist feminist theory. Our research question asks whether there is a link between the nature of policy implications and the different theoretical perspectives adopted, and whether scholars' policy implications have changed as the field of women's entrepreneurship research has developed. We concentrate on empirical studies published in the "Big Five" primary entrepreneurship research journals (SBE, ETP, JBV, JSBM and ERD) over a period of more than 30 years (1983-2015). We find that policy implications from women's entrepreneurship research are mostly vague, conservative, and center on identifying skills gaps in women entrepreneurs that need to be 'fixed', thus isolating and individualizing any perceived problem. Despite an increase in the number of articles offering policy implications, we find little variance in the types of policy implications being offered by scholars, regardless of the particular theoretical perspective adopted, and no notable change over our 30-year review period. Recommendations to improve the entrepreneurial ecosystem for women from a policy perspective are offered, and avenues for future research are identified.

Keywords: Women's entrepreneurship, ecosystem, policy implications, gender research, systematic literature review (SLR)

JEL Classifications L26 L53 Z18

1 Introduction

Women make up over 40% of the global workforce; they bring productive talent to the labor market, and control \$20 trillion in annual consumer spending. Globally, there are more than 126 million women entrepreneurs starting or running businesses, and 98 million

operating established businesses; these women innovate and generate employment opportunities (GEM, 2015, p.10). As a consequence, women's entrepreneurship has attracted increased scholarly and political attention in recent years (Henry, Foss & Ahl, 2016; Jennings & Brush, 2013).

Entrepreneurial ecosystems are important support structures for economic development (Kantis & Federico, 2012) because they provide the necessary human, financial and professional resources needed for businesses to survive and grow; they facilitate interaction with external stakeholders; provide access to valuable networks, as well as local and global markets, and support business development (Isenberg, 2010; Mason & Brown, 2014). Improving their effectiveness can influence entrepreneurial behavior and enhance the survival and growth of established businesses (Welter, 2011; WEF, 2013).

In this paper, we focus on a relatively under-researched area, entrepreneurship policy - a core component of the entrepreneurial ecosystem - and highlight its role in enhancing our understanding of women's entrepreneurship (Zahra & Nambisan, 2012). We critically explore the policy implications of empirically-based published research on women's entrepreneurship according to gender theoretical perspective over a period of more than 30 years. Our rationale for adopting this particular focus stems from the recognition that there is increasing pressure on scholars, regardless of their discipline area, to demonstrate the influence of their research (Steyaert, 2011). Consequently, entrepreneurship researchers have become aware of the disparity between knowledge generated by academic researchers and that which can be usefully employed by entrepreneurs and policy makers (Steffens et al., 2014).

Entrepreneurship scholars have proved that gender does matter, and that entrepreneurship itself is a gendered phenomenon (Jennings & Brush, 2013). However,

notwithstanding some valuable contributions¹, it is not clear whether scholars have been concerned with the impact of their research to the same extent, particularly regarding policy implications. This study seeks to fill this gap and build new knowledge on how policy implications can create effective ecosystems for women's entrepreneurship.

We ask whether there is a link between the extent and nature of policy implications and the feminist theoretical perspective adopted, i.e. feminist empiricism, feminist standpoint theory and post-structural feminism. We further explore whether policy implications have changed over time as the research field has developed. The potential relationship between the use of feminist perspectives and policy implications in research on gender and entrepreneurship is an unexplored theme. The rationale for adopting this approach is that these perspectives conceive of women (and men), their roles in society, and, fundamentally, the role of the policy element within the entrepreneurial ecosystem in distinctly different ways. Theoretically, we expect research adopting different gender perspectives to deliver different policy recommendations.

The paper contributes to extant gender and entrepreneurship theory by highlighting the importance of policy as a core component of the entrepreneurial ecosystem, and by furthering our understanding of how scholarship on women's entrepreneurship relates to policy. Our findings support that 'One size' policies simply do not 'fit all', nor will they be effective if offered in isolation (Mason & Brown, 2014). If the entrepreneurial ecosystem for women is to be improved from a policy perspective, future research must move beyond consistently recommending "fixing women" through education and training. Future research needs to

¹ Ahl & Nelson (2015) highlighted ineffective solutions to structural level problems; Kalnins & Williams (2014) stressed the importance of supporting existing rather than start-up women's businesses, and Kvidal & Ljunggren (2014) focused on introducing a gender dimension into policy making.

study both the resource providers and the connectors within the ecosystem, as well as the institutional environment embedded within it.

The paper is structured as follows: We first discuss the entrepreneurial ecosystem, and position policy as a key component therein. We then review relevant gender and entrepreneurship literatures, explain our methodological approach and present our findings in the context of gender theory. Next, we highlight the implications of our findings for policy makers, and identify avenues for future research. The final section presents our conclusions.

2 Entrepreneurial Ecosystems

According to Kantis & Federico (2012), the entrepreneurial ecosystem comprises a number of interconnected and mutually impacting elements that interact to create a supportive environment for new venture creation and growth. Although Stam (2015) suggests that the entrepreneurial ecosystems approach is relatively new, several different ecosystems models have been developed (Mason & Brown, 2014). Van de Ven (1993), for example, noted the evolution of entrepreneurial ecosystems through a set of interdependent components interacting to generate new ventures over time. Characteristics inherent in this conceptualization include openness, voluntarism, relationships and evolution, which are directly opposite to those typically associated with economic theories dealing with a firm's relationship to its environment (i.e. rationality, structure, strategy, control). Subsequently, Moore (1996) defined a business ecosystem as 'an economic community supported by a foundation of interacting organizations and individuals – the organisms of the business world.'

Building on Isenberg (2010) and the World Economic Forum (WEF, 2013), Mazzarol (2014) suggests that there are nine components of the entrepreneurial ecosystem. While each

entrepreneurial ecosystem is unique, these components can be applied to describe and analyze any country's ecosystem. In Mazzarol's framework, *government policy* is highlighted as the first and most important component of an entrepreneurial ecosystem because policy directly affects entrepreneurs and the new ventures they seek to create. Furthermore, policy can often have a greater impact on smaller businesses; this is especially important given that the majority of ventures in any ecosystem are SMEs. However, government policy not only deals with the entrepreneurial or small business, it also includes a wide cross-section of policies relating to taxation, financial services, telecommunications, transportation, labour markets, immigration, industry support, education and training, infrastructure and health (Mazzarol, 2014: 9-10). Hence, government policy affects everyone, not just entrepreneurs. While, in this paper, we support Mazzarol (2014) in arguing that the policy dimension is the most important component of the entrepreneurial ecosystem, it is clearly not the only one, nor can it operate in isolation. The *regulatory framework and infrastructure* component, for example, is created and directly influenced by policy, and this in turn impacts the prevailing level of entrepreneurial activity. The *funding and finance* component refers to the availability of financial capital, which may be in the form of micro-loans, venture capital and other types of formal and informal debt and equity for new and growing ventures. *Culture* refers to societal norms, including society's tolerance of risk and/or failure, the perceived social status of the 'entrepreneur', and an individual's drive and creativity. The availability of *mentors, advisers and support systems* is important to help develop and support entrepreneurs at the various stages of their entrepreneurial journey. Mazzarol also highlights the role of *universities as catalysts* within the entrepreneurial ecosystem, encouraging entrepreneurial development, creating an entrepreneurial mind-set and offering – often in conjunction with external providers and local agencies - appropriate *education and training* programs for entrepreneurs and established businesses. This latter component links directly to the *human capital and*

workforce element of the ecosystem in ensuring relevant training and skills development of workers. Mazzarol's (2014) final ecosystem component relates to *local and global markets*, which are important in an effective ecosystem because growing businesses need appropriate access to large domestic and international markets through corporate and government supply chains. These nine ecosystem components are not entirely mutually exclusive; they overlap, interconnect and are mutually impactful (Isenberg, 2010; Mazzarol, 2014). While they impact everyone – regardless of gender – some of these components impact more significantly on women than on men, or may be less accessible to women. For example, with regard to 'soft' ecosystem components' (i.e., education and training; mentors and advisors; human capital and workforce; access to markets), appropriate education, training and mentoring programs could help encourage women's entrepreneurial aspirations and provide the entrepreneurial and management skills required for successful business start-up and development. As there are still significantly fewer women than men entrepreneurs globally (GEM, 2015), this is an important area of ecosystem influence. Furthermore, in view of studies reporting women's lack of management experience (Mukhtar, 2002), such programs could be especially valuable for those women who have not had an opportunity to hold a management role in their careers and gain the necessary management skills for business ownership.

In terms of the 'hard' ecosystem components' (funding and finance, and universities – in the context of their physical facilities, i.e. incubators, laboratories and equipment), there is extensive literature reporting the significant challenges women face in accessing appropriate funding to start and grow their businesses, especially with regard to venture capital (Alsos et al., 2006; Orser et al., 2006). Hence, any improvement in this aspect of the ecosystem could help alleviate some of these challenges, potentially improving the rate of development and growth amongst women-owned businesses. In terms of university facilities, there are notably fewer women who access university incubation facilities or related supports (Foss & Gibson,

2015), or start businesses in technology or STEM-based sectors (Anna, Chandler, Jansen, & Mero, 2000) that typically avail of such supports.

The ‘compliance’ ecosystem components (policy; regulatory frameworks) may inadvertently discriminate against women’s businesses if, for example, enterprise policies - as is often the case - favor high-tech, growth and export-oriented manufacturing sectors that are typically male dominated (Anna et al., 2000). Small, local and service-oriented businesses, which are most often associated with women, may not be able to avail of such supportive policies to the same extent. Appropriate health and welfare policies, including sick and maternity benefits, also need to be in place to allow women to maintain their participation in the labor market while taking leave to have children.

The ‘culture’ component, “that complex whole which includes knowledge, belief, art, morals, law, custom and any other capabilities and habits acquired by man as a member of society” (Tylor, 1974, p.1), has, arguably, one of the most profound impacts on women. Studies on entrepreneurship in the Middle East, Africa and some Asian countries, for example, have shown how culture has disadvantaged women by preventing them from owning a business - due to religion or societal norms - or privileging their role as wife and mother over any other to which they may aspire (Roomi, 2013). Unfortunately, culture is essentially an embedded phenomenon shaped by generations, and thus, is not easy to influence, despite any changes in government or legislation.

Notwithstanding its value as an analytical tool, the entrepreneurial ecosystem as a theoretical lens has been criticized for being underdeveloped, lacking causal depth, and having a limited evidence base (Spiegel, 2015; Stam, 2015). As highlighted above, a review of the literature not only reveals several different applications of the concept (Isenberg, 2010;

Moore, 1996; Van de Ven, 1993), but also demonstrates the many frustrations associated with its application (Welter, 2011; Zahra, 2007).

2.1 The Policy Dimension of Entrepreneurial Ecosystems

The policy dimension of the ecosystem has been recognized as a particularly powerful ecosystem component (Mason & Brown, 2014; Mazzarol, 2014; Stam, 2015), not least in the context of women's entrepreneurship. It was not long ago that women did not have the right to inherit, the right to own a business, or the right to borrow money without her husband's co-signature (and this is still the case in some countries). Business ownership has, to a large extent, been granted to women through policy changes. Policy - in the form of government support for and understanding of business start-ups, and in terms of the ease of starting and operating a business in a particular region/country (WEF, 2013) - is important for economic growth. Furthermore, policy is a context-specific force; it is embedded in a country's institutional framework and, as a consequence, has considerable ability to influence entrepreneurial behavior regionally, nationally and globally (Welter, 2011); this is particularly the case for women's entrepreneurship in both developed and developing economies (Acs, Bardasi, Estrin & Svejnar, 2011; Estrin & Mickiewicz, 2011). Finally, it has been argued that good governance is a necessary prerequisite in supporting and stimulating growth oriented entrepreneurial activity (Mendez-Picazo et al., 2012); thus, effective entrepreneurial policies can help address market failures and promote economic growth (Acs et al., 2016).

2.2 The Policy Dimension and Entrepreneurship Research

While other ecosystems components have been debated in the literature, the policy dimension has been underplayed; this is also the case in women's entrepreneurship research. Link & Strong's (2016) recent bibliography of the gender and entrepreneurship literature found that

only 4% of articles addressed public policy. However, they anticipated an increase in this figure because issues around gender equality and women's entrepreneurship have been central to EU and OECD policies for several decades. Recent scholarship asserts that public policy in relation to entrepreneurship must address several challenges, including the realization that 'one size does not fit all', the fact that policy initiatives offered in isolation are likely to be ineffective, and the need to differentiate between entrepreneurship and small business policies (Mason & Brown, 2014). Suggestions on how best to influence policy include advice on lifting the research gaze from the individual entrepreneur and her business and address how process and context interact to shape the outcomes of entrepreneurial efforts (Aldrich & Martinez, 2001). More recently, Zahra & Wright (2011) argue that if entrepreneurship research is to influence public policy, there needs to be "a substantive shift in the focus, content and methods" (p.67). While we support this view, we also acknowledge that the increased attention paid by both researchers and policy makers to the ecosystems concept challenges such a shift, as it involves an interdependency between actors, businesses and organizations, and thus makes developing policy implications more complex. It is, perhaps, the complexity of such challenges and the difficulty involved in effectively addressing them that has prevented more policy engagement from scholars. This paper aims to contribute to this issue in the specific context of women's entrepreneurship scholarship; a field where policy implications should be expected, as discussed below.

3 The Policy Dimension and Women's Entrepreneurship Research

Women entrepreneurs are one of the fastest growing entrepreneurial populations in the world and have therefore received much attention from scholars. Jennings & Brush (2013) identified over 630 studies on women's entrepreneurship, of which much is

concerned with making women's entrepreneurship visible in the academic field. In an analysis of how entrepreneurship scholars motivate research on women's entrepreneurship, Ahl (2004) found the most common observation to be that women are underrepresented as business owners, and even more underrepresented in the high growth segment. The reasons for their underrepresentation was then posited as a problem to be explained, and possibly amended. Extant research, therefore, often focuses on a number of problems associated with women's entrepreneurship that are either related to women themselves or to structural conditions (Acs, 2011; Welter, 2011; Ahl, 2004). It is reasonable to expect researchers to offer suggestions in terms of how to rectify the very problems they identify, as well as suggestions to address the entrepreneurial ecosystem, including the policy dimension. Since women typically take responsibility for family as well as work, they are directly influenced by any country's family policies, such as provision of daycare or parental leave. They will also be influenced by sex discrimination policies, by labor market policy, by policies regarding access to relevant education, to capital, or even to business ownership itself. However, we expect policy suggestions to differ with gender perspective taken, as outlined below.

3.1 Gender Perspectives

Feminist theory is commonly categorized in three perspectives: *feminist empiricism*, *feminist standpoint theory* and *post-structural feminism* (Harding, 1987; Calas & Smircich, 1996).

What they have in common is what underlies feminism – the recognition of women's subordination in society and the desire to rectify this. The role of feminist research is then to provide interpretations and explanations for women's subordination. But since the perspectives differ in terms of how gender is conceptualized, how obstacles for gender

equality are defined, and in ontological and epistemological assumptions (Campbell & Wasco, 2000), we expect problem formulations and policy suggestions to differ accordingly (see Table 1).

Insert Table 1 about here

Feminist empiricism is often used in conjunction with a liberal feminist agenda. Liberal feminism assumes that women and men have similar capacities, so if only women were given the same opportunities as men, they would achieve equal results (Holmes, 2007). Liberal feminism thus sees discriminatory structures as the reason for women's subordination. The fight for equal pay or equal access to business ownership are examples of liberal feminist struggles. Liberal feminist research is often *empiricist* in nature – it counts the presence of women or describes their conditions. The categories “men” and “women” are used as explanatory variables, and the word gender is used as an equivalent to sex. Research using feminist empiricism does not necessarily explicitly identify it as feminist, but when there is an aim of making women and women's conditions visible it may be categorized as such (Harding, 1987; Ahl, 2006).

Research using this perspective maps the presence of women in business, it maps their characteristics, or it maps size, profit or growth rate differentials between men and women-owned businesses (e.g Anna et al., 2000; Wicker & King, 1989). It also focuses on access to resources, such as information or capital (Kalleberg & Leicht, 1991). Identifying the field's foundational questions, Jennings and Brush (2013) found the majority of the research to compare men and women on four dimensions: i) representations as business owners, ii) access to finance, iii) management practices and iv) performance. The majority of the field thus follows the feminist empiricist tradition.

Theoretically, policy implications from a liberal feminist perspective should focus on resource allocation, or women's equal access to resources. Policy suggestions might include equal access to business education and training, or legislation prohibiting banks from requiring a husband's co-signature for a loan.

While feminist empiricism has been, and is, useful in order to make women's presence and condition visible, it has been criticized for accepting current (male) structures, and for simply adding women. In entrepreneurship research, McAdam (2013) criticized this perspective for uncritically comparing the performance of men and women entrepreneurs while neglecting industry differences. It found women to "underperform", (cf. Fischer et al., 1993), and thus made 'women's ability to adapt to a male business world' the problem to be solved.

Feminist standpoint theory developed from 1960s and 1970s radical or socialist feminist activism. Unlike liberal feminism, both radical and socialist feminism question *structures* – whereas socialist feminism is critical of capitalist oppression, radical feminism is critical of patriarchal oppression and wants to redefine the entire social structure (Calás & Smircich, 1996). Feminist standpoint theory assumes that women have unique experiences *because* they are women, and – unlike men - have the lived experience of how structures oppress them. Women thus have the right of interpretation regarding knowledge about women and women's oppression (hence the word standpoint), and the role of research is to help make this visible (Harding, 1987).

Theoretically, policy implications based on a standpoint perspective should focus on changing social structures so that they also cater to women's needs and/or value women's unique contributions. Examples would be quotas for women-owned businesses in public

purchasing, paid parental leave to be split equally between the parents, or gender specific business training.

Feminist standpoint theory is inherently political. However, the uptake in women's entrepreneurship literature has mostly been of a version labeled *social feminism*, which states that men and women are different because they were socialized differently, and not necessarily because they have similar experiences of oppression. The theory often assumes women to be more caring, ethical or relationship oriented than men (Gilligan, 1982). The focus is on how to appreciate and make use of gender differences, rather than overhauling societal structures. Citing Black (1989), Fischer et al. (1993) introduced social feminism in the women's entrepreneurship literature, explaining that female (entrepreneurship) traits may be different from male, but equally valid. Scholars who have used this perspective include Brush (1992), who suggested that women view their businesses as interconnected systems of relationships as opposed to separate economic units, and Bird & Brush (2002) who proposed a feminine perspective on organizational creation. Standpoint theory has been criticized as it often builds on essentialist assumptions, polarizes men and women, and uses middle-class women as the norm, while ignoring ethnic, minority and geographical groupings, and possible in-group discrimination based on any of these groupings (Holmes, 2007).

Post-structuralist feminist theory emanated from the observation that discrimination may be based on any social category, not just sex (Hooks, 2000), and from post-modern critiques of "grand narratives" (Lyotard, 1984), such as those justifying social orders by "natural" sex differences. Gender is defined as socially constructed through history, geography and culture. Hence, what appear as masculine and feminine traits vary over time, place and discourse, and are constantly renegotiated. Studies of how gender is "done" are recommended (West and Zimmermann, 1987).

Post-structuralist research would focus on how gendered social practices construct privilege, and recommendations would focus on amending such practices. Possible policy suggestions would be mandatory gender awareness training among mainstream business advisors (rather than a separate advisory system where women advise women), or perhaps an ombudsman for complaints concerning gender discrimination by loan officers.

Literature reviews have found the post-structuralist perspective to be sparsely represented, but fruitful in revealing how gender discrimination is achieved (Neergaard, Frederiksen, & Marlow, 2011). An example is Nilsson (1997), who studied the gendering of business advisory services for women, and found an effect of side-tracking to be that it counted for less. However, a post-structuralist perspective is best represented in articles critiquing the field. Such articles point out the male gendering of the entrepreneurship field, and claim that common and established research practices (as embedded in the first two perspectives) - through their assumptions, problem formulations, research questions, methods and interpretation of results - tend to subordinate women from the start (Ahl, 2006).

The relationship between the use of feminist perspectives and policy implications in research on gender and entrepreneurship is an unexplored theme. Consequently, our first task is to identify the pattern and prevalence of these policy implications.

4 Data and Methods

Consistent with Tranfield et al. (2003), we conducted a systematic literature review (SLR) of relevant empirical papers published between 1983 and 2015 in the “Big Five” top tier entrepreneurship research journals, as categorized by Katz (2003)². SLRs are well established as appropriate methodological approaches within the field of entrepreneurship (Pittaway &

² Small Business Economics (SBE), Entrepreneurship, Theory and Practice (ETP), Journal of Business Venturing (JBV), Journal of Small Business Management (JSBM), Entrepreneurship and Regional Development (ERD).

Cope, 2007), and are also recognized as appropriate methods for conducting reviews within the field of women's entrepreneurship (Jennings & Brush, 2013; Neergaard et al., 2011). We focused on the 'Big Five' due to their high impact factor and perceived influence in the field³. We applied the search terms 'gender' OR 'women' OR 'woman' AND 'entrepreneur' OR 'business' to the title, abstract and key words fields to search across the journals, and subsequently cross referenced this with a separate review of the contents page of individual volumes/issues of each of the five journals to ensure no relevant paper was omitted. Exclusions were applied as appropriate. We further excluded conceptual papers and literature reviews for two reasons: Firstly, while we acknowledge that policy implications are included in both conceptually and empirically based papers, we felt that – given the volume of material - it would not be possible to cover both within the confines of a single paper. Secondly, we felt that concentrating on empirically-founded policy implications would add robustness to our findings. Appendix 1 documents the stages of the SLR. We applied a focused policy reading guide (see Appendix 2) to read and analyze the articles for their policy content, cross checking interpretations amongst the research team as we went along to ensure consistency. We used a qualitative approach to examining the policy content and implications, beginning by interpreting the policy variable ('yes' or 'no') and then looking for other terms besides just 'policy', such as 'law', 'regulation' and 'formal institution'. The completed reading guides were compiled into a single excel spreadsheet and categorized according to three time periods. Our final sample contained 165 articles published across the five journals over the 30-year period (see Table 2).

Insert Table 2 about here

³ We considered including other leading journals, books and conference papers, but given the considerable qualitative analysis involved in our methodological approach, and the inevitable increased volume of material, we felt such inclusions would be beyond that which would be manageable within a single journal paper.

5 Findings

5.1 Descriptive Analysis

Of the 165 articles, 117 included policy implications. 75 articles had policy implications that were stated explicitly, while 42 articles had policy implications that were stated implicitly. We coded articles that addressed policy makers explicitly, or offered suggestions regarding a change in legislation, regulation or public institutions, as ‘explicit’ policy recommendations. We coded suggestions that *might* be addressed by policy even if it was not totally clear, such as “programs for women entrepreneurs should...” as ‘implicit’ policy recommendations. Table 3 provides quotes that we extracted from the articles in order to document our coding.

Insert Table 3 about here

Table 4 shows the particular feminist perspective adopted within the articles that report policy implications. There has been a notable increase in those articles providing policy implications from the first period through to the third. *Feminist empiricism (FE)* was the dominant perspective throughout, while in the last two decades a substantial share of *feminist standpoint theory (FST)*-based articles appeared. *Post-structural feminism (PSF)* was represented by 11 papers. Three articles included implications but had no particular gender perspective. To further explore the nature of the SLR data, we tested whether the choice of feminist perspective could be a factor affecting whether or not an article reported policy implications, see Appendix 3 for analysis and results.

Insert Table 4 about here

Table 5 shows the spread of policy papers across the five journals according to time period and feminist theory. The *feminist empiricism* perspective was sparse across all journals in the

first decade, but was dominant in JBV (10 articles) and JSBM (11 articles) in the second period, and in SBE (15 articles) in the third. JSBM published the greatest number of *feminist standpoint theory*-based papers in the second period (3 papers), and ETP (7 papers) in the third period. There was a marked absence of *post structural feminism*-based papers across all journals and the first two period. JBV had the highest number (5) in the third period, which contains 10 of the 11 post-structuralist feminist theory papers with policy implications in our sample.

Insert Table 5 about here

In addition to the analysis of the 117 policy-papers, we analyzed the 48 non-policy papers to determine whether they contained either practical implications or implications related to other parts of the ecosystem (apart from policy). We coded ecosystem implications following Mazzarol's (2014) model; Funding and Finance; Culture; Mentors, Advisers and Support Systems; Universities as Catalysts; Education and Training; Human Capital and Workforce, and Local and Global markets. These areas may of course also be addressed in the papers coded as policy papers, but in such cases the policy level is asked to address it. Table 6 presents quotes from the 14 papers we found to have ecosystem implications, practical implications or both.

Only seven papers had implications for the ecosystem beyond policy. Four concerned constructions of gender that may be detrimental to women, one gender segregated social structures, one access to finance and one education. The practical implications (nine papers) focus, for the most part, on education and training.

Insert Table 6 about here

5.2 Qualitative Analysis

The analysis is structured according to the different feminist perspectives, drawing on selected quotations from the papers to illustrate our points.

5.2.1 Feminist empiricism

Feminist empiricism was the dominant feminist research perspective during the first two time periods, and continues to be a major perspective in research on women's entrepreneurship (Neergaard et al., 2011). As illustrated in Table 4, 77 papers - representing two-thirds of the sample - were coded as feminist empiricist. Much research in this category focused on finding gender differences; in performance, in entrepreneurial behavior, traits or values, or in structural issues such as access to education or finance.

The papers in our first ten-year period provided very few policy implications. Most had very small samples limited to a certain region or industry. The most typical recommendation was, therefore, to suggest further research. The second and third period had more papers with policy implications. Consistent with theory, the policy suggestions of the feminist empiricist papers were concerned with equal access to resources, particularly education and finance. Suggestions concerning access to education or training were often formulated in terms of people needing to better themselves, and that "someone" should arrange for this:

"Providing informal as well as formal learning experiences for women would be important...

Mentoring programs may be effective...Internships and cooperative education programs may also be utilized (Scherer et al., 1990: 42)."

Suggestions concerning access to finance were more clearly formulated, and more likely to identify a target audience, such as bankers or the government:

"...Smaller firms are more likely to face liquidity restraints than larger firms. If these liquidity restraints are the result of a market breakdown...government assistance programs to small businesses could rectify these (Evans & Leighton, 1990: 328)."

Further, these articles often ended up advising training for bank loan officers to prevent them from inadvertently discriminating against women. Suggestions were consistent with theory in that they concerned access to resources, but most suggestions recommended women (or bankers) to improve their knowledge, skills or attitudes through training, thus putting the onus individuals rather than on education and training provision, or specific aspects of the entrepreneurial ecosystem. The policy level was seldom addressed directly.

5.2.2 Feminist Standpoint Theory

Research adopting feminist standpoint theory assumes that women entrepreneurs are different from men in terms of values or experiences, and because of this they can and do make a unique and positive contribution to entrepreneurship. Our sample had 26 articles in this category. Feminist standpoint theories range from those focusing on the individual and the importance of adapting to her needs and desires (social feminist theory), to those that recognize patriarchal oppression and recommend an overhaul of the entire social system (radical feminist theory). While two articles hinted at patriarchy, most used social feminist theory. Five articles used liberal and social feminist theory to create comparative hypotheses – for example, do women perform different from (read ‘less’) than men because of discrimination (liberal feminist theory), or because of their values (social feminist theory) (e.g. Fischer et al., 1993)? The other articles investigated issues such as growth intentions, networking, or behavior in seeking finance, looking for particular feminine ways and values. Results were mixed. Articulated policy implications were sparse, formulated in general terms and centered on how policy should cater in specific ways to women:

"Programs geared towards preparing potential entrepreneurs should focus more on the skills and behaviors that facilitate growth, specifically in the financial management arena. Helping women to gain access to bankers and other sources of capital will increase the odds that these businesses will become large (Carter & Allen, 1997: 220)."

Alsos et al. (2006) suggested that policy makers should put stronger demands on private and government financial institutions to report the share of women's businesses they finance; they should ease women entrepreneurs' access to capital. Other papers recommended support organizations to educate women about the value of equity investment (Orser et al., 2006), or be attuned to women entrepreneurs' unique needs (Manolova et al., 2007).

Policy recommendations tended to center on advising or training the individual woman. Noticeably absent were suggestions for *actually changing policy*, such as new legislation, gender quotas, new government purchasing rules or changes to the welfare systems – suggestions that might add value to the entrepreneurial ecosystem. Theoretically informed suggestions from a standpoint feminist perspective, i.e. suggestions about *changing social structures*, were noticeably absent. Recommendations were thus *not* consistent with a feminist standpoint perspective.

5.2.3 Post-Structural Feminism

Post-structural feminist research questions the gendered construction of its research object. "Gender" is not equivalent to sex; for example, policy may be gendered. Our review featured eleven such articles that included policy recommendations, all but one in the last time period. Six articles had explicit policy recommendations. Rosa and Dawson (2006) investigated women's underrepresentation in academic spin-offs and concluded that:

"...no policy has yet focused on how gender impacts on the process of commercialization itself within universities. It is hoped that one contribution of this paper will be to draw the attention of policy makers to this anomaly" (Rosa & Dawson, 2006: 363).

Klyver, Nielsen & Evald (2013) advised that countries that actively promote gender equality by progressive labor market policy may actually make it more difficult for women who want to become entrepreneurs. Jayawarna, Rouse & Macpherson (2014) add class as an analytical category and recommend governments to provide child care in order to make it possible for the less privileged to engage in entrepreneurship. Gupta, Goktan & Gunay (2014) suggest the need for public policy aimed at eliminating gender stereotypes in popular press and mass media to level the playing field for women entrepreneurs, and Shneor et al., (2013) say that whether a women-only class is beneficial or not depends on whether the culture is feminine or masculine.

It is noteworthy that papers taking the social construction of gender into account recommend structural change, which theoretically should be a standpoint perspective recommendation. But the line between gendered structures and gendered social practices is imprecise – social practices tend to become institutionalized as structure. The recommendations were thus at least somewhat consistent with the theoretical perspective. However, we observed that critique of gendered social practices was more prevalent than suggestions for hands-on amendments.

6 Summary and discussion of key findings

The most prominent finding is that around a third of the articles (42 of the 117) with policy implications (generously interpreted) did not address the policy level explicitly. Forty-eight articles (29%) did not have any policy implications, and only seven of these articles addressed

other ecosystem implications (see Table 6). This is surprising given that policy is a critical component of the entrepreneurial ecosystem and, according to Mazzarol (2014), is the most important. Despite its particular impact on women entrepreneurs (Acs et al; 2011; Estrin & Mickiewicz, 2011), we find that, consistent with Link and Strong (2016), the policy dimension of the entrepreneurial ecosystem continues to be underplayed.

The second key finding is that policy implications are mostly formulated with unspecified targets. Specific functions within government are not addressed, and specific legislative or other change is seldom advised. The advice is not immediately actionable. This suggests that in order for ecosystem changes to be effective, they need to be a part of an overall ecosystems strategy where targeted outcomes and responsibilities are clearly defined and monitored. As policy is one of the ‘compliance’ components in Mazzarol’s (2014) ecosystems framework, this point is particularly important for women’s entrepreneurship as some policies may inadvertently discriminate against women’s businesses, for example, favoring typically male-dominated business sectors (Anna et al., 2000).

The third notable finding, which relates to one of the ‘soft’ ecosystem components – ‘Education and Training’ - is that almost all recommendations center on training – these are either directed at women entrepreneurs who should take part in training; to educators or governments who should arrange training, or to bankers and others who should raise awareness and highlight the particular needs of women entrepreneurs. While ‘Education and Training’ is an important area of ecosystem influence, helping women to develop the skills required for successful business start-up and development, recommendations in this category can also serve to further highlight women’s perceived deficits, reinforcing their ‘othering’ and lending support to the argument that women need to be ‘fixed’ (Ahl, 2006; Ahl & Marlow, 2012). These findings are entirely consistent with those of Bartunek and Rynes (2010), who found that to become more aware, to conduct training and to learn were the most common

recommendations articulated in 1,738 management publications. Recommendations were not written in a manner likely to become immediately actionable.

A fourth finding is that even where researchers do write about policy implications, they tend to *avoid* suggestions normally associated with policy, i.e., legislation, market regulation, taxation or welfare provision. In viewing policy as a core component of the entrepreneurial ecosystem, findings reveal a lack of attention towards regulatory and contextual policy components. For example, when authors write about policy, they concentrate on proposing training for the individual woman entrepreneur or measures for actors very close to her – bankers, financiers, advisors – thereby omitting, or avoiding all other areas of public policy within the ecosystem, i.e., financial services, transportation, immigration, labor markets, infrastructure and health (Mazzarol, 2014: 9-10) that affect the general conditions for entrepreneurship as well as for women. Again, this reinforces the view that while policy may be the most important component of the entrepreneurial ecosystem, it is multifaceted, involving a cross-section of sub-policies that overlap with ‘hard’, ‘soft’, ‘compliance’ and ‘culture’ ecosystem components; as such the ‘policy’ component cannot operate in isolation (Mason & Brown, 2014).

A fifth and notable finding is that regardless of feminist perspective, implications sections were similar. While all three feminist perspectives were represented, most recommendations could be categorized as feminist empiricist, that is, they concerned the counteracting of discrimination, or women’s equal access to resources. And, interestingly, much of this advice was also couched in terms of its leading to a higher end, in most cases economic growth. Women’s well-being was not the ultimate aim. Hence, even if using feminist theory, a pronounced feminist agenda was not present.

A possible explanation might be that research is supposed to be factual and neutral. This may not coincide with an argument for change that is inherently political in nature. Even if authors aim to offer such implications they might be censored (or censor themselves) in the review process. Another explanation is that academics may feel uncomfortable in constructing policy implications (Bartunek and Rynes, 2010). They may dutifully formulate some unspecified, non-committing implications simply because it is expected.

Articles across the 30-year period adopting a feminist empiricist approach revealed few policy implications, save for broadly suggesting more research or implying that it is up to women to improve themselves through education or training; occasionally, government was asked to provide this. Papers adopting a feminist standpoint perspective again had few specific policy implications; however, where included, they concerned how policy makers should cater to women entrepreneurs' specific needs. The findings demonstrate the gendered nature of research "implications" in published scholarship on women's entrepreneurship. Finally, the articles adopting a post-structural feminist approach focused on the gendered nature of its research objects, such as advisory services, commercialization processes, culture, stereotypes, labor market policy or social stratification, and recommended amendment accordingly; however, the advice was mostly couched in vague terms.

The emphasis on training women serves to reproduce the second-ordering of women that characterizes so much of the gender research in entrepreneurship (Ahl, 2006). When recommendations suggest training, the policy message in short is that women must be "fixed". In sending this message to policy makers about women, research on gender and entrepreneurship is paradoxical, since feminist theories seek to explain how societal and structural conditions affect women in the labor market and in organizations (Acker, 2008). Hence, individual level remedies are suggested for structural level problems (Ahl & Nelson, 2015; Kvidal & Ljunggren, 2014).

While our paper focused specifically on the policy dimension of the entrepreneurial ecosystem in the context of women's entrepreneurship, our findings have important implications for the ecosystem in its entirety. Firstly, we reinforce the view that policy is the most powerful and, hence, the most important ecosystem component (Mazzarol, 2014; Stam, 2015). This is because its inherent sub-policies and scope of influence overlap with other ecosystem components. Secondly, we demonstrate that because changes to the policy component tend not to be specific or targeted, they will not be effective without decisions being made in relation to other ecosystem components. This supports the view that the entrepreneurial ecosystem is made up of a series of interconnecting and mutually impactful components (Isenberg, 2010), none of which operates in isolation; they all interact to create a supportive environment for new venture creation and growth (Kantis & Federico, 2012). Finally, when policy makers review their particular entrepreneurial ecosystem, they need to adopt a holistic approach and develop an overarching ecosystem strategy that acknowledges the interdependency between the different actors in the 'hard', 'soft', 'compliance' and 'culture' dimensions of the entrepreneurial ecosystem. After all, policy is a context-specific force (Welter, 2011) and, as contexts differ from country to country, and from ecosystem to ecosystem, 'one size' will never fit all (Mason & Brown, 2014).

7 Implications

Firstly, following Zahra and Wright (2011), we reiterate that deriving policy implications from entrepreneurship research is important, and researchers have a valuable role to play through their continued critical explorations of the field. However, scholars need to articulate their recommendations in ways that can be understood and applied. There needs to be a process of translation between research findings and their application. New systems for this

translation process would need to be designed, and the necessary time and resources would need to be allocated.

Secondly, in view of the increasing pressure for academics to demonstrate that their research has an impact, policy makers should realize that they are ideally placed to request clearer and more succinct policy implications. Thirdly, our findings demonstrate that there is more value to be derived for policy makers from academic scholarship in the field of women's entrepreneurship. This could be obtained by encouraging academics to communicate their findings to their stakeholders, test them out and work out implications in a language that policy makers understand. Finally, our study has implications for journal editors in relation to publishing conventions: If journals are to serve as vehicles for scholarship and influence in their field, we suggest they pay more attention to policy implications; ask authors to expand their implications sections and assist them with tools and templates for how findings can be translated into useful suggestions for policymakers.

Our own recommendation for future scholars are that when drawing out policy implications from their research findings – they need to embed such implications in the actual context they are investigating, be this geographical or industry specific, and they should do so with an understanding of how their particular entrepreneurial ecosystem operates. As we stated at the outset, the power of the ecosystem metaphor lies not in its theoretical preciseness but in its recognition that entrepreneurship is embedded in dynamic interactions with other businesses and organizations as well as within a regulatory and political framework (cf. Zahra & Nambisan, 2012), and that ecosystem components are in themselves interconnected and mutually impacting (Kantis & Federico, 2012). Furthermore, since research reveals that the entrepreneurial ecosystem is gendered (Gicheva & Link, 2015), future scholars need to recognize this if they are to demonstrate how and where their policy implications have an impact. A considerable part of the ecosystem is regulatory in character, constituting formal

policy and codified rules for behavior at both national and institutional levels (Scott, 2014; Grimaldi et al., 2011). Public policy is developed within such structures, and it is not gender neutral. Consequently, public policies often do not work because they are too general, context free and disconnected from the larger gendered society of which they are a part. Following recent research on institutional and contextual approaches to entrepreneurship (Foss & Gibson, 2015), future research needs to develop more context dependent policy implications that take complex societal gendered mechanisms into consideration.

8 Limitations and avenues for future research

Our main limitation is our small sample size. Additional insights could be gained by including newer or specialist journals, as well as books, book chapters and conference papers. While we focused on policy, future studies could cover all nine of Mazzarol's (2014) ecosystem dimensions, exploring how they differ between countries, how they impact women entrepreneurs, and how they might be improved.

Future studies might also consider the extent to which suggested policy implications have been subsequently implemented in practice, or they could explore policy effectiveness, identifying good practice examples that improve the entrepreneurial ecosystem for women.

Further, future research questions could focus on whether policy implications are ghettoized in specific journals. More controversially, perhaps, would be to explore the extent to which policy implications are tempered as a result of researchers' fear of criticism from those in control of funding or support. Such exploration would require access to different data sets, and might require novel methods of qualitative investigation (Henry et al., 2016). The inherent complexities, sensitivities and biases associated with such a study could have serious implications for academic scholarship.

We hope our findings will inspire future researchers to take policy implications more seriously and to consider other ways to engage their target audiences. This could include collaborations with organizations in the entrepreneurial ecosystem so that research findings having the potential to influence policy can be appropriately contextualized, articulated differently or, delivered in new types of publication outlets.

9 Conclusions

This paper explores the policy implications of research on women's entrepreneurship – as published in the 'Big Five' entrepreneurship journals to determine whether there had been a change in focus with regard to such implications over a period of more than 30-years, and whether this was related to the particular gender perspective adopted.

The study revealed that while 117 of 165 articles reviewed included policy implications, most were implicit or broad, thus making it difficult for any specific action to be taken. This is surprising on two fronts: first, because entrepreneurship as a research field purports a need for proximity to its policy actors, and second, because the "Big Five" journals, premier outlets for leading scholarship, seem to ignore the opportunity for such scholarship to contribute to policy.

Our study also demonstrated that most recommendations concerned training for women entrepreneurs. Suggesting that women need to be 'fixed' puts the focus back on individuals, while neglecting gendered structures. It fails to challenge structural conditions, or fundamentally change the entrepreneurial ecosystem; this serves to reinforce the status quo.

Theoretically, this paper contributes by furthering understanding of how feminist perspectives inform/not inform recommendations for women's entrepreneurship policy, and

by highlighting the importance of policy as a core component of the entrepreneurial ecosystem. Regardless of feminist perspective, policy implications in academic papers seem inherently gender biased, individualizing problems to women themselves. Unless this changes - and scholars begin to account for the contextual and institutional dimensions of entrepreneurial ecosystems - we cannot improve the environment for women's entrepreneurship.

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Tables

Table 1 Categories of Feminist Perspectives

	Feminism	Feminist research	View of sex	Research focus	Theoretically expected policy suggestions
1	Liberal	Feminist empiricism	Essentialist (same)	Make women and their conditions visible	Equal access to resources (e.g. to education, experience, networks or capital)
2	Radical, socialist	Feminist standpoint theory	Essentialist (different)	Make women's unique perspectives and contributions visible	Change of social structures (e.g. public daycare, equally shared, paid parental leave, quotas in public purchasing)
3	Postmodern, postcolonial	Poststructuralist feminist theory	Socially constructed	Make gendered discriminatory practices visible	Change of discriminatory social practices (e.g. mandatory gender awareness training for business advisors)

Table 2 SLR Sample

Journal title (Review Period: 1983-2015)	N° of papers in final sample	N° with policy implications (%)
Small Business Economics (SBE)	31	23 (74 %)
Entrepreneurship and Regional Development (ERD)	30	20 (67 %)
Entrepreneurship Theory and Practice (ETP)	27	18 (67 %)
Journal of Business Venturing (JBV)	32	23 (72 %)
Journal of Small Business Management (JSBM)	45	33 (73 %)
Total	165	117 (71 %)

Table 3 Snippet Samples of Evidence Extracted

	<i>Sample 1</i>	<i>Sample 2</i>	<i>Sample 3</i>	<i>Sample 4</i>	<i>Sample 5</i>
<i>Journal</i>	SBE	JBV	ETP	JSBM	ERD
<i>Year of publication</i>	2012	1998	2002	1990	1992
<i>Authors</i>	Sena et al.	Cliff	Gatewood et al.	Scherer et al.	Carter et al.
<i>Feminist perspective</i>	FE	FST	FE	FST	FE
<i>Research topic</i>	Borrowing patterns of male/female entrepreneurs	Entrepreneurs' attitudes to business growth and size	Entrepreneurial expectations; performance	Entrepreneurial career selection	Rural firms; firm characteristics
<i>Country context</i>	UK	Canada	USA	USA	USA
<i>Policy implications?</i>	Yes	Yes	Yes	Yes	Yes
<i>Explicit/implicit?</i>	Explicit	Explicit	Implicit	Explicit	Implicit
<i>Type of policy-maker targeted</i>	National	Not specified	Regional	National	Not specified
<i>Type of policy implication</i>	<p>Policy makers should consider tailoring their supports to areas of the population where it is most needed.</p> <p>Women are less keen to approach external funders than men; women who have received government support are more likely to approach external funders, suggesting that policy measures may be useful in addressing this imbalance.</p>	<p>Female entrepreneurs are concerned with growing their business in a controlled manner, i.e. one that does not exceed their maximum business size threshold; this implies a deliberate choice for a smaller firm with a slower growth rate. This suggests that government programs designed to boost growth/size may not be successful when targeted at women.</p>	<p>Advice to entrepreneurs – especially female entrepreneurs – should be geared toward the venture rather than the individual entrepreneur's abilities. Networks are valuable. Advice to stimulate entrepreneurial activity needs to concentrate on the unique needs of the individual.</p>	<p>Policy makers seeking to increase the number of female entrepreneurs could find formal mentoring programs useful – i.e. successful women entrepreneurs working with aspiring entrepreneurs. This would help overcome environmental barriers and strengthen feelings of self-control /self-efficacy. Programs could be run through existing public sector organizations.</p>	<p>Findings that could be useful for designing strategies for developing home based businesses include: The rural home based businesses in the study were mainly owned by women sole proprietors in the craft sector, and were financed by personal savings. Businesses financed in this way tend outperform those financed by external sources.</p>

Table 4 Feminist Perspective in Papers with Policy Implications (N=117)

			<i>Feminist perspective</i>				<i>Total</i>
			<i>FE</i>	<i>FST</i>	<i>PSF</i>	<i>Other</i>	
<i>Time period</i>	<i>1983-1992</i>	<i>Count</i>	8	3	0	0	11
	<i>1993-2002</i>	<i>Count</i>	28	4	1	0	33
	<i>2003-2015</i>	<i>Count</i>	41	19	10	3	73
<i>Total (entire period)</i>		<i>Count</i>	77	26	11	3	117

Table 5 Feminist Perspective According to Time Period and Journal

<i>Time Period</i>	<i>Journal</i>	<i>FE</i>	<i>FST</i>	<i>PSF</i>	<i>Other</i>	<i>Total</i>
1983-1992	SBE	1	1	0	0	2
	ERD	1	0	0	0	1
	ETP	1	0	0	0	1
	JBV	1	0	0	0	1
	JSBM	4	2	0	0	6
<i>Total</i>		8	3	0	0	11
1993-2002	SBE	1	1	0	0	2
	ERD	3	0	1	0	4
	ETP	3	0	0	0	3
	JBV	10	0	0	0	10
	JSBM	11	3	0	0	14
<i>Total</i>		28	4	1	0	33
2003-2015	SBE	15	4	0	0	19
	ERD	10	2	3	0	15
	ETP	4	7	2	1	14
	JBV	6	0	5	1	12
	JSBM	6	6	0	1	13
<i>Total</i>		41	19	10	3	73
<i>Total all time periods</i>		77	26	11	3	117

Table 6 Ecosystem and Practical Implications in Non-Policy Papers

Author	Year	Journal	Ecosystem code	Ecosystem implications	Practical implication
Baker, Aldrich, & Liou	1997	ERD	(C) Culture	We suggest that women are rendered invisible by a particular form of reification labelled androcentric	-
Coleman, S. & Robb, A..	2009	SBE	(F) Funding and Finance	These findings suggest the possibility of both supply and demand side constraints on women's access to capital. Further study is needed to delve into these issues to determine precisely why women use the financing sources they do and why they avoid or are discouraged from others	-
De Tienne, D.B. & Chandler, G. N.	2007	ETP	(E) Education and training	Our study indicates that there may be multiple pedagogies that should be employed when teaching or training potential entrepreneurs. Because women and men use different types of human capital and different processes a «one size fits all» approach may not be meeting the needs of all individuals in the classroom	-
Fagenson, E.A. & Marcus, E.C.	1991	ETP	(C) Culture	...more favourable evaluations and treatment may be expected from customers, suppliers, and financiers of male entrepreneurs than of female entrepreneurs.... This may cause a self-fulfilling prophecy to take hold.	...female role models should be utilized to expose women to the entrepreneurship profession.
Lerner, M., Bruschi, C. & Hisrich, R.	1997	JBV	(L) Local and global markets	It appears that these findings reflect the effects of different social structures, particularly the impact of occupational segregation, wage disparity, and participation in the non-supported sector of the market.	-
Lerner, M. & Almor, T.	2002	JSBM		.	Our results show that pro-activeness in the form of strategic planning is a central capability that correlates strongly with performance measures
Marlow, S.	1997	ERD	(C) Culture	Until gender, affecting the experience of self-employment, is afforded attention and credibility, the experiences of self-employed women and the contributions made by their businesses cannot be properly understood or evaluated.	

Stoner, C.R. Hartman, R.& Arora, R.	1990	JSBM	(C) Work home relationship	...there is considerable crossover among the business and personal dimensions for female business owners.	Female business owners need to be prepared to cope with the ramifications of work-home role conflict, particularly in the lean initial years in the life of the firm.
Buttner, E.H.& Rosen, B.	1988	JBV	-		Perhaps in the context of workshops for aspiring female entrepreneurs, sex stereotypes could be explored and strategies for overcoming bias could be addressed.
Buttner, E.H. & Rosen, B.	1989	JBV	-		One practical implication could be to develop training materials for helping bank loan officers to identify and overcome possible sex bias in funding decisions.
Davis, P.S. et al	2010	JSBM	-		Managers may want to consider implementing systems, such as reward systems, that are focused on customer satisfaction, that can contribute to the successful implementation of a market orientation. Conversely, managers need to be alert to factors, such as interdepartmental conflict that may hinder market-oriented activity.
Gupta, V., Turban, D. & Pareek, A.	2013	ETP	-		Our research reveals the potential benefits of including stereotypically feminine attributes and female role models in entrepreneurship development programs, such as classrooms, books and case studies.
Morris, M.H. et al	2006	JSBM	-		The contemporary environment remains one where, in spite of encouragement to pursue professional careers, many women are taught not to be risk takers, and not to be competitive or aggressive. Education

Verhul, I., Uhlaner, 2005 JBV -
L. & Thurik, R.

and training programs do not explicitly help them address role conflicts, particularly in terms of how building high-growth ventures is compatible with other life roles.

...different guidelines for attracting, supporting and counselling female entrepreneurs and small business owners should be considered by directors of small business service centres and other service providers.

APPENDIX 1: Stages in the SLR Process

Stage	Description
1	A list of the “Big Five” journals in Entrepreneurship research was compiled: ERD, ETP, JBV, JSBM, SBE ⁴ .
2	Each member of the author team was allocated a discrete 10-year period to search: period 1: 1983-1992; period 2: 1993-2002; period 3: initially 2003-2012, and subsequently updated to include the period up to end December 2015.
3	Within journal searches were conducted by means of a systematic Boolean keyword search using the terms ‘gender’ OR ‘women’ OR ‘woman’ OR female AND ‘entrepreneur’ OR entrepreneurship OR ‘business’ in the title, key words and abstract field. We used the academic Scopus database to perform our search. This database covers all the journals in our SLR. As a cross check, in some cases, content pages of each journal issue/volume were examined to ensure no relevant paper was omitted/missed.
4	The resulting articles were then examined, and exclusion criteria were applied. Discussions between the authors throughout the process ensured that any further potential exclusions were discussed and agreed. In this step we excluded 50 papers in the last (updated) period, and 39 papers in the three first periods. This resulted in a total of 165 papers.
5	The common thematic reading guide designed by authors was then applied
6	The author team discussed articles as they reviewed them to ensure consistency of analysis.

⁴ We acknowledge that focusing on the “Big Five” journals restricts our study somewhat, however, we wanted to concentrate on those journals deemed to have the most significant scholarly impact in the field and to explore any notable changes over a significant period. Furthermore, in view of the considerable narrative content involved and the in-depth qualitative analysis required, we felt that such focus was warranted.

APPENDIX 2: Reading Guide

SLR Reading Guide				
1. Article title				
2. Author(s)				
3. Year of publication				
4 Journal				
5.Feminist perspectives	<i>Perspectives</i>	<i>Explicit (x)</i>	<i>Implicit (x)</i>	<i>Comments</i>
	FE	<input type="checkbox"/>	<input type="checkbox"/>	
	FST	<input type="checkbox"/>	<input type="checkbox"/>	
	PSF	<input type="checkbox"/>	<input type="checkbox"/>	
	Other	<input type="checkbox"/>	<input type="checkbox"/>	
6. Feminist perspective key findings/notes				
7a. Policy implications	Yes (x) <input type="checkbox"/> No (x) <input type="checkbox"/>			
7b. If yes in 7a. How are the policy implications being reported in the paper	Explicit <input type="checkbox"/>	<i>Policy implication findings /quotes/notes:</i>		
	Implicit <input type="checkbox"/>			
7c: If yes in 7a. Definition of policy implications:	Yes <input type="checkbox"/> If yes Explain: No <input type="checkbox"/>			
	<i>How do they address the implications:</i>			
8a. Other implications reported?	<input type="checkbox"/> Future entrepreneurs <input type="checkbox"/> Nascent entrepreneurs <input type="checkbox"/> Education <input type="checkbox"/> Female business owners <input type="checkbox"/> Financial capital providers <input type="checkbox"/> Researchers <input type="checkbox"/> Managers <input type="checkbox"/> Others.....			
8b: Practical implication text:				
9a. Ecosystem code	<input type="checkbox"/> P= Policy ⁱ <input type="checkbox"/> F= Funding and finance <input type="checkbox"/> C= Culture <input type="checkbox"/> M= Mentors <input type="checkbox"/> U= Universities as catalyst <input type="checkbox"/> E= Education <input type="checkbox"/> H= Human capital and workforce <input type="checkbox"/> L= Local and global markets			

	<input type="checkbox"/> NO= No implications for ecosystem
9b. Ecosystem explanations (beside policy implications):	
10a. Type of implications for future research	<input type="checkbox"/> Entrepreneurship research <input type="checkbox"/> Gender research <input type="checkbox"/> Other:..... <input type="checkbox"/> No implications
10b. If yes in 10a. Implication text:	
11. Sample size n:	
12. Country:	

¹Note: Do not code for P here unless you have coded for Yes in 7a.

APPENDIX 3. Logistic regression

We formulated H1: There is a significant relationship between policy implications in articles and feminist perspectives applied. Given the binary nature of the dependent variable, we conducted a binary logistic regression with feminist perspectives as explanatory variables and policy implication as the binary dependent variable. The dependent variable is coded 1 for articles with policy implications, and 0 for those with no policy implications. The feminist perspectives are used as the independent variables, all coded as dummy variables. The feminist perspective “other theoretical perspective” containing only three cases was removed from the analyses since there was no variation in this variable. All three of these cases were coded ‘policy implication’. To ensure we accounted for all the variability in our SLR data, we controlled for other observations collected in our SLR, such as geographical area, time periods and specific type of implication, and type of journal, all coded as dummy variables.

Results

		Policy implication	
		Coefficient ⁱ (std.error)	Wald χ^2
<i>Categories</i>	<i>Variables</i>		
Feminist perspectives	Post-Structural Feminism	-	3.39
	Feminist Empiricism	1.023 (0.73)	1.94
	Feminist Standpoint Theory	0.190 (0.76)	0.06
Journals	SBE	-	6.07
	JSBM	1.134 (0.70)	2.64
	ETP	- 0.240 (0.70)	0.12
	ERD	-0.286 (0.71)	0.16
	JBV	0.342 (0.70)	0.24
Area	Asia + Africa	-	1.02
	Europe	0.371 (0.68)	0.29
	America	-0.149 (0.63)	0.05
Time	1982-1993	-	15.57
	1993-2002	1.643 (0.57) *	8.11
	2003-2015	2.472 (0.63) **	15.21
Practical implications	1 = Yes, 0 = No	1.454 (0.43) **	11.51
	Constant	-2.454 (1.2) **	3.75
<i>Model diagnostic</i>			
<i>N</i>		162	
<i>-2 Log Likelihood</i>		158.00	

Cox and Snell R ²	0.213
Nagelkerke R ²	0.303
Model χ^2	38.892 **
df	11
Hosmer and Lemeshow χ^2	8.002 (P=0.433)
Overall % correct prediction	76.1 %

¹Note: ** and * denote significance at the 1% and 5% levels, respectively

The chi square shows that the overall model is significant at the 0.00 level and it predicts 76.1 % of the responses correctly. The Hosmer-Lemeshow goodness of fit ($P > 0.05$) gives an acceptable outcome ($\chi^2 = 8.002$, $p = 0.433$), indicating that the model prediction does not significantly differ from the observed. The -2 log likelihood was 158.052 and the two Pseudo R² values are 0.213 (Cox and Snell) and 0.303 for Nagelkerke, indicating that the fit of the model to the data was moderate. According to the regression results, H1 was rejected: None of the feminist perspectives was significant, indicating that feminist perspectives cannot be used as a determinant whether an article reports policy implications or not. Both the time variable and the practical implication variable were significant at $p < 0.05$. This indicates that articles in the two last time periods are more likely to report policy implications compared with the first time period. Also that articles reporting practical implications are more likely to also report policy implications than those which do not report practical.