



1042-2587
© 2007 by
Baylor University

Advancing a Framework for Coherent Research on Women's Entrepreneurship

Anne de Bruin
Candida G. Brush
Friederike Welter

Introduction

Most would agree that the dramatic growth and participation of women in entrepreneurship and the expanding body of research creates a need for both generic and specific theoretical perspectives and research approaches to better understand this phenomenon. To address this need, we consider issues relevant to advancing a framework for women's entrepreneurship research. However, it is not our intention to establish some reduced parameters for the study of women's entrepreneurship; rather, we concur with Gartner that "... entrepreneurship research espouses a diverse range of theories applied to various kinds of phenomena. . . . There is no elephant in entrepreneurship. The various topics in the entrepreneurship field do not constitute a congruous whole" (Gartner, 2001, p. 34). As such, we take into consideration the need to bridge the practice of entrepreneurship with this body of theory as it applies to the large and growing population of women entrepreneurs, and for policy makers to be aware of research results that have implications for fostering women's entrepreneurship.

This second volume of the special issue on women's entrepreneurship marks the end of our guest editorial responsibilities for *Entrepreneurship Theory and Practice*. However, we are not able to easily let go of our thinking, and consistent with the theme, we wish to consider the dialogue. And so, before introducing the articles for this volume on women's entrepreneurship, it made sense for us to analyze current and future themes in women's entrepreneurship, then to outline some methodological concerns we observed in our discussions during the review process for this two-volume special issue on women's entrepreneurship. This analysis has led us to consider whether we need a separate theory on women's entrepreneurship. This expanded introduction offers an overview of elements for a proposed framework that we hope will inspire more dialogue and research on women's entrepreneurship.

Please send correspondence to: Candida G. Brush, tel.: (781) 239-5014; e-mail: cbrush@babson.edu.

Themes in Women's Entrepreneurship Research

Of the 52 articles submitted to the special issue on women's entrepreneurship in *Entrepreneurship Theory and Practice*, the most popular topics in empirical research about women's entrepreneurship are financing (8), networks/social capital (6), and research on performance (6), including growth, growth strategies, and issues of success. Other topics include studies about individual characteristics and behaviors, such as entrepreneurial orientation (1) or self-efficacy (3), intentions and motivations (4), decision models (2), and perceptions (2).¹ Another cluster of studies researched particular groups of women entrepreneurs such as African-American women business owners, Indian women entrepreneurs, spouses or co-preneurs, and the like. Only a few submissions have explicitly studied entrepreneurial processes, such as opportunity recognition. Even fewer are concerned with the environment for entrepreneurship, which include country studies (e.g., women business owners in Iran or Pakistan), regional environments (e.g., rural women entrepreneurship, urban women's entrepreneurship), sector contexts (e.g., small home offices of women, high-tech women businesses), and institutional environments (e.g., labor markets, normative country contexts).

What is the picture emerging from this overview of topics? In short, it is strikingly different from previous research on women's entrepreneurship. For example, a recent literature review of 400 academic articles on women entrepreneurs by Carter, Anderson, and Shaw (2001) found several studies investigating specific gender differences in business management, finance, business networks, and performance. On the other hand, the submissions to the special issue do not reflect the current topical research in the entrepreneurship community (e.g., opportunity recognition [Eckhardt & Shane, 2003], cognition [Wadson, 2006], corporate entrepreneurship [Sharma & Chrisman, 1999]). This is somewhat surprising, insofar as most researchers generally assume current topics of interest in entrepreneurship would also be of interest with regard to women entrepreneurs, and that most scholars studying women's entrepreneurship appear to accept the mainstream discussion on methodology as a guiding principle for research without questioning whether this will capture the manifold realities of women's entrepreneurship (Gatewood, Carter, Brush, Greene, & Hart, 2003). It appears that researchers studying women's entrepreneurship follow different guiding principles, identifying those topics somewhat outside the mainstream of entrepreneurship generally, but where results will inform the women's behaviors and participation. We observed three broad groups of research themes: annuals, perennials, and saplings.

Annuals are studies wherein additional research is unlikely to contribute (much) to new knowledge. We consider these to be descriptive studies or profiles of women and men entrepreneurs and their business. Clearly, descriptive studies are important first steps, but they are dead-end themes and, like their short-lived parallels in the plant world, have limited lives, and are not productive for future studies. While these dead-end themes or annuals are certainly of use if such studies are conducted in unfamiliar contexts (e.g., transition or developing countries, "nontraditional" sectors), in general, this is research that has lived its life and is now over. Generally, most descriptive studies, especially those with small and convenience samples that research personal characteristics of female entrepreneurs, find more similarities than differences to male counterparts (Gatewood

1. The total number of submissions mentioned in this paragraph differs from the actual number of 52 submissions, because the count was based on the main topic of submissions. To conduct a separate topic count, however, was difficult because many of the submissions combined topics.

et al., 2003). However, in terms of business characteristics, women entrepreneurs tend to set up their ventures with lower start-up capital than men, and they are generally found to be smaller in size compared with those owned by men (Brush, 1992, 2006; Welter, Smallbone, & Isakova, 2006).

Perennials are recurrent topics that are always “in fashion” and continue to remain on the research agenda. These are often tackled in articles with a high probability of being published, as they pick up on the mainstream entrepreneurship strands and/or methods. For example, studies examining effects of resources on start-up and growth (Carter & Allen, 1997), or the effects of individual factors on start-up and growth (Anna, Chandler, Jansen, & Mero, 2000; Cliff, 1998). This group also includes articles that use or build on existing data sets that are in popular usage like, e.g., the Global Entrepreneurship Monitor (GEM).

Saplings are new and emerging topics which, as with young trees, have already taken root, but it remains to be seen if they will continue to grow and flourish. Surprisingly, few submissions to the special issue echo the new and emerging streams currently popular in the “mainstream” entrepreneurship debate, namely, opportunity recognition (e.g., Eckhardt & Shane, 2003; Shane & Venkataraman, 2000), decision-making styles such as bricolage (Baker & Nelson, 2005) or effectuation (Sarasvathy, 2001), or the recent focus on normative and societal environments influencing entrepreneurship (e.g., Baughn, Chua, & Neupert, 2006; de Bruin & Dupuis, 2003; Langowitz & Minniti, 2007; Welter et al., 2006). It is not entirely clear why this is the case. It could be that there are other topics to be investigated within the field of women’s entrepreneurship research that have not yet come to the fore.

Based on the submissions to the special issues, as well as other review studies (e.g., Brush, 1992, 2006; Carter et al., 2001; Gatewood et al., 2003; Welter, Smallbone, Isakova, & Aculai, forthcoming), we identify financing, networking and social capital, and growth/performance as perennials and potential saplings in women’s entrepreneurship research.

- *Financing*—There are scores of studies examining access to capital and venture capital funding of entrepreneurial firms (Gatewood et al., 2003; Mason & Harrison, 1999). Yet a much smaller number of studies include or study women. With regard to financing, previous research shows that women-owned businesses start with both lower levels of overall capitalization and lower ratios of debt finance than men-owned businesses (Carter & Allen, 1997; Coleman, 2000). These differences are attributed to structural and sectoral differences. Interestingly, the topic of financing is a limited area of study, where few systematic studies exist (e.g., Alsos, Isaksen, & Ljunggren 2006; Carter, Shaw, Lam, & Wilson, 2007). However, anecdotal evidence suggests sex discrimination issues, which leads researchers to state a need to accumulate more knowledge in this area (Brush, Carter, Gatewood, Greene, & Hart, 2006).

- *Networks and Social Capital*—Gender differences in network structures and networking behavior, i.e., in social capital, may influence both the decision to start and grow a business, as well as business survival and success. Network research is a popular topic in entrepreneurship studies; however, only few studies include women or compare them with men. Moreover, these studies show nonconclusive results. What remains to be seen with respect to women is whether “. . . these entrepreneurial networks are effective at facilitating the transition to self-employment” (McManus, 2001, p. 82).

- *Growth/Performance*—Gender also plays a role in business performance, insofar as it influences the self-perception of women entrepreneurs and their abilities to realize business growth given the desirability society attaches to business success (Anna et al., 2000). Additionally, the nature and extent of family support can influence the performance of women-owned businesses, referring to the emotional and financial support the family

may offer, as well as family labor, where previous research demonstrated that nonformal husband and wife teams can play a vital role in the performance of micro enterprises (Baines & Wheelock, 1998). In this regard, entrepreneurship scholars (e.g., Aldrich & Cliff, 2003; Jennings & McDougald, in press; Wheelock, 1998; Welter et al., 2006) only now draw more attention to the embeddedness of entrepreneurship in family and household contexts, often discussing this in the context of work–life balance.

All this leads to the question as to whether research on women’s entrepreneurship is investigating the right topics. Our impression from reviewing the 52 submissions to the two special issues is that most of this research is relevant to the phenomenon of women entrepreneurship, insofar as studying personal factors, resources, financing, strategies, and performance are essential elements. In line with Curran and Blackburn (2001), we suggest that the reason for this dominance of phenomenon-driven research may be the interplay between academia and policy maker/practitioners in this field where much more topics are brought onto the agenda by policy makers instead of being driven by results from theory building. This has led us to consider the methods and research design used by researchers.

Approaches Used in Researching Women’s Entrepreneurship: An Overview

We classified all submissions to the special issue according to the unit of analysis used, countries covered, selected sample characteristics, data source, method of data collection, methods, and analytical techniques used (see Table 1).² In terms of *unit of analysis*, the results are in line with Davidsson and Wiklund (2001), who found a dominance of studies focusing on micro-level analysis in entrepreneurship. However, as the table shows, our results also divert from this trend in that research on women’s entrepreneurship apparently still focuses on the individual level, although it is sometimes combined with country or regional profiles. This contrasts with overall entrepreneurship research which in 1998 showed a tendency toward firm-level and integrated-level analysis. The general picture emerging from the submissions to the special issue suggests that current research on women’s entrepreneurship does not incorporate the multilevel design called for by Davidsson and Wiklund (2001).

Another element of the popular research designs concerns the *countries studied* (see Table 2). Aldrich and Baker (1997) found that few of the articles submitted to the Babson College Entrepreneurship Research Conferences over a 10-year period and articles published in major small business and entrepreneurship journals during 1985–1995 studied more than one nation (with this increasing over time), although a considerable number included a country besides the United States. The picture is similar for the submissions to the two *Entrepreneurship Theory and Practice* special issues on women’s entrepreneurship in that a number of submissions covered countries outside the United States, but only 15% studied more than one country. This suggests that more cross-country studies are desirable in the future.

In 1988, Low and Macmillan called for sophisticated research designs and analytical techniques in entrepreneurship research (cited in Chandler & Lyon, 2001). More recently, Aldrich and Baker (1997) suggested that entrepreneurship is still in its nascency with

2. This classification was difficult, since only some authors state this explicitly. In most cases, it necessitated our interpretation. Therefore, our analysis is in general terms, drawing on Busenitz et al. (2003) and Aldrich and Baker (1997).

Table 1

Research Approach of the Submissions to the Special Issue

Unit of analysis		Country distribution			
Individual	40	One country			40
		Outside United States			24
		United States			16
Firm	0	Several			7
Both	8	Without United States			1
Not applicable	4	With United States			6
Total	52	Not applicable			5
		Total			47

Sample	Sample type (multiple)			Sample size	
Women only	14	Nascents, founders, owners	34	Large scale samples of population and/or businesses	13
Women-women	4	Students, pupils	7	Smaller samples	32
				Sample size below 100	22
Women-men	29	Experts, loan officers, business angels	7	Of which sample size of women below 100	12
				Above 100	10
Not applicable	5	Not applicable	4	Not applicable	5
Total	52	Total	52	Total	52

regard to response rates, replication, and sampling. Table 2 shows data sources, methods of collecting data, and the techniques employed for analyzing data, where applicable, of the 52 submissions. If we compare our results with those of Chandler and Lyon (2001) from their review of 291 entrepreneurship articles from 1989 until 1999, we detect some notable differences in “doing research on women entrepreneurs,” but also some similarities: Primary data sources are more prominent in researching women’s entrepreneurship, reflecting the lack of adequate secondary databases (81% compared with 67%, as cited by Chandler & Lyon, 2001); quantitative data collection methods dominate both in women’s and in general entrepreneurship research (55% compared with 48%, as cited by Chandler & Lyon, 2001), and qualitative techniques are used to a low extent both in women’s and in general entrepreneurship research, with 17% and 18% of the empirical studies drawing on those, respectively (Chandler & Lyon, 2001, p. 107).

Methodological Concerns Regarding Research on Women’s Entrepreneurship

Which *research designs* should we use in researching women’s entrepreneurship? In reviewing progress made in the entrepreneurship field up until the mid-1990s, Aldrich and Baker (1997) observed developments in longitudinal data collection, which since then should have increased even further with the U.S. American Panel Study of Entrepreneurial Dynamics (PSED), started in 1996 (Gartner, Carter, & Reynolds, 2004). Interestingly,

Table 2

Data Sources, Collection, and Analysis Techniques of Contributions to the Special Issue

Data source		Data collection		Data analysis	
Primary	42	Quantitative	29	Purely descriptive (frequencies)	4
Secondary (including survey data not collected by authors)	5	Qualitative	6	Statistical techniques	26
		Both	11	Qualitative techniques	8
Not applicable	5	Not applicable	6	Combination	8
				Of which	
				Frequency/statistics	3
				Frequency/qualitative	1
				Statistics/qualitative	3
				All three	1
				Not applicable	6
Total	52	Total	52	Total	52

most research on women's entrepreneurship relies on cross-sectional study designs, as is apparent in the submissions to our special issues, only two of which used longitudinal approaches, and none has conducted single industry studies. This, however, may also be a question of data availability.

Another issue concerns *measures* used in research on women's entrepreneurship. This is a construct validity question. For instance, if measures of entrepreneurship are created on male-owned businesses and male entrepreneurs, and if we accept that there are gendered aspects to entrepreneurship, we may be missing certain aspects of women's entrepreneurship that are positive, value creating, and from which we may learn more about entrepreneurship generally (Brush, 2006; Hurley, 1991). One example concerns growth and business performance: How should it be measured? Mainstream entrepreneurship and small business research concentrates on "objective" measures visible in turnover or employment growth. Only recently did research complement this by "subjective" measures such as self-stated growth willingness of entrepreneurs, and studies started paying attention to the overall attitude of society toward business growth (Diaz Garcia, 2006). However, as Brush and Hisrich (2000) state, performance differences between male and female businesses also depend on the measurements used, which emphasizes that future research should study outcomes other than financial measures, drawing attention to the interdependence between performance, success, and goals.

With regard to *samples*, there is the question of comparative research. Twenty-nine out of the 52 submissions to the special issue used this comparison, while 18 drew on solely women-based samples. Historically, we have generalized from samples, theories, and measures of men to women. The existing standards in entrepreneurship research are inherently "male based." There is certainly good reason to pursue comparative research, but the comparison sex and gender differences need not be the standard of comparison all the time.

So, why is research on sex differences of interest? "To get published" and "to make research on women's entrepreneurship valid" were some of the answers given by female researchers during a panel debate on the future of research at the Diana group First Global

Symposium on Growth Strategies for Women Entrepreneurs in Stockholm in May 2006. Hence, a cynical conclusion could be that most studies compare men and women because researchers accept this as an unwritten “rule” of the scientific community (cf. also de Bruin, Brush, & Welter, 2006). However, previous results on differences between men and women entrepreneurs and their businesses leave some doubt as to whether we should continue with comparative samples. For example, several studies draw attention to the fact that gender-specific differences in survival and growth rates disappear when data are controlled for industry and size (e.g., Du Rietz & Henrekson, 2000; Rosa, Carter, & Hamilton, 1996). Research evidence also suggests that gender differences in organizational performance may be due less to the particular sex of the business owner and more to environmental influences, such as the embeddedness of the business or the entrepreneur (Thornton, 1999), the location (Mirchandani, 1999), industry differences, and the size of the business (Anna et al., 2000), with the individual characteristics of the entrepreneur representing an additional layer (Cowling & Taylor, 2001; Kalleberg & Leicht, 1991). Often perceived sex differences vanished when researchers controlled for sector and environmental variables (Diaz Garcia, 2006). This suggests that comparisons of men and women should be more focused on patterns of variation rather than on just average differences. Further, it may well be that the basis of comparison may reasonably be other than direct effects. Rather, direct effects of gender may indeed matter for certain situations, but in other cases, sex may be a control variable where instead of explaining the effect, it decreases or increases it.³

On the other hand, instead of comparing male and female entrepreneurs, the question arises as to whether research would be more appropriately focused on comparisons among samples of women. The question here concerns what we can learn about entrepreneurship generally by studying female entrepreneurs. Bird and Brush (2002) draw our attention to gender perspectives on entrepreneurial processes, illustrating that a different viewpoint will add to our knowledge on how individuals perceive and operationalize entrepreneurship. The authors argue that venture creation is gendered in and of itself, and historically, the focus is on masculine processes and behaviors. They suggest that there is also an underexplored and unarticulated feminine set of processes and behaviors that influence new venture creation. In this, comparisons between groups women will allow us to fully understand gendered processes and gendered attributes in new ventures.

Arguably, we also may broaden our learning about entrepreneurship generally if we draw on some of the less “accepted” methods of doing research (see further) such as content and discourse analysis (Achtenhagen & Welter, forthcoming; Ahl, 2006), ethnographic study (Bruni, Gherardi, & Poggio, 2004), or narrative approaches, the benefits of which Campbell (2005) and Petterson (2005) vividly illustrate for women’s entrepreneurship in different contexts. This needs to go hand in hand with a different approach to *data collection and data analysis*. Looking at those approaches in the submissions received for the special issues, we observe a bleak and extremely one-sided picture (Table 2). Most researchers employed “conservative” methodologies when collecting and analyzing data. For empirical submissions, 29 articles used standardized surveys (three drew on data from the GEM, one from the PSED data sets), while 17 authors used in-depth interviews, three of which used experiments or simulations; one additionally employed a focus group approach. Similar to small business research (Curran & Blackburn, 2001), combinations of, a combination of standardized larger-scale surveys, secondary data, or semistructured face-to-face interviews appear to be increasingly popular methods. In terms of *data*

3. We thank Amanda Elam for this thoughtful point.

analysis, our review of submissions confirms an overwhelming dominance of a general positivist approach going hand in hand with hypotheses testing by statistical techniques, ranging from correlations, *t*-tests, factor analysis to regressions and hierarchical modeling. This led some authors to question the appropriateness of such techniques in explaining real-life phenomena: “. . . positivist explanations based on quantitative techniques, particularly statistical techniques, have been too tempting [. . .] Because the techniques are relatively easy and quick to use, they invite an almost mechanical approach to analysis,” and also point out that the use of such techniques was greatly enhanced by computers and statistical packages (Curran & Blackburn, 2001, p. 96).

From this analysis of research methods in the submissions to the special issue, three questions arise as a basis for our proposed framework:

- Are current research methods adequate in capturing the variety and richness of women’s entrepreneurship?
- Is there a danger of restricting potentially valuable contributions to knowledge by sticking to “mainstream” methods?
- Can research on women’s entrepreneurship benefit from adopting a wider methodological perspective?

Advancing a Theory of Women’s Entrepreneurship

In our quest for a coherent framework, we must consider whether our approaches to research are gendered by nature. When sharing our methodological concerns, we pointed out the overwhelming positivist approach to doing research, which is apparent in the dominance of standardized data collection and statistical multivariate techniques for data analysis. In entrepreneurship, while we generally seek new models of new business creation, we tend to focus on high-end value businesses (Busenitz et al., 2003).

Examining mainstream entrepreneurship research and the current discourse, we identify a rich discussion around opportunities, opportunity recognition, and exploitation as one popular theoretical perspective (e.g., Eckhardt & Shane, 2003). Conventional wisdom suggests that the exploitation of opportunities is the “essence of entrepreneurship” (De Carolis & Saporito, 2006, p. 52; Shane & Venkataraman, 2000). However, we suggest that the current theory debate neglects possible gender differences in such processes.

For example, opportunity recognition is influenced by *self-perceptions*, which play an important role in shaping entry into entrepreneurship as well as highlighting potential development paths. Entrepreneurial intentions are related to personal perceptions with respect to the supportiveness of a given society, the business environment, and one’s own abilities, i.e., they involve the individual sense making of the entrepreneur (Bird, 1989; Weick, 1995). Here, self-perceptions of women may restrict their possibility to recognize (the whole range of) business opportunities, thus constraining entrepreneurship or leading to certain forms of female entrepreneurship (Anna et al., 2000). This refers to self-imposed barriers in those cases where women (wrongly) perceive that they may not have the right opportunities and know-how to start or grow their own businesses.

With regard to self-perceptions, these are closely linked to the environment in which entrepreneurship takes place. For example, if a society mainly defines women through roles connected to family and household responsibilities, societal values implicitly interpret women’s entrepreneurship as less desirable and, as a result, provide lower normative support (Baughn et al., 2006; Langowitz & Minniti, 2007). Consequently, this can lead to

a lower level of opportunity recognition for women and lower rates of female entrepreneurs, thus influencing the extent of female entrepreneurship.

Finally, opportunity recognition is influenced by *personal ambitions*, i.e., the willingness of entrepreneurs to choose among different opportunities in order to identify and pursue an idea. Self-perceptions and ambitions are closely linked to each other, because “how entrepreneurs think about themselves and their situation will influence their willingness to persist towards the achievement of their goal” (Gatewood et al., 1995, p. 373).

In conclusion, all the assumptions about entrepreneurial “alertness” may in fact be “gendered” due to their underlying assumption about rational behavior. Cognitions and perceptions, as seen earlier, influence discovery and exploitation. However, if women are socialized differently, they will perceive opportunities in a different way (DeTienne & Chandler, 2007). An alternative and nongendered way would be to look at opportunities within a holistic interdependent system. Thus, in a sense, opportunities are nested within a woman’s life and her experiences (Brush, 1992). This perspective can account also for more macroenvironmental considerations. For instance, given the social roles/place of women, they may be excluded from or are positionally disadvantaged in social networks, as has been shown, e.g., for women in a post-Soviet context (e.g., Welter et al., 2006). They may, therefore, suffer from information asymmetries that would make them less likely to identify (be alert to) opportunities. Women also have different kinds of networks, which will lead to them receiving different information as well. Research shows women are more likely to have men and women in their networks, while men are more likely to have homogeneous networks comprised of mostly men (Aldrich, 1989). This information may be of less value where business opportunities are concerned, although on the other hand, it may allow women to detect innovative opportunities. Again, the environment plays a role here in influencing patterns of entrepreneurial behavior. Hence, we suggest that women’s entrepreneurship research (and maybe entrepreneurship research in general) needs to move beyond the narrow focus of opportunities per se.

Besides different approaches to doing research, is there a need for a single comprehensive *theory* of women’s entrepreneurship? In reviewing a major body of academic research on women’s entrepreneurship, Carter et al. (2001) conclude that explanatory theories are still lacking. Our submissions included a total of eight theoretical and conceptual articles, two of which were accepted for publication, obviously demonstrating a need to conceptually bring the field forward. In this regard, Mirchandani (1999, p. 230) draws attention to the fact that there is “little analysis of how gendered processes may shape the size of firms, or the tendency to focus on certain industries.” She suggests that most research on female entrepreneurship is not based on feminist theories, which tends to result in gender differences being explained in terms of how women entrepreneurs deviate from a so-called “male norm.” This goes hand in hand with observations by Bird and Brush (2002).

So, what are the pillars of such a theoretical framework? What researchers frequently neglect in entrepreneurship research is the embeddedness and context specificity of entrepreneurship. This can in part be attributed to a strong foundation of entrepreneurial theory rooted in economics (Hebert & Link, 1982; Shane, 2003). However, we believe that this also results from dominant research approaches, which focus on “clean” databases and up-to-date statistical techniques instead of the messy “real-life” variety of entrepreneurship covering “high-tech” new businesses as well as “lifestyle” venture or everyday entrepreneurial activities (Steyaert & Katz, 2004).

With regard to women’s entrepreneurship, these perspectives are important, as they will highlight the “more silent feminine personal end” of entrepreneurship (Bird & Brush, 2002, p. 57). This questions our theoretical understanding of venture creation and

entrepreneurship, where the “male norm” is normally taken for granted, but where a more feminist perspective adds value in pointing to the “nonobvious” and in creating a “female norm” for engaging in entrepreneurship. For example, drawing on feminist approaches, Bird and Brush (2002) suggest a model where gender has an impact on entrepreneurial processes through different concepts between men and women connected to reality, time, action and interaction, and power and ethics.

Moreover, research approaches so far tend to ignore institutional aspects of entrepreneurship (Baughn et al., 2006). For example, Davidsson (2003) introduced the notions of “entrepreneurship as societal phenomenon,” which draws attention to antecedents and outcomes of entrepreneurial behavior, and “entrepreneurship as a scholarly domain,” which aims at understanding what entrepreneurship is about. In the context of women’s entrepreneurship, both the societal and scholarly dimensions of entrepreneurship are important.

Considering the societal dimension, women’s entrepreneurship needs to be analyzed and understood in its social context, e.g., in relation to the role female entrepreneurs play in contributing to economic development by fostering social inclusion and employment, often for other women as has been shown for female entrepreneurs in post-Soviet countries (Welter et al., 2006). Gartner draws attention to the fact that observers “have a tendency to underestimate the influence of external factors and overestimate the influence of internal or personal factors when making judgements about the behaviour of other individuals” (Gartner, 1995, p. 70), which indicates the importance of balancing different perspectives on (women’s) entrepreneurship. Here, institutional theory approaches, as applied in some recent studies on women’s entrepreneurship in different contexts, can help. In particular, the concept introduced by Douglass North indicates that institutional theory can shed light on “hidden” institutional constraints, such as labor market institutions or the roles society ascribes to women, and the difficulties female entrepreneurs (perceive to) face in entering entrepreneurship and in growing their business (e.g., Aidis, Welter, Smallbone, & Isakova, 2007; Baughn et al., 2006; Welter, 2004; Welter et al., 2006).

Thus, a separate theory on women’s entrepreneurship may not be required. Rather, existing theoretical concepts should be expanded to incorporate explanations for the distinctiveness of women’s entrepreneurship, and current theoretical approaches, which are normally used in trying to explain women’s entrepreneurship, should be broadened.

The Articles in this Volume

This volume contains six articles. The first in our collection is authored by Langowitz and Minitti (2007), setting the scene, as the authors analyze the propensity of women across different cultures and countries. Thus, the article is on the forefront of institutional research, taking into account the overall environment. Based on a large-scale survey—the GEM data set—the authors investigate the variables influencing the entrepreneurial propensity of women and consider whether those variables have a significant correlation with differences across genders. In addition to demographic and economic variables, they include a number of perceptual variables, demonstrating that such variables have a crucial influence on the entrepreneurial propensity of women and account for much of the difference in entrepreneurial activity between the sexes. Specifically, they find that women tend to perceive themselves and the entrepreneurial environment in a less favorable light than men across all countries in their sample, regardless of entrepreneurial motivation. Overall, their results suggest that perceptual variables may be significant universal factors influencing entrepreneurial behavior.

The next two articles (DeTienne & Chandler, 2007; Wilson, Kickul, & Marlino, 2007) deal with entrepreneurship on an individual and micro level, picking up popular themes and constructs in the current entrepreneurship debate. First, DeTienne and Chandler discuss the role of gender in opportunity identification, their study being the first to explore gender differences in this entrepreneurial process. They found that women and men utilize their distinctly different stocks of human capital to identify opportunities and use fundamentally different processes of opportunity identification. However, they do not find any difference in the innovativeness of the opportunities identified. This research contributes both to the opportunity identification literature and to theories of social feminism by showing empirically that although women and men utilize different processes to identify opportunities, neither process is inherently superior.

Second, Wilson, Kickul, and Marlino analyze the linkages between entrepreneurial self-efficacy and entrepreneurial career intentions of adolescents and adult master of business administration (MBA) students, drawing implications for entrepreneurship education. Similar gender effects on entrepreneurial self-efficacy are shown for both groups, and the findings support earlier research on the relationship between self-efficacy and career intentions. Additionally, the effects of entrepreneurship education in MBA programs on entrepreneurial self-efficacy prove stronger for women than for men. Their article is interesting not only because of the demonstrated relationship between self-efficacy and career intentions, but also because the authors draw implications for entrepreneurship education, thus linking research to practice.

Two of the current hot topics in women's entrepreneurship research, namely, networking and growth, are tackled in the fourth article authored by Manolova, Carter, Manev, and Gyoshev (2007). The authors research the effects of human and social capital on the growth expectancies of men and women entrepreneurs in Bulgaria, thus contributing to an area that has, until now, received little by way of research attention (Welter et al., 2006). Their survey data from men and women new venture owners suggest that the growth expectancy among men is significantly and positively associated with outside advice achieved through networking. Among women entrepreneurs, growth expectancy is significantly and positively associated with perceived benefits from prior experience. This article adds to our knowledge on women's entrepreneurship in "constrained" environments such as in the transition context, illustrating the antecedents influencing women's entrepreneurship in a context, where market economies are only partially installed and where there exist considerable institutional constraints.

The next two articles analyze the role of gender in financing, another current topic in women's entrepreneurship, and develop themes wherein little knowledge exists. The fifth article by Carter et al. (2007) discusses the financing of women's entrepreneurship from the perspective of bank loan officers and their criteria in assessing applications in the United Kingdom. Their results reveal similarities in the criteria used to assess male and female applicants, but also suggest modest differences in the emphasis given to certain criteria by male and female lending officers. The processes used by male and female lending officers to negotiate loan applications revealed the greatest differences. This study is interesting for three reasons. First, in terms of methodology, Carter et al. replicate the study by Fay and Williams (1993). Second, it is one of the few submissions using experimental methods, supplemented by qualitative methodologies. Third, by focusing on bank loan officers, the authors incorporate a perspective from the supply side that has, to date, received less attention in women's entrepreneurship research (cf. Brush et al., 2006).

This supply-side perspective is aptly complemented by Harrison and Mason's (2007) article, which looks at venture capital. Based on a detailed analysis of business angels in the United Kingdom, the authors conclude that women investors who are active in the market

differ from their male counterparts in only limited respects. Future research into women business angels, and the possible existence of gender differences, needs to be based on more fully elaborated standpoint epistemologies that focus on the experience of the woman angel investor per se, and centered on the examination of the role of homophily, social capital, networking, and competition in investment behavior. This study adds to our knowledge base in two important ways. First, it is one of the few studies that researches the venture capital side for women entrepreneurs, and second, it focuses on business angels.

Concluding Comments: Toward an Integrated Framework

We argue that women's entrepreneurship occurs in a range of settings and contexts. Therefore, an integrated framework must reflect the embeddedness of women's entrepreneurship in the macro, meso, and micro environments. Moreover, the framework should also have a cultural context so that differences across countries and institutional settings can be analyzed. In addition, there is a need for an integrative multilevel framework, which facilitates analysis on an individual, firm, industry, regional, and national level, and which provides scope for researching linkages between levels (Elam, 2006). This supports the claim of Davidsson and Wiklund (2001), who argued that the particular unit of analysis needs to be taken into account when researching entrepreneurship. We stated earlier that, for the most part, this appears to be missing in research on women's entrepreneurship. This may be partly due to the "newness" of the research stream on women's entrepreneurship, but the mistake made here is one of not learning from the progress made in the entrepreneurship field in general. In particular, women's entrepreneurship research would benefit from a multilevel design, taking into account the relationship between individuals and the environment.

In this regard, our review of current themes, methodologies and approaches to researching women's entrepreneurship points to some interesting issues for *further research*. One such direction concerns the appropriate unit of analysis for women's entrepreneurship (Davidsson & Wiklund, 2001). Most researchers take the current units of analysis—the entrepreneur, the co-preneur, or the venture—for granted, without questioning its applicability to women's entrepreneurship. Recent studies on the family embeddedness perspective of entrepreneurship (Aldrich & Cliff, 2003), or "enterprising households" (Jennings & McDougald, in press; Welter et al., 2006; Wheelock, 1998) may hold promising avenues for future research on women's entrepreneurship, assisting in capturing its variety in different contexts.

We also suggest that there is a need for research on multiple levels, involving multiple units of analysis. One such unit of analysis would be the entrepreneur, and here we concur with Sarasvathy (2004) suggesting that there should be a greater focus on the "entrepreneur as distinct from the 'firm.'" However, we do not want to hark back to the previous discussion on "who is an entrepreneur?" (Gartner, 1988), rather we prefer to stress a much-needed multiple lens view of women's entrepreneurship which would also involve research across groups of countries, e.g., transition economies.

In our view, there is some doubt as to whether current research approaches and methodologies adequately incorporate the "reality" of women's entrepreneurship. Moreover, we need to consider women's entrepreneurship both in terms of its scholarly phenomenon and its contribution to society.

Notwithstanding the previous discussion, we accept that there will be a number of challenges in our quest for a coherent framework for women's entrepreneurship research. Not surprisingly, the male-derived emphasis appears to persist (Kjellman &

Ehrsten, 2005). For example, recently, “A Theory of Homo Entrepreneurus” was postulated, suggesting with its title, a male entrepreneur focus (Kjellman & Ehrsten, 2005). In our view, this is correlated with the issue of visibility of women’s enterprise and involvement in business, and it emphasizes the hegemony of the men-focused cultural myth that continues to prevail (Achtenhagen & Welter, forthcoming; Baker, Aldrich, & Liou, 1997).

Another issue concerns approaches that foster women’s entrepreneurship. For instance, Sarasvathy (2004) highlights the importance of understanding the barriers to entrepreneurship. This resonates with “simplistic” liberal feminist thinking, in that the removal of barriers would enable women to achieve “honorable man status” (Marlow & Patton, 2005, p. 722). We think that, in line with Sarasvathy (2004), while there is a need to understand the barriers, we should also acknowledge that their removal will not automatically lead to greater levels of women’s entrepreneurship. That said, such a focus on accumulating knowledge on barriers within their specific contexts will support the need for affirmative policy actions, which in turn can mitigate the entrepreneurial gender gap.

Finally, there is a need to take into account the different arenas of discourse on women’s entrepreneurship. These include academia, policy makers, practitioners, and the media. These arenas are not distinct or separate, but they need to be considered when weaving the rich tapestry of women’s entrepreneurship.

This second volume of our special issue, together with the earlier volume, helps to lay the foundation for a more inclusive discussion on women’s entrepreneurship, one that is based on rigorous research, incorporates topics that have, until now, received little by way of research attention, and accommodates a diversity of research methods. Such debate should help move us closer to developing a framework for research which is unrestricted yet more coherent.

REFERENCES

- Achtenhagen, L. & Welter, F. (forthcoming). Media discourse in entrepreneurship research. In H. Neergaard & J.P. Ulhoi (Eds.), *Handbook of qualitative methods in entrepreneurship research*. Cheltenham, U.K.: Edward Elgar.
- Ahl, H. (2006). Why research on women entrepreneurs needs new directions. *Entrepreneurship Theory and Practice*, 30(5), 595–623.
- Aidis, R., Welter, F., Smallbone, D., & Isakova, N. (2007). Female entrepreneurship in transition economies: The case of Lithuania and Ukraine. *Feminist Economics*, April.
- Aldrich, H. (1989). Networking among women entrepreneurs. In O. Hagan, C. Rivchun, & D. Sexton (Eds.), *Women-owned businesses* (pp. 103–132). New York: Praeger Publishing.
- Aldrich, H. & Baker, T. (1997). Blinded by the cites? Has there been progress in entrepreneurship research? In D. Sexton & R. Smilor (Eds.), *Entrepreneurship 2000* (pp. 377–400). Chicago: Upstart Publishing.
- Aldrich, H. & Cliff, J. (2003). The pervasive effects of family on entrepreneurship: Toward a family embeddedness perspective. *Journal of Business Venturing*, 18, 573–596.
- Alsos, G., Isaksen, E., & Ljunggren, E. (2006). New venture financing and subsequent business growth in men- and women-led businesses. *Entrepreneurship Theory and Practice*, 30(5), 667–686.
- Anna, A., Chandler, G., Jansen, E., & Mero, N. (2000). Women business owners in traditional and non-traditional industries. *Journal of Business Venturing*, 15(3), 279–303.

- Baines, S. & Wheelock, J. (1998). Working for each other: Gender, the household and micro-business survival and growth. *International Small Business Journal*, 17(1), 16–35.
- Baker, T., Aldrich, H., & Liou, N. (1997). Invisible entrepreneurs: The neglect of women business owners by mass media and scholarly journals in the USA. *Entrepreneurship and Regional Development*, 9(2), 221–238.
- Baker, T. & Nelson, R. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50, 329–366.
- Baughn, C.C., Chua, B.L., & Neupert, K.E. (2006). The normative context for women's participation in entrepreneurship: A multicountry study. *Entrepreneurship Theory and Practice*, 30(5), 687–708.
- Bird, B. (1989). *Entrepreneurial behavior*. Glenville, IL: Scott Foresman.
- Bird, B. & Brush, C. (2002). A gendered perspective on organizational creation. *Entrepreneurship Theory and Practice*, 26(3), 41–65.
- de Bruin, A. & Dupuis, A. (Eds.). (2003). *Entrepreneurship: New perspectives in a global age*. Aldershot, U.K.: Ashgate.
- de Bruin, A., Brush, C., & Welter, F. (2006). Towards building cumulative knowledge on women's entrepreneurship. *Entrepreneurship Theory and Practice*, 30(5), 585–594.
- Bruni, A., Gherardi, S., & Poggio, B. (2004). Doing gender, doing entrepreneurship: An ethnographic account of intertwined practices. *Gender, Work and Organization*, 11(4), 406–429.
- Brush, C. (1992). Research on women business owners: Past trends, a new perspective and future directions. *Entrepreneurship Theory and Practice*, 16, 5–26.
- Brush, C. (2006). Women entrepreneurs: A research overview. In M. Casson, B. Yeung, A. Basu, & N. Wadson (Eds.), *The Oxford handbook of entrepreneurship* (pp. 611–628). Oxford: Oxford University Press.
- Brush, C., Carter, N.M., Gatewood, E.J., Greene, P.G., & Hart, M. (Eds.). (2006). *Growth-oriented women entrepreneurs and their businesses: A global research perspective*. Cheltenham, U.K.: Elgar.
- Brush, C. & Hisrich, R. (2000). *Women-owned businesses: An exploratory study comparing factors affecting performance* (Working Paper Series 00-02). Washington, DC: RISEbusiness.
- Busenitz, L., West, P., Shepherd, D., Nelson, T., Chandler, G., & Zacharakis, A. (2003). Entrepreneurship in emergence: Past trends and future directions. *Journal of Management*, 20(3), 285–308.
- Campbell, K. (2005). Quilting a feminist map to guide the study of women entrepreneurs. In D. Hjorth & C. Steyaert (Eds.), *Narrative and discursive approaches in entrepreneurship* (pp. 194–209). Cheltenham, U.K. and Northampton, MA: Elgar.
- Carter, N. & Allen, K. (1997). Size-determinants of women-owned businesses: Choices or barriers to resources. *Entrepreneurship and Regional Development*, 9(3), 211–220.
- Carter, S., Anderson, S., & Shaw, E. (2001, August). *Women's business ownership: A review of the academic, popular and Internet literature*. Report to the Small Business Service, Department of Marketing, University of Strathclyde, Glasgow.
- Carter, S., Shaw, E., Lam, W., & Wilson, F. (2007). Gender, entrepreneurship, and bank lending: The criteria and processes used by bank loan officers in assessing applications. *Entrepreneurship Theory and Practice*, 31(3), 427–445.
- Chandler, G. & Lyon, D. (2001). Issues of research design and construct measurement in entrepreneurship research: The past decade. *Entrepreneurship Theory & Practice*, 25(4), 101–113.

- Cliff, J.E. (1998). Does one size fit all? Exploring the relationship between attitudes towards growth, gender and business size. *Journal of Business Venturing*, 13(6), 523–542.
- Coleman, S. (2000). Access to capital and terms of credit: A comparison of men and women-owned small businesses. *Journal of Small Business Management*, 38(3), 37–52.
- Cowling, M. & Taylor, M. (2001). Entrepreneurial men and women: Two different species? *Small Business Economics*, 18(3), 167–175.
- Curran, J. & Blackburn, R. (2001). *Researching the small enterprise*. London; Thousand Oaks, CA; New Delhi: Sage.
- Davidsson, P. (2003). The domain of entrepreneurship research: Some suggestions. In J. Katz & D. Shepherd (Eds.), *Cognitive approaches. Advances in entrepreneurship. Firm emergence and growth* (Vol. 6, pp. 315–372). Oxford: Elsevier/JAI Press.
- De Carolis, D.M. & Saporito, P. (2006). Social capital, cognition, and entrepreneurial opportunities: A theoretical framework. *Entrepreneurship Theory and Practice*, 30(1), 41–56.
- Davidsson, P. & Wiklund, J. (2001). Levels of analysis in entrepreneurship research: Current research practice and suggestions for the future. *Entrepreneurship Theory and Practice*, 25(4), 81–99.
- DeTienne, D.R. & Chandler, G.N. (2007). The role of gender in opportunity identification. *Entrepreneurship Theory and Practice*, 31(3), 365–386.
- Diaz Garcia, C. (2006). *The influence of gender on small firms' resources and performance*. Unpublished doctoral dissertation, Universidad de Castilla La Mancha, Albacete, Spain.
- Du Rietz, A. & Henrekson, M. (2000). Testing the female underperformance hypothesis. *Small Business Economics*, 14, 1–10.
- Eckhardt, J. & Shane, S. (2003). Opportunities and entrepreneurship. *Journal of Management*, 29(3), 333–349.
- Elam, A. (2006). *Gender and entrepreneurship in 28 countries: A multi-level analysis using GEM data*. Unpublished dissertation, University of North Carolina.
- Fay, M. & Williams, L. (1993). Gender bias and the availability of business loans. *Journal of Business Venturing*, 8(4), 363–376.
- Gartner, W. (2001). Is there an elephant in entrepreneurship? Blind assumptions in theory development. *Entrepreneurship Theory and Practice*, 25(4), 27–37.
- Gartner, W.B. (1988). Who is an entrepreneur? Is the wrong question. *American Journal of Small Business*, 12, 11–32.
- Gartner, W.B. (1995). Aspects of organizational emergence. In I. Bull, H. Thomas, & G. Willard (Eds.), *Entrepreneurship: Perspectives on theory building* (pp. 67–86). Oxford: Pergamon.
- Gartner, W.B., Carter, N., & Reynolds, P. (Eds.). (2004). *The handbook of entrepreneurial dynamics: The process of organization creation*. Newbury Park, CA: Sage Series.
- Gatewood, E., Carter, N.M., Brush, C.G., Greene, P.G., & Hart, M.M. (2003). *Women entrepreneurs, their ventures and the venture capital industry: An annotated bibliography*. The Diana Project, Stockholm, Sweden: ESBRI.
- Gatewood, E.J., Shaver, K.G., & Gartner, W.B. (1995). A longitudinal study of cognitive factors influencing start-up behaviors and success at venture creation. *Journal of Business Venturing*, 10(5), 371–391.

- Harrison, R.T. & Mason, C.M. (2007). Does gender matter? Women business angels and the supply of entrepreneurial finance. *Entrepreneurship Theory and Practice*, 31(3), 445–472.
- Hebert, R. & Link, A. (1982). *The entrepreneur: Mainstream views and a radical critique*. New York: Praeger.
- Hurley, A. (1991, August). *Incorporating feminist theories into sociological theories of entrepreneurship*. Paper presented at the Annual Meetings of the Academy of Management, Miami, FL.
- Jennings, J.E. & McDougald, M.S. (in press). Work-family interface experiences and coping strategies: Implications for entrepreneurship research and practice. *Academy of Management Review*.
- Kalleberg, A.L. & Leicht, K.T. (1991). Gender and organizational performance: Determinants of small business survival and success. *Academy of Management Journal*, 34(1), 136–161.
- Kjellman, A. & Ehrsten, M. (2005). “A Theory of Homo Entrepreneurus.” In T. Vinig & R. van der Voort (Eds.), *The emergence of entrepreneurial economics* (research on technological innovation, management and policy, 9) (pp. 211–232). Amsterdam: Elsevier.
- Langowitz, N. & Minitti, M. (2007). The entrepreneurial propensity of women. *Entrepreneurship Theory and Practice*, 31(3), 341–364.
- Low, M.B. & MacMillan, I.C. (1988). Entrepreneurship: Past research and future challenges. *Journal of Management*, 14(2), 139–161.
- Manolova, T.S., Carter, N.M., Manev, I.M., & Gyoshev, B.S. (2007). The differential effect of men and women entrepreneurs’ human capital and networking on growth expectancies in Bulgaria. *Entrepreneurship Theory and Practice*, 31(3), 407–426.
- Marlow, S. & Patton, D. (2005). All credit to men? Entrepreneurship, finance, and gender. *Entrepreneurship Theory and Practice*, 29(6), 717–735.
- Mason, C. & Harrison, R. (1999). Venture capital: Rationale, aims and scope. *Venture Capital*, 1(1), 1–46.
- McManus, P.A. (2001). Women’s participation in self-employment in western industrialized nations. *International Journal of Sociology*, 31(2), 70–97.
- Mirchandani, K. (1999). Feminist insight on gendered work: New directions in research on women and entrepreneurship. *Gender, Work and Organization*, 6(4), 224–235.
- Petterson, K. (2005). Masculine entrepreneurship—the Gnosjö discourse in a feminist perspective. In D. Hjorth & C. Steyaert (Eds.), *Narrative and discursive approaches in entrepreneurship* (pp. 177–193). Cheltenham, U.K. and Northampton, MA: Elgar.
- Rosa, P., Carter, S., & Hamilton, D. (1996). Gender as a determinant of small business performance: Insights from a British study. *Small Business Economics*, 8, 463–478.
- Sarasvathy, S.D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26(2), 243–263.
- Sarasvathy, S.D. (2004). The questions we ask and the questions we care about: Reformulating some problems in entrepreneurship research. *Journal of Business Venturing*, 19, 707–717.
- Shane, S. (2003). *A general theory of entrepreneurship*. Cheltenham, U.K.: Edward Elgar.
- Shane, S. & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217–226.

- Sharma, S. & Chrisman, J. (1999). Toward a reconciliation of the definitional issues in the field of corporate entrepreneurship. *Entrepreneurship Theory and Practice*, 23(3), 11–27.
- Steyaert, C. & Katz, J. (2004). Reclaiming the space of entrepreneurship in society: Geographical, discursive and social dimensions. *Entrepreneurship and Regional Development*, 16, 179–196.
- Thornton, P. (1999). The sociology of entrepreneurship. *Annual Review of Sociology*, 25(1), 19–46.
- Wadeson, N. (2006). Cognitive aspects of entrepreneurship: Decision-making and attitudes to risk. In M. Casson, B. Yeung, A. Basu, & N. Wadeson (Eds.), *The Oxford handbook of entrepreneurship* (pp. 91–113). Oxford: Oxford University Press.
- Weick, K. (1995). *Sensemaking in organizations: Foundations for organizational science*. Thousand Oaks, CA: Sage Publications.
- Welter, F. (2004). The environment for female entrepreneurship in Germany. *Journal of Small Business and Enterprise Development*, 11(2), 212–221.
- Welter, F., Smallbone, D., & Isakova, N. (Eds.). (2006). *Enterprising women in transition economies*. Aldershot, U.K.: Ashgate.
- Welter, F., Smallbone, D., Isakova, N., & Aculai, E. (forthcoming). The role of gender for entrepreneurship in a transition context. In L. Iandoli, M. Raffa, & H. Landström (Eds.), *Frontiers in European Research*. Cheltenham, U.K. and Northampton, MA: Elgar.
- Wheelock, J. (1998). Working for each other: Gender, the household and micro business survival and growth. *International Small Business Journal*, 17(1), 16–35.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, entrepreneurial self-efficacy, and entrepreneurial career intentions: Implications for entrepreneurship education. *Entrepreneurship Theory and Practice*, 31(3), 387–406.
-

Anne de Bruin is Professor of Economics at the Department of Commerce, Massey University.

Candida G. Brush is Professor of Entrepreneurship, holds the Paul T. Babson Chair in Entrepreneurship, and holds a chair in the Entrepreneurship Division at Babson College.

Friederike Welter is Professor of Small Business Management and Entrepreneurship, School of Economic Disciplines, University of Siegen.

The authors thank Colette Henry and Amanda Elam for their thoughtful and helpful suggestions in shaping this piece.