



Women entrepreneurs, opportunity recognition and government-sponsored business networks

A social capital
perspective

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Abstract

Purpose – This paper uses a social capital theoretical framework to examine how the relational dimension of business networks affects the networking activities of female entrepreneurs. In particular, the study examines the role of trust on women's networking behaviour and the part played by government business development officers in supporting women entrepreneur's opportunity recognition behaviour.

Design/methodology/approach – The research used mixed methods to gather and analyse data. A survey instrument was used to gather quantitative data and qualitative data was gathered from interviews and written responses to open-ended questions included in the survey.

Findings – The quantitative findings suggest firstly that approximately 20 per cent of the reason why women entrepreneurs belong to formal business networks is to search for business opportunities; however, their experience of trusting significantly affects their perception of the potential benefits of networking activities. Moreover, government development officers appear not to positively affect women entrepreneur's trusting behaviour.

Research limitations/implications – The sampling process could have caused bias in the data collection and therefore the generalisability of the findings may be compromised. This is because the sample came from a state with the most start-ups and therefore it is likely that these women are more entrepreneurial than normal. In addition, there may be bias in the type of women entrepreneur likely to have responded to the survey. It seems likely that the women entrepreneurs that would respond to this questionnaire are apt to be more entrepreneurial in their behaviour of recognising new opportunities, thereby biasing the sample used. Finally, another limitation of this study is common methods bias in relation to the data collected using self-report questionnaire.

Practical implications – The findings have implications for government because these findings suggest that they have wrongly assumed that entrepreneurs will behave in "politically constructed business network" the same way as they behave in social networks where trust levels develop over time. This may be the reason why trust was such an important variable in affecting these women entrepreneurs' networking behaviour. The findings suggest that if women entrepreneurs are to be supported to grow, the government should focus its scarce resources on building trust within these formal business networks, so that women can build the relational trust context needed to share information likely to lead to good business opportunities.

Originality/value – The paper provides information on the role of trust on women's networking behaviour.

Keywords Women, Entrepreneurs, Networking

Paper type Research paper



Introduction

Despite the fact that one-third of all businesses in the developed world are owned by women and one in ten women world-wide own their own business (Reibe, 2003); there has been minimal research about female entrepreneurship (Henry, 2002; Stevenson and Jarillo, 1990) – particularly the factors that affect the strategies women entrepreneurs use to find opportunities and become successful (Starr and Yudkin, 1996). Within the entrepreneurship literature, entrepreneurs are defined as those who “seek out and identify potentially profitable economic opportunities [and as such are] agents of growth” (OECD, 1998, p. 11). Within the women’s entrepreneurship literature, a women entrepreneur is defined as a person who has used her knowledge and resources to develop or create a new business opportunity, is now actively involved in managing it, owns at least 50 per cent of it and has been in operations for longer than a year (Moore and Buttner, 1997).

Most small, medium-sized enterprises (SMEs) are time poor and as a result focus mostly on operational activities (Garengo *et al.*, 2005) because they are more concerned about survival rather than growth (Gray, 2002). Hence, those searching for growth opportunities are acting entrepreneurially (Ardichvili *et al.*, 2003) because they are either “Identifying potential business ideas” (opportunity identification), “Recognising the idea as an opportunity” (opportunity recognition) and/or “Developing the opportunity” (opportunity evaluation). As a result, the main difference between SMEs and entrepreneurs is the degree to which they engage in the search for growth opportunities. The study of discovering new opportunities is argued to be in its infancy involving mainly descriptive studies rather than theory testing (Gaglio and Katz, 2001), and there is even less research about how women discover new opportunities.

There has been lots of research examining the benefits of clustering/networking for entrepreneurs seeking business opportunities generally (Hills *et al.*, 1997; Singh *et al.*, 1999; Hill and Brennan, 2000) and some studies examining the impact of social networking in particular for women entrepreneurs (Nelson, 1987; Ltunggren and Kolvereid, 1996; Verhuel and Thurik, 2001). The benefits of successful networking include accelerated innovation diffusion, increased productivity, profitability, sales, market knowledge and exports (Singh, 2000; Porter, 2000, 2001) and the development of a business climate that promotes innovative spin-offs for other firms (Drury, 1998). However, there has been minimal research examining how relational factors (such as trust) affect the networking behaviour of women entrepreneurs. Hence, the paper uses a social capital perspective to examine how one relational factor-trust may affect women’s networking behaviour.

In addition, the paper explores how government involvement may affect the relational dynamics involved for networked entrepreneurial women. To encourage greater entrepreneurial activity, a number of OECD countries have adopted new policies so as to encourage collaborative activities via the formation of industry clusters or business networks (Global Entrepreneurship Monitor, 2001). Government involvement has been because these cluster/networks are considered a prerequisite of innovative activity because of the potential benefits associated with accelerated diffusion of technology and know-how (OECD, 1997) which not only benefits the firms themselves, but also can enhance the economic development of a region (DETR, 2000, p. 25). However, government support for female entrepreneurs is not as evident although Reynolds *et al.* (2001, p. 5) argue that if governments were really interested in

accelerating economic growth by promoting economic activity, than they really should focus on encouraging “more of its women to participate”. There have been some recent attempts to develop new policies so as to better support female entrepreneurship in Europe (European Commission, 2000; Women’s Unit UK & Ministry of Industry, Employment and Communications (Sweden), 2001), but elsewhere government business policy aimed at supporting female entrepreneurship has been limited.

In summary, this paper uses a social capital theoretical framework to examine how the relational dimension of business networks (often initiated by government) affects the networking activities of female entrepreneurs within Australia. In particular, the study examines the role of trust on women’s networking behaviour and the part played by government business development officers in supporting women entrepreneur’s opportunity recognition behaviour. The reason for using a social capital framework is because it provides the lens for examining how the structure governing relationships (amongst women entrepreneurs and between women entrepreneurs and government business development officers) affects how women perceive opportunities.

Another reason for examining female entrepreneurs is because most are in SMEs and whilst there has been a lot of research examining the critical success factors of social networks comprising large firms (Saxton, 1997), there has been far less research undertaken examining business networks comprising SMEs (Human and Provan, 1997; Sherer, 2003). Moreover, there has been even less research examining how women behave in business networks even though women represent a third of all businesses in Australia and France and almost half of all businesses in Italy, New Zealand and Spain (Global Entrepreneurship Monitor, 2001).

The third reason for the research is because the underlying assumption emerging from a review of the US literature (such as Olk and Elvira, 2001; Porter, 1998, 1999, 2000, 2001; Sherer, 2003) is that firms join and actively participate in business networks and/or clusters because they recognize them as a source of potential business opportunities. However, the preliminary findings of the entrepreneurial outcomes of Australian networked firms suggest that opportunities from networking activities have not been realised, that is, networked firms have not necessarily increased productivity, profitability, sales, market knowledge and exports and there has been minimal evidence of accelerating innovation diffusion (ABIE, 1995; Brunetto and Farr-Wharton, 2003, 2004, 2005a, b). Moreover, Dean *et al.* (1997) examined 912 Australian firm owner/managers and found that 73 percent of them did not perceive the benefit of networking. Hence, this study examines whether women entrepreneurs’ trusting behaviour affects their networking behaviour and whether government economic development officers affect their networking behaviour.

Background

Social capital theory

Social capital is defined as the productive value that accrues to individuals and groups because of the social network relations amongst them (Taylor *et al.*, 2004) that affects their access to a range of resources (Lin, 2001). Nahapiet and Ghoshal (1998) argue that social capital theory can be used within the business context to explain outcomes by exploring three distinct dimensions: structural, relational and cognitive. Entrepreneurial researchers examine structural social capital by analysing the number of contacts that occur which connects individuals (Burt *et al.*, 2000). Cognitive social capital refers to the

types of understandings that develop amongst individuals depending on a shared meaning of language, codes and culture (Nahapiet and Ghoshal, 1998).

On the other hand, relational social capital refers to the underlying nature of relationships that guide how individuals behave and the resulting impact of their exchanges (Uzzi, 1996; Tsai and Ghoshal, 1998). In particular, the relational dimension of a network refers to the rules and norms about trusting, reciprocity and obligation behaviours (Adler and Kwon, 2002). However, this paper is limited to examining the role and impact of trust on women entrepreneurs' networking activity, because trust is a precondition of the co-operative behaviour needed within business groups if they are to achieve their objective because it determines the extent to which resources and information will be exchanged (Uzzi, 1996; Tsai and Ghoshal, 1998). Within an organisation, there are specific norms in place to determine how employees and supervisors will behave (Tsai, 2000). However, within business networks comprising entrepreneurs there are no traditional hierarchical and/or market relationship that normally governs behaviour and practices (Newell and Swan, 2000; Sheppard and Tuchinsky, 1996). Therefore, without trust, female entrepreneurs have no mechanisms for controlling for the expected behaviour and obligation of other entrepreneurs and their hidden motivations (Tsai and Ghoshal, 1998; Nahapiet and Ghoshal, 1998).

Networking activity

There has been a lot of research studying the benefits for entrepreneurs that use their social networks to identify business opportunities. In particular, social network theory assumes that it is possible to examine the linkages between defined groups of connected people as a system because of the characteristics they display (Scott, 2003). Social network research suggests that the 50 per cent of the firms investigated identified more opportunities than those firms who searched on their own (Singh *et al.*, 1999; O'Connor and Rice, 2001).

Business networks on the other hand, are linkages between different enterprises, however, they may or may not be based on social networks and if government has initiated their development, (as happens in EC countries and Australia) then there maybe few established social linkages in place in the networks. Similarly, the literature assumes that industry clusters (involving firms undertaking similar economic activities within a confined regional location) have in place established social networks that will facilitate the level of collaboration required to achieve the types of benefits described in the literature (Bapista, 2000; Koza and Lewin, 1998; Nooteboom and Gilsing, 2004; Deroian, 2002; Porter, 1999, 2000).

Within the women entrepreneurship networking literature, Nelson (1987) found that women entrepreneurs rated firstly "networks" and secondly "advice from significant other" as the two most important sources of information based on usefulness, rate of usage and cost at the start-up stages of a business and research by Ltunggren and Kolvereid (1996) confirmed the importance of family in business decision-making. Smeltzer and Fann (1989) suggest that women's networks are more formally organised and focused more strongly on role models, problem-solving and sharing information and Verhuel and Thurik (2001) argues that women's poor networking practices limits their access to new sources of potential business opportunities. Carter (2000) argues that networking is more important to female entrepreneurs as opposed to male entrepreneurs and often poor performance is because of poorly developed networks (Linehan, 2001).

On the other hand, Blisson and Kaur Rana (2001) identified that women find the potential benefits of networking difficult to achieve because of the time and costs involved in networking effectively. In addition, Asian businesswomen operating in the UK also faced barriers in the form of their cultural backgrounds (sometimes prohibiting attendance at meetings) and language differences, which affected their ability to establish their credibility (Blisson and Kaur Rana, 2001, p. 15).

Within the mainstream entrepreneurship literature, networks are differentiated based on the type of activity undertaken – with “hard” or “exploitative” business networks describing firms engaged in high levels of collaboration and entrepreneurial activities and consequently, they identify and exploit numerous new business opportunities (such as joint production and marketing ventures, and share technologies, knowledge and skills) (Sherer, 2003; Koza and Lewin, 1998; Nooteboom and Gilsing, 2004). In contrast, soft/explorative networks comprise entrepreneurs engaged in a lower level of collaboration and exploitation of new opportunities with far less resources/risk involved (Sherer, 2003). If women entrepreneurs are engaged in exploitative networks, then it is expected that they will perceive the benefits of belonging to a business network as a source of opportunities worthy of exploiting. The hypothesis used to test this idea is:

H1. Women entrepreneurs use networks to search for new business opportunities.

However, network outcomes for entrepreneurs are dependent on numerous factors. For example, Hoang and Antoncic (2003) argue that networks provide entrepreneurs with business information, advice, resource exchange and a means of reducing the potential risk associated with exploiting a new business venture, however, the quality of mutual trust acts as a barometer determining the degree to which potential benefits are possible. Hence, it is important to examine the role of trust in business networks.

The role of trust in business networks

Previous research suggests that good business networks are characterised by good flows of information, support, and sustained by the credibility and governance determining behaviour within the group (BarNir and Smith, 2002). Once the governance rules (based on a shared understanding of the rules and behaviour of the network) are established (usually informally) and entrepreneurs have worked out if the others are credible, then the information and support flows (Tsai and Ghoshal, 1998; Nahapiet and Ghoshal, 1998). However, establishing governance without a market mechanism to control the behaviour of would-be competitors requires women entrepreneurs to know who to trust because it affects what and how they share information (Wicks *et al.*, 1999).

Researchers argue that this knowledge comes from identifying different dimensions of trust and different authors have different names for markedly similar concepts. In particular, Zucker (1986) suggests that there are three forms of trust – characteristic-based trust (based on member’s characteristics), process-based trust (based on established history) and institutional-based trust (determined by established practices). Process-based trust is often used to examine how entrepreneurs learn about who and when to trust and it is examined by analyzing their history of trust experiences (Bower *et al.*, 1996) whereas McKnight *et al.* (1998) defines disposition to trust (similar to Zucker’s characteristic-based trust) as the extent to which one actor presents a

readiness to depend on other actors across a range of situations and other actors. The argument presented is that if entrepreneurs have a predisposition to trust, then it is likely that this behaviour will advantage them (Saxenian, 1994) because they will have the skills to balance trust and control (Das and Teng, 1998).

Using Zucker's dimensions, entrepreneurs probably experiment with trusting and respond to different situations based on past experience. Hence, if the first experience is positive, (probably because of the actor's beliefs about trusting) then they may continue to behave accordingly which (Mayer *et al.*, 1996 argue) increases the value of each relational exchange to each entrepreneur. As such an entrepreneur's "Predisposition to Trust" probably impacts on their experiences of trust (Zucker, 1986; McKnight *et al.*, 1998; Mayer *et al.*, 1996). The hypotheses used to test the impact of personal trust disposition and experiences of trust on the networking activities of female entrepreneurs are:

- H2. Personal trust disposition significantly affects women entrepreneur's perceptions about the perceived benefits associated with being in a network?
- H3. Personal trust disposition and past experiences significantly affect women entrepreneur's perceptions about the benefits associated with being in a network?
- H4. Personal trust disposition and past experiences moderates women entrepreneur's perceptions about the benefits associated with being in a network?

The role of government

As stated, at a macro policy level, there has been only recent recognition of the importance of female entrepreneurship in Europe in enhancing regional growth (European Commission, 2000; Women's Unit UK & Ministry of Industry, Employment and Communications (Sweden), 2001). Similarly, the Australian government has developed a small range of business programs aimed at supporting the business growth of female entrepreneurs. Business policies within Australia are made at the three levels of government – federal, state and local government, and each develops specific policies aimed at supporting their growth agendas. However, there has traditionally been a low take-up of government business programs and even less take-up of programs promoting networking (Enright and Roberts, 2001).

Previous research suggests that the reasons given include a lack of specific objectives attached to each policy/program, under-funding and poorly directed to specific target groups and in turn, poorly communicated to the client group and poor-coordination and communication between government departments (Department of Transport and Regional Services (DOTARS), 2000, 2002; Fulop, 2000; Giesecke and Maddern, 1997; Beer *et al.*, 1994; Brunetto *et al.*, 2005). However, it is unclear whether more recent programs have overcome some of the earlier problems. A study by Brunetto and Farr-Wharton (2005a) of the factors affecting the ability of government business development officers (positions at the state and local level within Queensland, Australia) suggest that the lack of resources and the "silo" mentality of some government departments responsible for administering some business programs do hinder their ability to effectively support business development of their clients. Business development officers are government employees hired to implement

government business policies aimed at supporting and assisting businesses. As such their role involves identifying businesses within different industry sectors and working with firms within particular sectors to grow their business. This may involve them presenting information to individual businesses or groups of businesses about changes to government regulations and/or export opportunities. As such, they may be instrumental in supporting the development of business networks by introducing key players within an industry and/or acting as a support (providing knowledge or secretarial support) for existing business networks.

At a micro level, some researchers argue that the role of government or other key players can affect the perception of governance and therefore the level and type of economic activities undertaken (Gulati, 1998; Zaheer *et al.*, 1998). This is because it may affect female entrepreneurs' perception of uncertainty especially in relation to making decisions about another entrepreneur's trustworthiness and capability (Gulati, 1998). In particular, Gulati (1998, p. 300) contends "firms entering alliances face considerable moral hazard concerns because of the unpredictability of the behaviour of partners and the likely costs to a firm from [their] opportunistic behaviour". In an attempt to reduce entrepreneur's concerns about moral hazard, some state and local governments have promoted strong involvement by their government business development officers in the network forming and developing processes. For example, the Queensland Department of State Development, Trade and Innovation runs "Smart Women Workshop Series" which are "tailored to the needs" and "specifically designed for Queensland business women" (QDSTI, 2006). It also promotes a business women's network in some areas of the state. The scope of this paper does not allow scrutiny of government business policies generally. Instead, the paper limits its investigation to examining whether women entrepreneurs were satisfied with the support given by business development officers within business networks. The hypothesis used to test this idea is:

- H5. Women entrepreneurs are satisfied with the support given by business development officers within business networks.

The five hypotheses are used to guide data collection.

Methodology

Introduction

This research uses mixed methods to examine how the relational structure (predisposition to trust and experience of trusting) of business networks affected women entrepreneurs' networking activities. Mixed methods research involves using both qualitative and quantitative research tools (Rocco *et al.*, 2003) and aids triangulation, which is the substantiation of results so as to increase validity and achieve greater depth and insight about a phenomenon (Denzin, 1989, p. 307; Rocco *et al.*, 2003). Quantitative data provides trends about behaviour; however, qualitative data provides a greater depth of understanding about "complex interactions, tacit processes, and often hidden beliefs and values" (Marshall and Rossman, 1989, p. 14). Qualitative data about female entrepreneurs was obtained using open-ended questions in a questionnaire as well as short interviews with ten female entrepreneurs. The data derived from a mixture of methods is used to develop analytical generalisations based

on a pattern-matching logic (Yin, 1989). This means that the emerging patterns of data are compared with the findings of previous research analysed in the literature reviews.

Quantitative methods

Sampling

Female SME owners engage in entrepreneurial behaviour to some degree everywhere – hence, the study could have been undertaken anywhere. For convenience, this study is focused in one state of Australia. The state was chosen because it exhibits high levels of growth of new small business start-ups (DSDI, 2003). Women entrepreneurs make up a third of the number of SMEs in Australia. The number of SMEs generally has at least trebled and their contribution to economic output has doubled since the 1980s (Barnes and Kennard, 2002) and they contribute 35 per cent of Australia's Gross Domestic Product, represent 97 per cent of private sector businesses and employ nearly 49 per cent of all private sector employees (ABS, 2003).

Purposeful sampling underpins the remaining sampling decisions (Yin, 1989). The first step involved approaching the relevant state government department so as to gain access to the list of female entrepreneurs involved in manufacturing and processing within the state. These types of firms were targeted because past studies suggest that manufacturing/processing firms have the potential to gain the most benefits in terms of innovative spin-offs from collaborating (Porter, 1999, 2000). In addition, snowballing was used to increase the response rate.

Questionnaires were then emailed to a random sample of 500 entrepreneurs and 119 were returned via email (a response rate of 21.1 per cent). However, only 90 females stated that they belonged to a business network and 29 females stated that did not belong to a network. The analysis of network behaviour involves only those female entrepreneurs that belong to networks.

Instruments

A questionnaire was developed to reflect a review of relevant literature. The questionnaire included three parts: a short demographic section; statements that asked respondents to indicate their degree of agreement (1 = strongly agree through to 6 = strongly disagree); and open-ended questions seeking a qualitative response (see Tables II and IV for survey questions used to test hypotheses). The questions related to network benefits used only the networked group in the regression analysis. In addition, interviews were undertaken with ten female entrepreneurs. The ten participants all belonged to business networks and were all identified by government business development officers as being actively interested in looking for growth opportunities. Convergence interviewing technique was used to determine how many female entrepreneurs were interviewed. No new females were sought after saturation of new themes ceased in response to the questions asked (Perry and Jensen, 2001).

Analysis

Quantitative analysis involved using the statistical package – SPSS to analyse data. In particular, the analysis involved undertaking regression procedures. Qualitative analysis involved data reduction by firstly categorizing the data based on “commonalities and differences” across emerging themes (Ghauri and Gronhaug, 2002) and then calculating the frequency of each category. The systematic patterns

that emerge were then used to draw conclusions that can be used to address research questions (Ghuri and Gronhaug, 2002; Yin, 1989).

Results

Demographics

Table I details the demographics of the female entrepreneur sample. It describes the type of business cross-tabulated against turnover. In terms of the length of time in a business, the majority had been in business for greater than ten years and had a turnover of between \$100,000 and \$500,000.

Results from quantitative analysis

To test the first hypothesis, a regression analysis was undertaken. The dependent variable was “Real benefits of being in this network for my business”. The independent variables were “Supply Chain Opportunities” “Market Opportunities” and “Learning Opportunities”. The findings suggest a significant relationship ($F = 3.530, p < 0.05, R^2 = 21.4$ per cent) (Table II). The significant independent variable was “Learning about new market opportunities” ($b = 0.364, p < 0.05$). The findings suggest that the first hypothesis should be accepted.

To test the second hypothesis, a regression analysis was undertaken. The findings suggest a significant relationship ($F = 11.512, p < 0.001, R^2 = 27.1$ per cent) (Table III, model 1). The findings suggest that the second hypothesis should be accepted.

To test the third hypothesis, a regression analysis was undertaken. The findings suggest a significant relationship ($F = 9.034, p < 0.001, R^2 = 37.6$ per cent) (Table III, model 2). The significant independent variables were “Trust disposition” ($b = 0.483, p < 0.001$) and “Experience of trust” ($b = 0.326, p < 0.05$). The findings suggest that the third hypothesis should be accepted.

To test the fourth hypothesis, a hierarchical regression was undertaken. The findings suggest a significant relationship ($F = 4.007, p < 0.05, R^2 = 42.6$ per cent) (Table III, model 3). The significant independent variable was “Predisposition to trust” ($b = 0.558, p < 0.001$). The findings suggest that the fourth hypothesis should be accepted.

To test the fifth hypothesis, a regression analysis was undertaken. The findings suggest a significant relationship ($F = 6.42, p < 0.000, R^2 = 34.2$ per cent) (Table IV). The dependent variable was “Overall, I am satisfied with the assistance from government business development officers”. The independent variables were

| Turnover \$s (000's) | Food and beverage processing | Tourism | Building | Training | Manuf | Business services | Health | Other |
|-------------------------|------------------------------------|---------|----------|----------|-------|----------------------|--------|-------|
| < 50 | 1 | 4 | 1 | 1 | 1 | 9 | 1 | 4 |
| 50 > x < 100 | 2 | 2 | | 1 | 3 | 5 | 1 | 4 |
| 100 > x < 500 | 2 | 1 | 2 | 2 | 6 | 8 | 2 | 3 |
| 500 > x < 1 m | 3 | 1 | 1 | 3 | 7 | 7 | 3 | 4 |
| > 1 m | 6 | 1 | | 3 | 4 | 3 | 4 | 3 |
| Total | 14 | 9 | 4 | 10 | 21 | 32 | 11 | 18 |

Table I.
Turnover cross-tabulated against type of business

Table II.
Results from main effects regression examining the perceived benefits for female SMEs of belonging to a network/cluster

| Variables 1 = SA - 6 = SD | Questions used in survey to test independent variables | Female entrepreneur statistically significant (β scores $F = 3.530^*$ $R^2 = 21.4$ per cent) | Mean and standard deviation for males and females | α if item deleted |
|------------------------------|--|---|--|--------------------------|
| Learning potential | I joined the network because I thought I could learn more from other entrepreneurs The network is a good place to get new ideas that will benefit my business I learn a lot about business from talking to other entrepreneurs I learn a lot about new business opportunities from attending network meetings | 0.061 | 2.5 (1.4) 2.7 (1.9) 2.6 (1.9) 2.7 (1.7) | 0.7025 |
| Market opportunities | Belonging to a network has benefited my business by presenting me with new markets I joined the network because I wanted to find new business opportunities | 0.364* | 2.3 (1.8) 2.7 (1.7) | 0.6846 |
| Supply chain opportunities | Belonging to a network will benefit my business by presenting me with more options in my supply chain The benefits of cooperating with my suppliers outweigh the problems The benefits of cooperating with competitors to buy raw materials outweigh the problems The benefits of cooperating with my competitors to tender for government jobs outweigh the problems <i>Dependent variable:</i> overall, there are benefits to being in a network | 0.175 | 4.6 (1.6) 2.8 (1.7) 2.9 (2.1) 5 (2.2) 5.3 (2.2) 2.07 (1.47) | 0.7227 |

Notes: *Significant at 0.05; ** significant at 0.001

| | Model 1 <i>b</i> | Model 2 <i>b</i> | Model 2 <i>b</i> |
|----------------------------------|---------------------|---------------------|---------------------|
| Trust disposition | 0.52** | 0.43** | 0.558** |
| Trust experience | | 0.326* | 0.305 |
| Learning about opportunities | | | -0.192 |
| Market opportunities | | | 0.113 |
| Supply chain opportunities | | | 0.054 |
| <i>R</i> ² (per cent) | 27.1 | 37.6 | 42.6 |
| ΔR^2 (per cent) | 27. | 10.5 | 5 |
| <i>F</i> | 11.512** | 9.034** | 4.007* |

Table III. Results of main effects hierarchical regression examining whether trust moderates the benefits derived from networking

Notes: *Significant at 0.05; **significant at 0.001; model 1: trust variables (predisposition to trust); model 2: trust variables (predisposition to trust and trust experience); model 3: the moderating effect of trust on the perceived benefit from networking for women

| Variables | Questions used in survey to test independent variables | Female SME owner/manager statistically significant β scores <i>F</i> = 6.421 <i>p</i> < 0.000 <i>R</i> ² = 34.2 per cent | Mean and standard deviation for males and females |
|-------------------------------|--|---|---|
| 1 = SA – 6 = SD | | | |
| Encouraged joining | Discussions with government development officers encouraged me to join in the network | 0.348, <i>p</i> < 0.000 | 5.47 (2.7) |
| Encouraged participating | Discussions with government development officers encouraged me to actively participate in the network | 0.172 | 5.04 (2.4) |
| Supported network development | Government development officers have an important role to play in supporting the development of networks | 0.214 | 3.08 (2.0) |
| Dependent variable: | Overall, I am satisfied with the assistance from government business development officers | | 5.09 (2.30) |

Table IV. Results from main effects regression examining the perceived level of satisfaction of female SMEs with government business development officers

“Encouraged me to join network” “Encouraged me to actively participate” and “Supported networks to become effective”. The significant independent variable was “Encouraged me to join network” (*b* = 0.348, *p* < 0.000). The findings suggest that the fifth hypothesis should be accepted.

Results from qualitative analysis

The sample of women entrepreneurs interviewed had all been in a formal business network for at least 12 months. Some belonged to women-only networks, whereas other

attended more traditional industry-specific business networks. In many cases, state and/or local government had some involvement with the networks, sometimes simply reporting changes in relevant legislation for the specific industry at the meeting, at other times it was the government economic development officer that organised venues and/or speakers for the network meetings, particularly if the business network had as its primary purpose, assisting entrepreneurs to export. The network meetings were held monthly, bi-monthly or tri-monthly for either a breakfast or dinner meeting.

To gather information from women entrepreneurs about what they thought the role of government economic development officers were in the networks, each of the ten entrepreneurs were asked to comment about their involvement with government officers. The findings suggest two very different emerging experiences. Some had a professional relationship with government economic development officers and appeared to have had good experiences:

I see government being there to support small business growth and I try to utilise their many support programs and liaise with State Development Officers whenever possible. Therefore, I feel my relationship has to be very good to gain the best out of the department.

On the other hand, a similar number had had nothing to do with government economic development officers and as such had not developed a relationship with them:

I had no relationship with the government until this interview. I had never heard of a field officer.

Further investigation to explain the data suggests that the reason for the disparity of responses may be because there are a limited number of government resources and therefore government resources are targeted at those entrepreneurs within specific industries (manufacturing and/or targeted growth industry such as the marine industry) and women may not necessarily be involved in those industries.

Another question asked of the ten women entrepreneurs was about the importance of trust when networking with other entrepreneurs within business networks. In every case, the respondents stated that the gains from networking are from sharing problems and ideas and getting useful feedback from those with experience. However, there seemed to be unwritten rules about not sharing important ideas about opportunities with those entrepreneurs that are competitors:

You have to pick what you say to whom – some entrepreneurs are more inclined to steal good ideas. I do, however, have a mentor in the network to talk to about a new business idea and I like to hear about others' failures and successes and see where I can apply this information to my business.

I have a mentor that has demonstrated to me (by his success) that he has the experience, knowledge, and contacts I need to improve my knowledge of running a business. To learn and retain focus, I have become involved in a number of local networks and have created some significant relationships with businesses, Office of Economic Development (Local govt), etc. which has provided support, information, and referral.

Hence, their experiences of trusting appeared to determine whom to trust, whereas much of the information sharing within the organised business networks did not seem to be particularly sensitive. Most of the women entrepreneurs appeared to have a small group (sometimes just one mentor) often within their social networks, but also within the formal business networks with whom they discussed important, sensitive

information. On the other hand, women entrepreneurs appeared to learn a lot just by listening to the stories told within business networks.

Discussion

This paper uses a social capital theoretical framework to examine how trust affected the networking behaviour of female entrepreneurs. These networks are often set up by government business development officers who may or may not have continued involvement in the day-to-day running of the networks. The second focus of the paper was to examine whether government business development officers were perceived as supporting women entrepreneur's opportunity recognition behaviour. Five hypotheses guided the data collection process.

The first finding from the research is that 20 per cent of the reason why women join networks is to search of business opportunities. This finding supports previous research identifying why entrepreneurs belong to networks (Sherer, 2003; Bosworth, 1995; Koza and Lewin, 1998; Nootboom and Gilsing, 2004; Singh *et al.*, 1999). In doing so, the findings provide new information about the nature and dynamics of being a women entrepreneur managing a SME. Previous research had focused on the behaviour of large firms within networks (Saxton, 1997; Human and Provan, 1997; Sherer, 2003). The findings from this initial study suggest that women entrepreneurs running SMEs belong to business networks for the same reasons as large firms.

The second and major finding of this study obtained using a social capital theoretical lens is that trust – particularly “Predisposition to Trust” significantly affects how women entrepreneurs perceive the benefits associated with networking. In particular, the quantitative findings from a hierarchical regression suggest that women entrepreneur's “Predisposition to Trust” in combination with their “Experiences of Trusting” accounted for 37.6 per cent of their perception of the potential benefits of networking activities. Previous research had already identified that trust affected networking activities for large firms (Sherer, 2003), this study explains how trust affects women entrepreneurs engaged in formal business networking. The analysis of the qualitative data suggests that women entrepreneurs use their “Predisposition to Trust” in combination with their “Experiences of Trusting” to determine how to trust and what information to share with competitors. Moreover, the mean for women's “Predisposition to Trust” was (mean = 4.48) and for “Experiences of Trusting” it was (mean = 4.09). This suggests that within formal business networks that are not based on trusting relationships formed over time, it is probably unrealistic to expect women entrepreneurs to share sensitive information that could advantage their competitors. Das and Teng (1998) have already identified that trusting behaviour is a function of balancing control with trust in their research – these findings suggest that until women entrepreneurs know the other members in the network well enough to trust them, they simply do not risk it.

The third finding is that government business development officers do play a significant role in assisting networked women entrepreneurs (Table IV). In particular, the third variable in the equation – “Supporting network development” has a mean of 3.08(2) suggesting that women entrepreneurs do “slightly agree” with that statement. However, their role appears not to affect women entrepreneurs' perception of other entrepreneurs' trustworthiness or capability or level of uncertainty generally as suggested by Gulati (1998). The qualitative data suggests that their role is perceived

as being more in delivering government programs, some of which are perceived as positive to those entrepreneurs that know about them.

This study's findings have a number of limitations. Firstly, the sampling process could have caused bias in the data collection and therefore the generalisability of the findings may be compromised. This is because the sample came from a state with the most start-ups and therefore it is likely that these women are more entrepreneurial than normal. As such, more studies are required to ensure stronger generalisability of these findings. In addition, there may be bias in the type of women entrepreneur likely to have responded to the survey. It seems likely that the women entrepreneurs that would respond to this questionnaire are apt to be more entrepreneurial in their behaviour of recognising new opportunities, thereby biasing the sample used. Finally, another limitation of this study is common methods bias in relation to the data collected using self-report questionnaire. However, Spector (1987, 1994) argues that as long as long as the surveys and interpretation reflect the literature, then self-report methodology is useful in providing trends that in turn provide useful insights into employees' feelings and perceptions.

Conclusion

The findings from this study contribute to the literature about women entrepreneurs. The findings from this paper add to the literature about the networking behaviour of women entrepreneurs. Moreover, the findings from using the lens provided by the relational dimension of the social capital theoretical framework contributed new knowledge about how trust affects women entrepreneur's perceptions of the benefits of networking. These findings are likely to negatively affect how women entrepreneurs behave within networks; because previous research has already demonstrated that trust perceptions affect the level of information sharing that occurs (Uzzi, 1996; Tsai and Ghoshal, 1998). Hence, it is likely that in this case, their low levels of trust did compromise their exposure to new business opportunities.

The findings have implications for government. Female entrepreneurs appear to have a relatively negative perception of the role of government business development officers (see means in Table IV). On the other hand, the qualitative data, suggests a divergent experience with government business development officers. One explanation may be because only some have dealings with them. Previous research about the role of government business development officers (Brunetto and Farr-Wharton, 2005a) suggests that the lack of resources means that whilst female entrepreneurs may comprise a third of all Australian SMEs, limited government resources for supporting business growth leads to limited focus on supporting women entrepreneurs – hence, only some women entrepreneurs have had exposure to government resources and programs.

However, another explanation is that these findings support the past findings that Australian business programs lack specific objectives, and are under-funded and poorly directed to specific target groups and in turn, are poorly communicated to the client group and suffer poor-coordination and communication between government departments (DOTARS, 2000, 2002; Giesecke and Maddern, 1997; Beer *et al.*, 1994; Brunetto and Farr-Wharton, 2003). Reynolds *et al.* (2001) argued that if governments is really interested in accelerating economic growth by promoting economic activity, than its first priority must be to encourage and support women entrepreneurs.

The findings have implications for governments because these findings suggest that they have wrongly assumed that entrepreneurs will behave in “politically constructed business network” the same way as they behave in social networks where trust levels develop over time. This may be the reason why trust was such an important variable in affecting these women entrepreneurs’ networking behaviour. The findings suggest that if women entrepreneurs are to be supported to grow, the government should focus its scarce resources on building trust within these formal business networks, so that women can build the relational trust context needed to share information likely to lead to good business opportunities. More research is required to examine what level of trust is required for entrepreneurs within business networks to share information about potential business opportunities.

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