Managerial Performance and Business Success: Gender Differences in Canadian and Israeli Entrepreneurs

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Abstract

The purpose of this paper is to assess the role of managerial performance in the success of men-owned businesses (MOB) and women-owned businesses (WOB) for Canadian and Israeli entrepreneurs. A process-oriented approach, a relatively overlooked perspective in this field, was used for this assessment. The methodology used was based on two national samples from Canada and Israel (n=235) which included mostly members of a private business networking organization. Questionnaires were distributed to the respondents; only entrepreneurs with at least one employee were included. Findings: Multilevel analyses revealed that gender is significantly associated with some managerial functions, but except for the business longevity—it is not directly associated with measures of business success; nationality is associated with two measures of business success: turnover and growth. Women entrepreneurs, both Canadian and Israeli, ranked significantly higher in some functions of their managerial performance compared to their male counterparts. This study's main implications are in deciphering the major role of managerial performance and nationality and the relatively marginal effect of gender in business success measures, implying that the gender gap in successful entrepreneurial businesses is decreasing. These findings can become foundations for better understanding broader entrepreneurship questions and practice-based researched endeavors. This paper's main contribution is in the identified need for developing training and education programs for entrepreneurs in the areas of managerial skills and practices; as well as in opening future avenues for cross-national assessments of a process-oriented perspective in these areas.

Research paper

Key words: entrepreneurship, gender, cross-national, managerial performance, business success
Introduction

The development of businesses has been said to proceed through stages that parallel those of human development, and much as in human development, each stage presents new challenges to be met and dealt with (Reynolds, Storey & Westhead, 1994). According to this view, which takes a process-oriented perspective (Aldrich & Langton, 1998; Elder, Johnson & Crosnoe, 2003; Moen, 1998; Moen & Minor, 1998), the owner's entrepreneurial characteristics, such as innovation, creativity, and risk-taking, are required mainly in the first stages of venture creation, as he/she turns innovative ideas into an active business. Once the business begins to function and succeed, however, the nature of the firm's needs change, and the owner is expected to engage in different managerial tasks, such as supervising staff, establishing strategic goals, or establishing effective networks. Furthermore, business success, at least at the micro level dimension of analysis, depends on the ability of firms to adapt internal structures and processes to available opportunities and external constraints (Pfeffer & Salancik, 1978), and such adaptations depend on the actions of the firm's leader, (e.g. Barringer & Jones, 2004; Chen & Barnes, 2006; Miller, Madsen & Cameron, 2006), the entrepreneur. Choosing and utilizing the appropriate managerial performance is thus critical in assuring the success of entrepreneurial businesses. Literature about how businesses need to operate for achieving success disclosed robust works on business survival, growth in sales and profitability as well as in growth in size of the firm (Bates, 1990; Hall, 1992; Kalleberg & Leicht, 1991) . Although a comprehensive review has been done on business success measures, relatively few studies have explored the relationships between managerial performance and business success in the entrepreneurial realm.

The success of entrepreneurial businesses is multifaceted, taking on different forms (Lussier & Pfeiffer, 2000; Shane & Venkataraman, 2000; Stevenson & Gumpert, 1985). However, one major finding that repeatedly emerges from studies on entrepreneurship is that women-owned businesses and men-owned businesses (WOB and MOB, respectively) differ in some success measures (e.g., Alsos, Isaksen & Ljunggren, 2006; Bhide, 1999, 2000; Birley, 1989; Boden & Nucci, 2000; Grilo & Irigoyen, 2006). With the exception of a few recent studies showing no gender differences among entrepreneurial businesses in some success measures (e.g., Johnsen & McMahon, 2005; Menzies, Dichon & Gasse, 2004), most studies revealed differences in business longevity (Low & MacMillan, 1988), rates of sales (Bhide, 2000; Cassar, 2004; Covin, Green & Selvin, 2006; Covin & Selvin, 1991), and rates of growth (number of employees), (Bhide, 1999, 2000; Flamholtz & Randle, 2000; Greiner, 1998; Watson, 2006) among others. Variations in success across gender-based businesses has traditionally been explained either by the resource-based view (e.g., Barney, 1991, 2001; Bird & Brush, 2002; Boden & Nucci, 2000; Brush, Carter, Gatewood, Greene, & Hart, 2004; Conner & Prahalad, 1996; Cooper & Goby, 1999; DeTienne & Chandler, 2007; Fasci & Valdez, 1998; Loscocco, Robinson, Hall & Allen, 1991; Marlow & Paton, 2005), i.e., owners' human capital, motivations to start a business, their choices of industry, among others (Jones & Raydel, 2002; Kirchoff, 1994); or by the output-oriented perspectives, in terms of the business's results, e.g., sales turnover and profitability; growth; longevity, and more (Alsos, et al., 2006; Boden & Nucci, 2000; Fielden, Davidson, Dawe & Makin, 2003; Grilo & Irigoyen, 2006). A literature search that addresses the differential success of MOB and WOB in such measures however reveals that there are only a few studies of substance that deepen the exploration to a process-oriented perspective in explaining MOB and WOB's success in these measures (Baron, 1998; Greene, Hart, Gatewood, Brush & Carter, 2003; Verheul & Thurik, 2001). While the theoretical importance of sustaining the firm's competitive
advantage has catapulted this issue to the forefront of agendas for both output-oriented and resource-based approaches (Barney, 1991, 2001); the process-oriented approach – referring to both the theoretical and practical role of gender performance in sustaining a competitive advantage - continues to lag behind (Zahra, 2007). As such, issues such as managerial performance carried out by men and women are pushed to the rear of research in entrepreneurship.

A process-oriented approach

Guided by the literature on life course theory, the process-oriented point of view (Aldrich & Langton, 1998; Moen & Minor, 1998) refers primarily to actions and activities of leading entrepreneurs (Low & MacMillan, 1988; Ucbasaran, Westhead & Wright, 2001; Zahra, 2007) along the entrepreneurial process or life course of their businesses - from exploration to exploitation (Shane & Venkataraman, 2000), focusing on the connection between entrepreneurs' actions and their organizational development. This view treats the business outcomes (i.e., survival, financial performance, and growth) as the results of the business processes, in the context of the environment and organizational processes (Carsrud, Olm, & Eddy, 1986; Gartner, 1989). Recently, there have been calls in research for a shift in focus, from the traits and motivations of entrepreneurs to performance and behavior (Gartner, 2001; Ucbasaran et al., 2001; Zahra, 2007). One such performance would be entrepreneurs' managerial performance.

Taking a process-oriented perspective means emphasizing performance, which can be relatively easily adjusted and modified to the firm's needs. Explaining MOB and WOB's success measures through the owner's human capital, for example, means addressing existing facts, some of them unchangeable, i.e., past experience in entrepreneurship or management, or attainment of academic education in entrepreneurship – thus assuming that only a limited number of individuals with unique initial human resources will achieve success for their businesses. By taking a process-oriented view, implications on how to achieve better results in their businesses are applicable, and should promote a narrowing of the gender gap in entrepreneurial businesses' success.

Additionally, the process-oriented view emphasizes the role of environment and the external relationships on the owner's performance and the business processes (Street & Cameron, 2007); asserting that environments' influences on entrepreneurial businesses or on entrepreneurs, i.e., men versus women, vary across cultures (Mirom, Erez & Naveh, 2004), thus should be addressed accordingly. Statistical assessments suggest that the number of people involved in entrepreneurship is about 73 million, about 30 million of whom are women. Considering the importance of entrepreneurship to nations' economies, and the growing numbers of entrepreneurs, particularly women entrepreneurs, it is surprising that little has been written on gender and the success measures of entrepreneur-owned businesses in the context of their environments (Greene et al., 2003). The assumption that there is a single, 'universal' environment that affects entrepreneurial businesses' success means ignoring environmental or contextual effects (Shane, 2003; Shane & Venkatamaran, 2000); yet, only a very limited number of studies have addressed comparative cross-cultural perspectives of gender and success measure of new businesses (e.g., Cameron & Quinn, 1988; Street & Cameron, 2007). Comparisons across nations of the entrepreneurship environment for women and men can further promote an understanding of gender differences in entrepreneurship performance.
relationships between managerial performance and success measures of MOB and WOB thus seem warranted.

The shortcomings in the afore-described research were the impetus for a comparative cross-cultural exploration of MOB and WOB's success measures, i.e., longevity, sales turnover and growth in business size through a process-oriented perspective, i.e., owners' managerial performance.

Theoretical Background

Managerial behaviors and gender in the entrepreneurial context The management practices of business owners have been repeatedly found to be positively associated with business success (Barney, 1991, 2001; Zahra,). But in the emerging literature on management and entrepreneurial business there is a relatively limited number of studies addressing comparative cultural assessments, whether of gender (Brush, 1992; Merrett & Gruidl, 2000; McGregor & Tweed, 2002); or across countries (Kolvereid, Shane & Westhead, 1993; Mueller, 2004; Smith, Dugan & Trompenaars, 1997). Moreover, there is a much smaller body of existing research on women entrepreneurs relative to that on men entrepreneurs, especially with respect to managerial performance (Chaganti & Parasuraman, 1996; Sonfield, Lussier, Corman, & McKinney, 2001). This may be the result of the difficulty in determining managerial performance, as this is a multifaceted, diverse concept that encompasses several managerial aspects, such as managing people, setting goals, stimulating creativity and innovation, establishing networks, and more (Whetton & Cameron, 2005).

In this study managerial performance is defined as management know-how, which is assumed to reflect management-specific skills and knowledge, without regard to the kind of business. Several managerial functions will be included to represent the management performance of entrepreneurs; i.e., managing innovation, people-orientation in managing employees, leading change, and others. Previous studies on entrepreneurship have shown that men and women differ in their managerial skills and performance (Gundry & Welsch, 2001; Lerner, Brush & Hisrich, 1997; Morris, Miyasaki, Watters & Coombes, 2006; Perry, 2002), but most of those studies did not adequately address the multidimensionality of managerial performance but rather treated 'management' as an inclusive, one-dimensional concept (Dumas 2001; Fischer, 1992; Morris, et al., 2006; Sadler-Smith, Hampson, Chaston, & Badger, 2003; Rosa, Carter & Hamilton, 1996). Some studies examined a few functions of managerial performance, e.g., decision-making, risk-taking or leading change, but investigated them separately, thereby overlooking the holistic dimension of managerial performance in entrepreneurial businesses. Most of these studies have shown that women entrepreneurs are less successful in turning their managerial performance into successful and profitable enterprises (Carter, Williams, & Reynolds, 1997; Du Reitz & Henrekson, 2000); however, the explanations for these gender-based relationships are mixed. Some studies tend to portray women as being at a disadvantage in certain critical managerial behaviors, i.e., in exhibiting financial performance; less likely than men entrepreneurs to use lines of credit, bank loans or supplier credit; among others (Carter & Rosa, 1998; Carter, et al., 1997; Powell & Ansic, 1997; Sonfield, et al., 2001), some other studies point to lack of skills such as self-confidence to lead change in their businesses, to set goals or to generate alternative solutions in order to make adequate decisions or to overcome the problems they face, especially in risky situations (Johnson & Powell, 1994; Zinkhan & Karande, 1991). Overall, these shortcomings are
suggested to be the cause of gender gaps in the development of their businesses. On the other hand recent studies provide empirical evidence that men and women do not perform differently in managing their entrepreneurial businesses and that their managerial performance and attitudes correspond in many aspects (Chaganti & Parasuraman, 1996; Menzies, et al., 2004; Orser & Riding, 2004; Watson, 2002); while a third group of studies addresses the advantages women have in specific functions in management. The body of studies focusing on the managerial performance for which women are at an advantage compared to men includes managerial functions related to people; women more than men focus on their teams' development, empower their subordinates and encourage their workers' achievements and perseverance (Bruni, Gherardi & Poggio, 2004; Brush & Hisrich, 2000; Brush, et al., 2004; Gundry, Ben-Yoseph & Posig, 2002). Other studies report that women entrepreneurs spend more time in networking, more engaged in conducting market research and typically demonstrate advantages in strategic planning, leading change (Greve & Salaff, 2003; Lerner, et al., 1997; Lerner & Almor, 2002; Morris, et al., 2006; Walker & Webster, 2006) and innovation (e.g., Hisrich & Brush, 1984; Goldsmith, Stith & White, 1987; Goldsmith, Freiden & Eastman, 1995 Sexton & Bowman-Upton 1990).

The research on male entrepreneurship, which is more comprehensive than the research on female entrepreneurship, depicts men as initially having a more advantageous position in the general management of their new firms, in managing sales (Du Rietz & Henrekson, 2000), and in being more oriented to their businesses' financial goals ( Carter & Rosa, 1998; Coleman, 2002; Orhan, 2001; Tullous, 2002). They are more likely to emphasize customization or cost efficiency (Chaganti & Parasuraman, 1996), and are in a better position to manage networking more effectively (Aldrich, 1989), even though women entrepreneurs are more involved in networking in quantitative terms (Greve & Salaff, 2003).

In each of these cases, women are considered to perform their managerial role differently from men, and this leads their businesses to a different course of development and success (Watson, 2002; Watson & Robinson, 2003). However, none of these studies provide satisfactory explanations for why WOB are less successful in some measures than MOB; do women entrepreneurs form a unique culture ((Hofstede, 2001; O’Reilly, Chatman & Caldwell, 1991) differentiated that the culture of men entrepreneurs? One would expect such explanations in view of the burgeoning studies showing more gender similarities than differences in management, or that several aspects of women’s managerial performance surpass either in quality or magnitude, that of men.

Entrepreneurial success and gender Although there is robust theory on entrepreneurial success and gender (e.g., Alsos, et al., 2006; Birley, 1989; Boden & Nucci, 2000; Chaganti & Parasuraman, 1996; Grilo & Irigoyen, 2006), studies on this relationship and managerial performance are scarce. With the exception of a study by Kalleberg and Leicht (1991), we could not locate any recent studies addressing the multiple indicators of managerial performance and success measures of MOB and WOB. Entrepreneurial success is complex and difficult to measure (Shane & Venkataraman, 2000) and this could explain the dearth of research in this area; moreover, the measurement of 'business success' draws from different approaches (e.g., Sexton & Bowman-Upton, 1990), with each approach introducing different limitations in terms of evaluation, validity, reliability, availability, accuracy, etc. Of the existing studies on entrepreneurial success and gender, some findings show gender-related differences in sales, financial assets, profitability (Chaganti & Parasuraman, 1996); survival (Cooper, Gimeno-
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Gascon, & Woo, 1994; Robb, 2002; Srinivasan, Woo, & Cooper, 1994); and growth in size measured by number of employees (Bhide, 1999, 2000; Flamholtz & Randle, 2000; Greiner, 1998; Watson, 2006), where WOB are found to be less successful than MOB. Some other studies found no gender-related differences in success measures, i.e., longevity, turnover, and growth, among active entrepreneurial businesses (Fagenson, 1993; Kalleberg & Leicht, 1991; Menzies, et al., 2004; Sonfield, et al., 2001; Verheul, Rissieeuw & Bartelse, 2002; Verheul & Thurik, 2001; Watson, 2002).

According to Watson (2002), this conflicting evidence may be explained by the fact that all of these studies fail to relate input to output, this relation being essential to adequately assessing performance and success. His results, derived from research conducted on a large sample of men and women business owners in Australia, showed no difference in men's and women's business performance when measured by return on equity (ROE) and return on assets (ROA), after taking into account industry and age of the business. Similar results were found when risk measures were included in the analysis (Watson & Robison, 2003). However, a recent study conducted by Johnsen and MacMahon (2005) with the same sample concluded that there were no statistically significant differences between the success of MOB and WOB, even in terms of business growth. The scarcity of recent studies addressing these issues (e.g., Menzies, et al., 2004; Du Rietz & Henrekson, 2000) can be attributed either to the complexity of defining entrepreneurship success or the different ways in which each gender defines business success (Van Auken, Rittenburgm, Doran & Hsieh, 1994). For example, women entrepreneurs perceive business success as being in control of the business processes, building ongoing relationships with clients, doing something fulfilling and achieving goals, while men describe success in terms of achieving goals and financial profitability (Moore & Buttnner, 1997; Romano, 1994). The documented differences in motivations to entrepreneurship (Hughes, 2006) can explain these divergences in the perception of business success. If women choose entrepreneurship to balance family and work, for example, the measure of success might not be stated in terms of financial profitability.

The measures chosen to be included in this study and representing business success are longevity, turnover from sale and increase in size as measured by the number of employees.

Business longevity – Age and size variables consistently exhibit significant relationships with the firm’s success (Low & MacMillan, 1988). From the process-oriented perspective the relationships between business longevity and entrepreneurs’ managerial performance is twofold. Taking the organizational change perspective, managerial performance represents the internal processes that develop over the course of the firm’s life, among other existing routines (e.g., Bates, 1990; Hannan & Freeman, 1984); thus entrepreneurs’ managerial performance evolves and is shaped through the business' resources, needs and constraints. As such, not only does the existing managerial performance in a business enhance the business' success over time, but in fact, a firm lacking effective management may die (Watson, 1995). A different aspect of this theory suggests that age of the business – longevity - means a loss of agility and responsiveness over time; thus while the pressures imposed on the business increase with age and size of the business, new opportunities are missed, and current dangers are not avoided (Barron, West & Hannan, 1994). It may suggest that such rigidity induces entrepreneurs' managerial performance to become fixed and this in turn may reduce the likelihood of making any changes in order to ascertain an adaptation between the business and the external pressures it encounters (Barron, et al., 1994). Some findings show that business growth decreases with the firm’s age (Jovanovic,
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1982); thus from this aspect over the years the owner's managerial performance may turn into a potential hindrance to the success of his or her business.

Some functions of managerial performance such as goal setting (e.g., Noel & Latham, 2006), innovation and adaptation of new technology (Gagnon, Sicotte & Posada, 2006; Sinetar, 1985) are considered to positively affect business longevity. Again, the effect of gender on this relationship between managerial performance and business success has been insufficiently investigated.

Turnover from Sales - this measure is usually assessed against the benefits from alternative courses of action (Shane & Venkataraman, 2000). Consistent with opportunity cost arguments, entrepreneurs with relatively higher levels of managerial performance – whether as a result of their managerial experience, education and training in management, or their personal traits - are likely to pursue entrepreneurial activities with potentially larger returns (Bhide, 2000; Cassar, 2004; Covin, et al., 2006; Covin & Selvin, 1991).

Both managing innovation, R&D and change (Chakrabarti, 1990; Deeds & Rothaermel, 2003), and networking (Anand & Khanna, 2000; Duysters, de Man & Wildeman, 1999; Walter, Auer & Ritter, 2006) are found to stimulate sales.

Business Growth - Based on both the process-oriented perspective and the resource-based view, the entrepreneur's managerial performance (i.e., capabilities, personal abilities) are associated with business growth, (Barney, 1991, 2001), i.e., number of employees. Employees are a critical resource in the achievement and maintenance of any growth (Bhide, 1999; Flamholtz & Randle, 2000; Greiner, 1972, 1998; Watson, 2006), thus effective management of their employees enhances entrepreneurs' business success.

Studies show that the most important managerial functions for achieving growth in number of employees relate to effectively managing people in terms of empowerment, feedback, personal development and rewarding the employees. (e.g., Weitzman & Kruse, 1990; Zenger, 1992).

Cross-cultural management performance

In the last decade, a number of empirical studies have suggested that differences among the genders in managerial performance can be explained by cultural factors, such as nationality. Managerial performance has been found to differ across nationalities, both in terms of perceptions of what determines managerial performance and in terms of management practices (Atuahene-Gima & Ko, 2001; Neelankavil, Mathur & Zhang, 2000; Steensma, Marino, Weaver & Dickson, 2000). Some studies have found that nationality has a greater impact than gender in terms of contextual influences and thus suggest that nationality, to some degree, moderates gender differences among entrepreneurs (Kolvereid, et al., 1993; Mueller, 2004; Smith, et al., 1997). Neither the prevalence nor the substance of entrepreneurs' managerial performance is uniform across countries (Shane, 1992; Smith et al., 1997; Mueller & Thomas, 2001). Innovativeness, managing subordinates, authority imposed within the firm, decision-making processes, conflict resolution (Lam, Chen & Schaubroeck, 2002; Shane, 1993; Tinsley & Brett, 2001), among others, have been found to differ across countries (Thomas & Mueller, 2001). However, despite these findings, cross-cultural assessments of entrepreneurs' managerial performance and its effect on their business' success have been insufficiently investigated in the
research on entrepreneurship, and the exploration of these multinational relationships in the context of gender has been neglected for many years. A large-scale, cross-cultural study including different countries was conducted by Williams and Best (1990). However, in these times of rapid change, especially in the era of budding international entrepreneurship, research from a cross-national perspective should be the standard rather than the exception.

The relationships between managerial performance, gender, and nationality in the context of entrepreneurship led to two key research questions concerning the prospects for women entrepreneurs in turning their management performance into successful businesses; these questions regards again the inquiries about cultures (Hofstede, 2001; O’Reilly, et al, 1991). First, is there a ‘universal' pattern, i.e., culture of gender differences such that specific functions of managerial performance are more prevalent among women entrepreneurs than among men entrepreneurs, regardless of their nationality? Some studies strongly suggest the existence of common, gender-related patterns across cultures (Hofstede, 2001; Williams & Best, 1990; Zinkhan & Karande, 1991). The second question addresses nationality-related behaviors, raising inquiries into whether there are functions of managerial performance that are prevalent among entrepreneurs of one nationality more than of another, i.e., culture, regardless of their gender. For example², in a multinational study conducted by Smith, Dugan, and Trompenaars (1997), it was found that across countries, men consistently exhibit higher "entrepreneurial traits", than women; but when controlled for nationality, the 'modernity' of the country moderated the gender effect on these traits.

Although the above cited researchers addressed gender and entrepreneurship from a multinational perspective, not one of these studies included managerial performance in their theoretical models.

*Why Canada vis-à-vis Israel?*

While several significant similarities have been noted in the entrepreneurial trends of the Canadian and Israeli advanced economies at the aggregate level, i.e., the output-oriented level of analysis, there seem to be major differences in government support of entrepreneurial initiatives and in the higher education programs in entrepreneurship between these nations that may play a significant role in determining, at least in part, entrepreneurs' managerial performance.

**Canada**- Canada is ranked as having one of the world’s most entrepreneurial economies. Entrepreneurship is opportunity-driven, with an average of 8.8 to 9.5% of the adult population engaged in entrepreneurial activities in the years 2003 to 2006. In demographic terms, twice as many men as women are involved in the start-up or early growth period of a new business or firm, but the average annual growth rate of self-employed women and/or women entrepreneurs is more than double that of men (GEM 2002, ³ 2004, 2005,⁴ Royal Bank of Canada, Government of Canada⁵). The entrepreneurial market in Canada is relatively stable; in the first quarter of 2006,

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³ GEM 2002; Canadian Report, 2002, Riverin, N.


⁵ Canada Business for Entrepreneurs, at: [http://www.cbsc.org/](http://www.cbsc.org/)
Canada’s business bankruptcies dropped by 10.9 percent over the same period in 2005 (Industry Canada, 2006). The Canadian government has affirmed that entrepreneurial ventures form the strategic backbone of the economy. In order to turn knowledge and innovation into successful operations, many institutions - governmental, private, academic, educational - are committed specifically to helping entrepreneurs realize their full potential, and a very large number of entrepreneurial educational and training programs are available (Menzies, 2004).

**Israel** - In the year 2000, the GEM ranked Israel third in the world in entrepreneurial activity. Investors are attracted by Israel's highly educated and trained workforce and by its concentrations of technology parks and technology incubators. Israel is highly ranked as an entrepreneurial economy, yet it is also characterized as a 'restless' economy, with very high annual rates of business closures (Sharabani, 2004; Eden, Horesh, Almor & Kariv, 2005). The results of several studies show that in terms of infrastructure and drive for high technology innovation, Israel is similar to Silicon Valley (Dana, Korot & Tovstiga, 2005; Nijkamp, Guldemond & Teelen 2004) and that most of its high-tech companies are relatively successful in terms of sales (Mirom, et al., 2004; van Beuzekom & Arundel, 2006), though comparatively small in size. However, due to insufficient encouragement and commitment of resources from government (Phan & Foo, 2004), Israel's high-tech entrepreneurship has not reached its potential level of success. Entrepreneurship in Israel is three times more opportunity-driven than necessity-driven. In terms of demographics, as in Canada, there are twice as many men as women involved in the start-up or early growth period of a new business or firm. The Israeli entrepreneurial market is characterized by intensive networking (Haour, 2004; Shoham, Baruchson-Arbib & Gouri-Oren, 2006). However Israel has fewer and less-developed entrepreneurship education and training programs than most other industrialized economies (Berry, 2005; Eden, et al., 2005).

Attitudes towards entrepreneurship are positive in both Canada and Israel. However, the main contextual differences between the two countries, insofar as the themes of the present study are concerned, appear in government support, the higher education programs for entrepreneurs and other programs supporting entrepreneurs. In Canada, these are at very high levels, while Israel has not succeeded, as has Canada, in establishing specific institutions, governmental or other, which are devoted to the promotion of entrepreneurship or the training of entrepreneurs (Eden, et al., 2005).

**Research Model and Methodology**

Based on the extant literature, a conceptual model (Fig. 1) was created to guide the empirical research. In the model, business longevity; turnover (sales); and growth in number of employees represent functions of the business' success; and these success measures are posited to be a

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function of the entrepreneurs’ managerial performance. Nationality, Canadian and Israeli, and gender are mediating variables; and characteristics of the business and the entrepreneur are included as control variables in the model.11 This proposed model should enable an exploration of the unique relations between each function of the owners' managerial performance and MOB and WOB success measures among Canadian and Israeli entrepreneurs.

Managerial performance in five distinct management functions is included. These are: managing innovation, managing employees through a people orientation as opposed to task-orientation12 (Blake & Mouton, 1963), leading change, goal-setting, and networking (Whetten & Cameron, 2005).

Research Hypotheses and Questions

As shown in the above literature review, women entrepreneurs are at a greater advantage than men in some functions of managerial performance, i.e., functions related to a people orientation, engagement in networking, and managing strategic planning and leading change, whereas men are more financially - and goal - oriented than women. It has been shown that the Canadian institutional support systems are far more developed than the Israeli, and this might affect the entrepreneurs’ acquisition and development of the relevant managerial functions, which are usually studied theoretically and applied practically in institutions and/or courses devoted to entrepreneurship.

Since the relationships between managerial performance and nationality have been insufficiently explored in entrepreneurship, the first hypothesis compares the relationships of gender and managerial performance between the two nations.

H1. Women entrepreneurs will rank higher than men in managing people, leading change and networking. Men will rank higher than women in managing by setting goals. Canadians - men and women will rank higher than their Israeli counterparts across each one of the included functions of managerial performance.

11 Although business success is also undoubtedly affected by nationality, this relationship was not dealt with in this study since our focus was on process rather than output.

12 E.g., Task-related characteristics include among others, being driven to excel, accepting of responsibility, having initiative, and being results-oriented – in order to achieve the organization's goals in productive, efficient and effective ways. As such, task-oriented leaders or leading entrepreneurs engage in spelling out the duties and responsibilities to their employees, clarifying roles and task requirements, including telling people what to do, how to do it, etc., mostly in one-way communication. People-orientation is considering employees' needs as most relevant, encouraging two-way communication and helping to build confidence and motivation on the part of the employees; stimulating employees intellectually by empowerment them, providing feedbacks and arousing them to develop new ways to think about problems.
The effects of managerial performance on some success measures of MOB and WOB have been insufficiently addressed in previous research. The extant literature revealed positive relationships between managerial functions related to innovation, business longevity (Gagnon, et al., 2006; Sinetar, 1985) and turnover from sales (Chakrabarti, 1990; Deeds & Rothaermel, 2003); and that a greater focus on leading change (Chakrabarti, 1990; Deeds & Rothaermel, 2003) also stimulated business turnover from sales. Management by goal setting was found to relate to the higher levels of business longevity (e.g., Noel & Latham, 2006); and the growth in size of the business has been found to strongly relate to a people-orientation in managing and leading the staff (e.g., Weitzman & Kruse, 1990; Zenger, 1992). These relationships however, have insufficiently been explored in the context of gender differences.

On the other hand, the literature provided some insights into the gender differences in some functions of their managerial performance; but there is still a lack of research into the association of these relationship and MOB and WOB success measures.

For example, the literature reveals that women entrepreneurs are at an advantage relative to men in managing their staff through a people-orientation (Brush, et al., 2004; Gundry, et al., 2002); and compared to men entrepreneurs they are at an advantageous position in strategic planning and change (Greve & Salaff, 2003; Lerner, et al., 1997; Lerner & Almor, 2002; Morris, et al., 2006; Walker & Webster, 2006).

The next two hypotheses address the deficiencies described, and based on these streams of research, attempt to investigate how managerial performance of each gender group affects MOB and WOB success measures. These hypotheses delve into the 'gender' culture, thus do not include nationality in their exploration.

H2 hypothesizes these relationships among women entrepreneurs and H3 – among men entrepreneurs.

H2. Women entrepreneurs: higher levels of management through a people-orientation will be positively related to higher levels of growth in business' size; and higher levels of managing by leading change will be positively related to turnover from sales.

Men entrepreneurs are found to be in a more advantageous position in managing sales (Du Rietz & Henrekson, 2000); being more oriented to their businesses goals (Chaganti & Parasuraman, 1996; Tullous, 2002; Orhan, 2001), and to network more effectively than women entrepreneurs (Aldrich, 1989).

H3. Men entrepreneurs: higher levels of management through goal setting will be positively related to longevity; and higher levels of management through networking will be positively related to higher levels of turnover from sales.

Finally, following the findings showing that nationality has been found to affect business success measures and even to moderate the effect of gender on business success measures (Kolvereid, et al., 1993; Mueller, 2004; Smith, et al., 1997) and based on the process-oriented view discussed earlier, the fourth hypothesis attempts to decipher the roles of gender and nationality in the business success measures; more specifically which 'culture' is most predominant in determining MOB and WOB success – gender or nationality. This hypothesis is based on studies showing
that the relationship between managerial performance and business success is pertinent (Carter, et al., 1997; Du Reitz & Henrekson, 2000); as well as on the findings suggesting that Canadian entrepreneurial businesses survive longer and are relatively larger in size; while Israeli entrepreneurial businesses are relatively successful in their financial indicators, but face more bankruptcies and are relatively smaller. Taken together the last hypothesis proposes:

H4. The business success measures will be affected primarily by entrepreneurs' managerial performance. Managing by goal setting and innovation will positively affect business longevity, managing innovation and networking will positively affect turnover from sales, and managing by a people-orientation will be positively related to growth in size. Gender will insignificantly affect business success, and nationality will significantly affect business success – being Canadian will be related to longevity and growth in size; being Israeli to turnover in sales.

**Research design and methods**

*Sampling procedure:* Two national samples were collected, and these included only entrepreneurs with at least one employee. The Canadian sample consisted of 115 entrepreneurs and the Israeli sample consisted of 120 entrepreneurs.

*Data collection – Israel and Canada:* In order to ensure the validity and reliability of the cross-national assessment, the same two-stage sampling procedure was followed in Canada (Montreal and Toronto) and in Israel (Tel-Aviv area, Haifa area and Beer-Sheba area). As a first step, the principal investigators of this study attended several weekly meetings of entrepreneurs, who are members of an international organization, where the purpose of the study was explained. The study's questionnaires were distributed at these meetings (English and French versions in Canada and Hebrew version in Israel), and the completed forms were collected at the end of the same meetings. From the Israeli chapters of this organization, 76 completed questionnaires were collected, an approximately 90% return rate. In order to enlarge the sample, the respondents were asked to provide referrals of entrepreneurs who are not members of this organization. In the second stage, the research investigators contacted these entrepreneurs by telephone and sent the questionnaires by e-mail or delivered them in person to those willing to participate. In Israel, 44 completed questionnaires were gathered through this procedure, an approximately 43% return rate. In Canada (Montreal and Toronto areas), 65 completed questionnaires were collected from members of the organization, and 50 from non-members, in the same two-stage procedure. The average response rates in Canada from both members and referrals was about 37%.

T-tests of gender, age, and educational level showed no significant differences in any of these parameters between members and non-members of this company, in either country.

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13 Business Networking International (BNI), a private marketing company specializing in word-of-mouth referral marketing. Members represent the major businesses, trades and professions in the community. A selection process is conducted at the group level for the best placement of a member in a group for the best potential referrals he or she could get in the group, but any entrepreneur could be a member in BNI groups. Annual fees are required. Presently, there are over 4,100 BNI chapters operating in 26 countries and over 81,000 members worldwide (at: [http://www.bni.com/](http://www.bni.com/)).

14 Canadian respondents could choose between the English and the French versions. These versions were translated by a professional translator from Hebrew.
Sample profiles

Canada: The sample consisted of 115 respondents, all entrepreneurs, 73 (63.5%) men and 42 (36.5%) women. The mean business longevity for MOB was 9.8 years and for WOB, 6.1 years. Of the respondents, 47.1% reported having one employee, 22.1%, two employees, 10.6%, three employees, and the rest, 20.2%, more than four to thirty employees. Most of the respondents reported having an academic education, with 40 of them (34.8%) having attained a first degree and 29 (25%) having obtained a professional, non-academic education. The average age of the male respondents was 46 years and that of the women, 42 years.

Israel: The Israeli sample consisted of 120 respondents, all entrepreneurs, 69 (57.5%) men and 51 (42.5%) women. The mean business longevity was 10.5 years for MOB and 4.96 years for WOB. Thirty-three respondents (27.5%) had one employee, 10 (8.3%) employed two persons, 16 (13.3%) had three employees, 12 (10%) had four employees, and the rest reported having more, with one entrepreneur reporting 50 employees. The average age of the male respondents was 39 years and that of the women, 35 years.

All of the respondents, in both Canada and Israel, own businesses in the service and commercial sectors; there were no owners of businesses in the low- or mid-tech industry nor from the manufacturing sector. Since the distribution of the businesses' occupations was very large, the business sector was separated into professional versus non-professional businesses for computations (Longenecker, 2006).

Questionnaire

The research questionnaire was in three parts. (1) Business measures derived from objective data, i.e., the products/services provided by the company, the age of the business, number of full-time employees, full-time employee turnover rates in the preceding year, gross earnings and change from the preceding year (Kalleberg & Leicht, 1991). For this study, the variables included as success measures were: business longevity (age); growth in turnover from sales from the preceding year and growth in the number of employees. (2) A self-assessment form of managerial behavior, modified for entrepreneurs from the Personal Assessment of Management Skills (PAMS) (Whetten & Cameron, 2005), intended to assess the functions required for effective management. From the original 85-statement PAMS questionnaire, 50 statements deemed most relevant to entrepreneurial management, all based on the entrepreneurial literature, were selected for this study. The respondents were asked to rate their actual perceived managerial performance according to a 4-point rating scale (1- strongly disagree ----5- strongly agree); (3) Entrepreneurs' personal characteristics: age, educational attainment, and measures of previous self-employment experience.

THEORETICAL AND OPERATIONAL DEFINITIONS

Dependent variable

Business success - The dependent variable is based on the respondents' self-reports referring to three success indicators: (a) business longevity (Bates, 1990; Orser & Riding, 2004; Robb, 2002);
respondents addressed the question – "How old is your business (in years)?"; (b) changes in the turnover from their businesses' sales. Building upon prior research in entrepreneurship, one predominant indicator of a business's financial performance focuses on sales or growth in sales (e.g., Kalleberg & Leicht, 1991; Fischer et al., 1993; Rosa et al., 1996; Fasci & Valdez, 1998; DuRietz & Henrekson, 2000). Business turnover was measured by the owners' responses to the question: "Please specify what is the change (in %) of your business revenues (sales) from its start up point till today?"; (c) growth in the business size, assessed through the current number of employees compared to the number of employees at start-up, indicating the growth, stability or reduction in the number of employees over time.

Independent variables Managerial performance – studies have shown that entrepreneurs have a different set of attitudes about the nature of the management process and business in general (Baum & Locke, 2004; Gasse, 1977). Based on Whetten and Cameron's (2005) conclusive model and modified from their PAMS questionnaire on managerial performance, five managerial functions are included in this study; respondents were asked to rank (1- very rare ----5-very often) the extent each function characterizes their daily managerial performance as leading entrepreneurs on the following functions; (a) innovation (Gasse, 1977, 1982; Smilor, 1997), e.g., "I strive to generate new ideas and activities at work", "I make sure that divergent points of view are represented in every complex problem-solving situation", "I invest more effort and take more initiatives than expected"; (b) leading change (Filion, 1991; Lerner, et al., 1997; Lerner & Almor, 2002; Morris, et al., 2006; Walker & Webster, 2006), e.g., "I work to close gaps between good and great performance", "I know how to get people to commit to my vision of positive change", "I express compassion toward employees who experience difficulty in adjusting to change"; (c) a people-orientation in managing the staff (Brush, et al., 2004; Gundry, et al., 2002), e.g., "I frequently give other people positive feedback", "I express gratitude frequently, and even for small acts", "I avoid using threats or demands in order to impose my will on others", "I help people feel competent in their work"; (d) goal-setting (Baum & Locke, 2000; Baum, Locke, & Smith, 2001; Erez & Judge, 2001; Locke, 2001, Locke & Latham, 1990, 2002), e.g., "I set financial goals based on my vision regarding my business", "I set financial goals and encourage my workers to accomplish them", "I usually emphasize a higher goal associated with the work"; (e) networking (Greve & Salaff, 2003; Lerner, et al., 1997), e.g., "I pro-actively meet different people in order to expand my networking", "I attend professional conferences/seminars/forums for networking"

Control variables

Educational level and past managerial experience are known to affect future sales and revenue (Cassar, 2004); and so id the effect of age, gender (e.g., Johnsen & McMahon, 2005; Menzies, et al., 2004) and nationality (Atuahene-Gima & Ko, 2001; Neelankavil, et al., 2000; Steensma, et al., 2000) on several measures of the business success. They were thus included as control variables. Of the firm's characteristics, two dichotomous variables were included; sole ownership (0) versus partnership (1) (e.g., O'Connor, Hamouda, McKeon, Henry & Johnston, 2006); and professional (1) versus non-professional (0) businesses (Longenecker, 2006). The category

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15 Self-reports were chosen as data collection methodology due to entrepreneurs' tendency to avoid the presentation of objective data on their business' sales turnover or any other financial indicators; moreover there is an emerging stream of research in entrepreneurship providing substantial evidence supporting the validity of the self-reported measures, including financial indicators, due to the fact that they are anchored in objective criteria, and are thus reliable and valid (Brush & Wanderwerf, 1992; Chandler & Hanks, 1993).
'professional businesses' refers to those whose main activities derive from extensive academic and/or practical training, i.e., law firms, psychology and psychology-related firms, businesses specializing in architecture, accounting, medicine, organizational, management or financial counseling, and so on. The category 'non-professional businesses' refers to those whose main occupation does not require such academic knowledge and specialized training, i.e., craft- and art-related businesses, fashion, building construction, retail shop and restaurant ownership, chefs, private kindergartens, and so on.

Results

Table 1 summarizes the descriptive statistics and the intercorrelations between managerial performance, the included measure of business and the control variables—personal and business characteristics.

| Please insert Table 1 around here |

The estimates in Table 1 indicate positive and significant relationship for each one of the business' success measures with different managerial functions; for example, longevity is positively and significantly related to three managerial functions, namely, leading change, a people orientation and setting goals; turnover from sales is positively and significantly related to networking and growth in size is positively and significantly related to setting goals. Gender is significantly related to longevity and growth in size, male entrepreneurs were significantly related to both measures; and nationality is significantly related to turnover from sales and growth in size, Canadians are significantly related to growth in size and Israelis - to turnover from sales. Managerial functions are intercorrelated but not to a multicolinearity level.

The expected versus actual results for H1 to H3 are summarized in Table 2.

| Please insert Table 2 here |

To determine whether the functions of managerial performance are differentiated by gender for each nation, as posited in H1, a two-step procedure was followed. First, to enable classification of the included variables, thereby facilitating the detection of structures in the relationships between the variables (Pedhazur & Schmelkin, 1991), a factor analysis was executed for the 50 variables selected as measures of managerial performance. The results of this analysis showed that by

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16 The Principal Components method was chosen since it allows combining two or more variables, which could be correlated, into one factor, and the Varimax rotation was used to maximize the variance of the 'new' factors.
extracting factors with eigenvalues of 1.0 or higher, five factors, explaining approximately 50% of the total variance, remained. Looking into the rotated matrix, the factor with the highest loadings was associated with managing innovation (Innovation) followed in descending order by factor associated with variables in managing through a people-orientation (People), leading change (Change), goal setting (Goals), and networking (Networking). The loadings were computed and the resultant factors were employed in a one-way ANOVA to identify the gender differences in managerial performance. The one-way ANOVA was chosen as it provides comparisons by gender of the means of each factor of the managerial performance. ANOVA was measured separately for Canadian and Israeli entrepreneurs.

The analysis indicated that women of both nations ranked higher scores than men in each factor of the managerial performance, but significant differences between the genders emerge only in managing innovation ($F(1,81) = 3.852, p < 0.05$), (women: MEAN = 3.33, SD = .500; men: MEAN = 3.10; SD = .438) for the Canadian sample; and in: managing innovation ($F(1,101) = 8.251, p < 0.01$), networking ($F(1,101) = 3.900, p < 0.05$), and managing the staff by a people orientation ($F(1,101) = 4.100, p < 0.05$) for the Israeli sample. Means and SDs for the Israeli sample respectively, were as follows: managing innovation—for men 3.01, .484, and for women, 3.28, .405; networking—for men 3.19, .54 and for women, 3.40, .41; and managing through a people-orientation—for men 3.19, .50 and for women, 3.41, .53. The findings suggested that women entrepreneurs, both Canadian and Israeli emphasize more than their male counterparts some managerial functions; while the expected relationships—of nationality or of men with some managerial functions emerge insignificant; hence partly supporting the first hypothesis.

The expected versus actual results for H2 and H3 are summarized in Table 2. To explore the second and third hypotheses, on the role of gender in the relationships between managerial performance and business' success measures, a multivariate analysis (MANOVA) was conducted in a custom model with interactions of gender with each managerial factor separately. The dependent variables included were the three business' success measures (longevity, changes in the turnover from their businesses' sale, and growth in business' size), and the covariates were the five factors comprising managerial performance (i.e., innovation, managing by a people orientation, leading change, setting goals and networking), gender entered as a fixed factor. The overall multivariate test emerged significant for four variables, gender (Wilks $\lambda = .729, F(1,180) = 2.673, p < 0.05$), and three managerial functions, managing by a people orientation (Wilks $\lambda = .750, F(1,180) = 2.420, p < 0.05$), innovation (Wilks $\lambda = .599, F(1,180) = 2.339, p < 0.05$) and establishing networking (Wilks $\lambda = .683, F(1,180) = 3.339, p < 0.05$). The interactions showed significance for gender with—establishing networking (Wilks $\lambda = .740, F(1,180) = 2.501, p < 0.05$), innovation (Wilks $\lambda = .712 F(1,180) = 2.00 5, p < 0.05$) and managing people (Wilks $\lambda = .815 F(1,180) = 2.225, p < 0.05$). The tests for between-subject effects showed that of the main effects (without interactions) of gender on business' success measures, significance emerged for growth in business' size ($F(1, 180) = 6.713, p < 0.00$) and turnover from sales ($F(1, 180) = 6.489, p < 0.05$), indicating that in general, the genders differ in these measures. Regarding the factors of the managerial performance, for networking, the mean for men (Mean = 2.912; SD = .756; n = 100) was higher than that for women (Mean = 2.833; SD = .902; n = 80), while for managing through a people orientation, and innovation the mean for women respectively (Mean = 3.255; 3.100; SD = .491; .222; n = 80) were higher than that for men, respectively (Mean = 3.148; 2.919; SD = .948; 1.114; n = 100). The interactions of gender with networking ($F(1,180) = 5.355, p < 0.05$) was significantly related to turnover in sales;
gender and innovation \( (F(1,180) = 4.348, p < 0.05^*) \) was significantly related to turnover from sales; and managing the staff by a people orientation \( (F(1, 180) = 4.078, p < 0.05^*) \) was significantly related to growth in the business' size.

The findings for H2 and H3 emerged that for women managing by a people orientation was significantly and positively related to growth in the business' size, and innovation was positively and significantly related to turnover from sales, as expected; and that for men networking was significantly and positively related to turnover from sales, again as expected. However, the other expected relationships did not emerge significant, thus these findings only partially support H2 and H3.

To further investigate the forth hypothesis that some functions of the managerial performance will affect the business' success measures and that overall nationality would appear more significant than gender in determining the business' success, three hierarchical regression analyses were conducted for each of the business' success measures separately, i.e., longevity, changes in the turnover from their businesses' sale, and growth in business' size\(^{17}\). Since the factors of managerial performance are predominant in this study's conceptualization, rather than entering all the independent variables into the multiple regression equations at the same time, I wanted to consider the influence of the these factors in isolation; thus, the factors of managerial performance were entered in the first step, gender and nationality were entered in the second step, and finally, the control variables— the owner's personal characteristics (i.e., age, educational level and prior experience in management) and the business' characteristics (sole ownership versus partnership and non-professional versus professional businesses) were entered in the third step.

**LONGEVITY**

It appears that the five included factors of managerial performance explained around 6\(^{18}\) of the total variance in business longevity (step 1); the next step, with gender and nationality, added a moderate contribution of around 4\% to the total variance, meaning that these are moderate predictors of the criterion variable; and the control variables entered in the third step contributed an additional 18\% to the total variance, the total variance as revealed by the \( R^2 \) is around 23.5\%, a considerable result. Of the factors representing the managerial performance, leading change and setting goals emerged positive and significant, as expected, but contrarily to the hypothesis innovation appeared insignificant in affecting the business longevity. Again in contrast to the expected relationships, gender appeared significant in predicting longevity, namely business headed by men are older than businesses headed by women. Of the control variables – the owner's age and past experience in management have both a positive and significant effect on longevity.

**TURNOVER FORM SALES**

The factors of managerial performance explained around 5.5\% of the total variance in changes in business turnover from sales (step 1); gender and nationality contribution to the total variance by

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\(^{17}\) Only for growth in the business size an additional controlling variables was included – the business' age, due to the partial correlation between them.

\(^{18}\) The contribution of self-reports is usually relatively low (Gelman & Hill, 2006); thus the percentages revealed in this study are considerable.
adding around 2% to the total variance, again implying that both are negligible predictors in determining the dependent variable; while the control variables included in the third step appeared insignificant in determining the business' turnover from sales.

The major contribution of the factors representing managerial performance emerged positive and significant for innovation, leading change and managing by a people orientation; and as predicted, gender appeared insignificant, and nationality appeared significant — businesses headed by Israelis comparatively to those headed by Canadians had higher and positive changes in turnover from sales.

GROWTH IN SIZE

The factors in the first step explained around 6% of the total variance in the business' growth in size; gender and nationality, added a contribution of around 3% to the total variance, and the control again appeared insignificant as revealed from the results in the third step; overall the included variables explained around 12% of the total variance. The factors that emerged positive and significant are managing by a people orientation, as expected and setting goals. Gender emerged insignificant and nationality emerged significant, Canadian more that Israeli profited of a growth in size, as predicted. Although partially supporting the hypothesized relationships in H4, most of the expected relationships and their directions appeared as expected; overall the results of this study supported most of the hypothesized relationships.

Conclusions

The relationship between gender and success in entrepreneurial businesses, an emerging quest in entrepreneurship research, is still unresolved and unclear. The findings to date are inconsistent and inconclusive, with some studies reporting differences between success measures, i.e., longevity, changes in turnover from sales and growth in size for MOB and WOB (e.g., Chaganti & Parasuraman, 1996; Greve, 1999; Robb, 2002; Srinivasan, et al., 1994), while others show similarities in some of these indicators (Fagenson, 1993; Kalleberg & Leicht, 1991; Sonfield, et al., 2001; Verheul & Thurik, 2001). In addition, most of the conclusions on business success are drawn from studies largely on MOBs, rather than from comparative assessments of the different 'cultures' of men and women entrepreneurs (Hofstede, 2001; O’Reilly, et al., 1991).

Additionally, it should also be noted that as global economies grow, 'local' observations of business success measures seem limited. Nationality has been found to affect some measures of business success (Kolvereid et al., 1993), and although cultural assessments of these topics are imperative (Hofstede, 2001), they are notably lacking in the realm of entrepreneurship. The present study addresses these gaps and attempts to explore the close and complementary relationships between managerial performance and business success, using a process-oriented perspective. Relatively few studies focus on the activities and actions within the business, such as
managerial performance, i.e., take a process-oriented perspective, which corresponds to this study's basic conceptualization. Most studies on entrepreneurship and business success measures favor either the resource-based view (e.g., Barney, 1991; Bird & Brush, 2002; Boden & Nucci, 2000; Brush, et al., 2004; Loscocco, et al., 1991), associated with the owner's human capital and personal characteristics, or the output-oriented approaches (Alsos, et al., 2006; Boden & Nucci, 2000; Fielden, et al., 2003; Grilo & Irigoyen, 2006), which address the differences and/or similarities in MOB and WOB's success measures, but typically do not attempt to provide empirical explanations for these findings.

In this study the gender of the owner is postulated to play a marginal role in business success; alternatively, some indirect effects, related to gender, may have a predominant role in the businesses' success; as such, different managerial functions in which owners, men and women, engage should affect the success of MOB and WOBs.

In Figure 1 the main variables investigated in this study are presented. The relationships of gender and managerial performance among Canadian and Israeli entrepreneurs were first compared. In partial accordance with the first hypothesis, women entrepreneurs, both Canadian and Israeli, ranked significantly higher in some managerial functions compared to their male counterparts; Canadian women entrepreneurs were found to rank higher in managing innovation; Israeli women entrepreneurs were found to rank higher in managing change, innovation and in managing the staff by a people orientation. These findings show that each nation has a characteristic managerial performance, especially among women entrepreneurs, and that no gendered managerial performance emerged. Simply put, in the cases of both the Canadian and Israeli women entrepreneurs, these findings support previous ones, for example, the finding on Canadian and Israeli women who rank higher than men in managing innovation, correspond to those showing that women entrepreneurs emphasize innovation (e.g., Hisrich & Brush, 1984; Goldsmith, et al., 1987; Goldsmith, et al., 1995 Sexton & Bowman-Upton 1990); and the findings that Israeli women are more focused than men on managing their employees, again supports previous studies showing that women entrepreneurs have the advantage in managerial performance oriented to people (Bruni, et al., 2004; Brush et al., 2004; Gundry et al., 2002). However, the engagement of Israelis in some functions that are less likely to be used by Canadian women entrepreneurs is surprising in light of the supportive entrepreneurial environment in Canada19 (Manzies, 2004) compared to Israel (Berry, 2004; Eden et al., 2005), and induced us to seek different explanations. Based on Hefstede's model (2001) showing that national cultures stem from consistency in values, and on the work of O'Reilly, Chatman, and Caldwell (1991) comparing the organizational dimensions related to innovation, people-orientation and openness to change, a possible explanation of these findings may be that entrepreneurs in the different nations, especially women, hold a unique view on what 'management' entails or what is the best managerial performance to use for their own businesses. These findings may also suggest that although Canada and Israel may have different and unique ideas regarding management processes in entrepreneurial businesses, there still is a general 'idea' or 'value' in both nations that prompts women entrepreneurs to use some functions of managerial performance more frequently than men. Intriguingly, this implies, contradicting some previous findings on women’s disadvantaged position in some managerial functions (Powell & Ansic, 1997; Sonfield, et al.,


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2001), that women entrepreneurs are as, if not more, pro-active and 'hands-on' in management as their male counterparts.

Turning to the second and third hypotheses, on the role of gender in the relationships between managerial performance and business success measures, the results revealed that a higher managerial orientation of women towards people and innovation are positively related to both growth in WOB's size and turnover (correspondingly); and in the case of men higher levels of reported networking are related to MOB's turnover; suggesting not only that men and women use different functions in their managerial performance, but that they also transform these managerial functions into different advantages for their businesses. For example, turnover from sales is stimulated by networking in MOB and by innovation in WOB. These findings provide a breakthrough in our knowledge by revealing that although MOB and WOB were found to demonstrate different success measures (Alsos, et al., 2006; Boden & Nucci, 2000; Grilo & Irigoyen, 2006); it is apparently not the gender of the owner, but rather the managerial functions used by the owners, (used differently by men and women), which shape the success of the business. Concurrently, the same business success measures develop, at least in part, from different managerial performance in businesses headed by men or by women. Yet, some expected relationship between managerial performance and MOB’s and WOB's success failed to emerge as significant in this study. Future studies should therefore re-assess these relationships in larger samples and across more nations.

Finally, in the attempt to decipher the role of the different 'cultures' – gender or national – in the relationship between managerial performance and business success, as proposed in the fourth hypothesis, apart from its significant affect on longevity, gender appeared insignificant in affecting business success measures, i.e., turnover from sales and increase in size, as hypothesized. Building on the national statistics in Canada and Israel showing that entrepreneurial businesses in Israel are relatively small but profitable (Eden, et al., 2005; van Beuzekom & Arundel, 2006), the findings on the advantage of businesses headed by Canadians in increase in size compared to those headed by Israelis, and of the businesses headed by Israelis in their turnover from sales compared to those headed by Canadians, are not surprising; though the statistical contribution of nationality was moderated for both success measures.

Overall, this study's findings provide a breakthrough in our knowledge in raising the premise that MOB and WOB's success measures are not directly related to the owner's gender, but are more likely to be associated with the genders' use of specific managerial functions and, apparently, to their ideas or values of how managerial functions assist them in achieving success for their businesses. By providing evidence on the role of the internal and operational processes, i.e., managerial performance, in shaping business success (Fagenson, 1993; Kalleberg & Leicht, 1991; Verheul, et al., 2002; Verheul & Thurik, 2001) these findings reinforce the relevance of the process-oriented approach in the investigation of the success of MOB and WOB.

The predominant role of managerial behaviors and nationality, and the relatively marginal role of gender per se in business success measures, imply that the gender gap is decreasing in some measures of business success.

These study findings also highlight avenues for future research through a process-oriented perspective, and thus challenge the domination of the traditional line of studies that uses a resource-based view or an output-oriented perspective on MOB and WOB's success measures. A
more robust measurement of MOB and WOB success measures is thus developed, and fills gaps in our knowledge of MOB and WOB’s success.

Implications and Limitations

The main implication of this study is in the area of training and higher education in entrepreneurship. With the empowerment of women in small- and medium-size enterprises (SMEs), gender-based assistance programs have provided training courses, but there has been concern that women are being channeled into businesses that are smaller, under-capitalized and labor-intensive, and that they are at a disadvantage in the relevant skills and behaviors that could promote greater success. Several studies have argued that programs are needed that focus on the skills and behaviors which could facilitate success and growth (Carter & Allen, 1997). However, since our findings show that 'gender' has limited relevance to business success, the call for reconsidering the gender issue in education and training programs in entrepreneurship should be evaluated. Offering such gender-related programs means inculcating the gender issue in entrepreneurship, thus marginalizing women entrepreneurs rather than moving them into the mainstream of the entrepreneurial economy. In their efforts to promote and support local entrepreneurship, education programs in this area should focus more on process-oriented perspectives, and should be more integrated, both conceptually and in practice, with management programs, but adapted to the entrepreneurial realm in order to acknowledge the role of management in the outputs of the entrepreneurial ventures. These programs should be offered to active and potential entrepreneurs of both genders and should focus on the acquisition and development of the managerial skills and behaviors relevant for achieving the various goals of an entrepreneurial business.

The results of this study are subject to some limitations. First, the sample was gathered through a non-random, convenient sampling procedure. Acknowledging the difficulties in gathering random samples of entrepreneurs, and given that this study's sample is fairly large, the value of understanding more about entrepreneurs' managerial behaviors and their role in MOB and WOB success measures outweighs the technical limitation of using a non-random sample. As the business world becomes more sophisticated and increasingly differentiated, and as entrepreneurship abounds and SME competition becomes more aggressive, management behaviors constitute an increasingly large and important component of entrepreneurial business success.

This study addressed entrepreneurs only in the services and retail sectors; the manufacturing and industrial sectors are not represented at all. This is due to the limitation imposed by collecting a non-random sample and the inherent difficulties in gathering a satisfactory number of women entrepreneurs in the manufacturing and industrial sectors, where they are under-represented. Further investigations should address this limitation, possibly by asking for assistance from government associations engaged in industry and manufacturing, in order to amass a sufficient research sample from these sectors. Finally, future research should sample entrepreneurs from different nations in order to enhance the knowledge on the role of national culture in the success of MOBs and WOBs.
References


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The Research Model: Effects of managerial behaviors on business success—Canadian and Israeli

Mediating variables:

Management behavior
- Innovation (Innovation)
- Managing people (People)
- Leading change (Change)
- Goal setting (Goals)
- Networking (Networking)

Control variables:

Firm's characteristics
- Sole ownership/Partnership
- Professional/Non-professional businesses

Entrepreneur's personal attributes
- Educational level
- Past experience in management
- Age

NATIONALITY (Canada-Israel)

GENDER

Business success
- a. Business survival (Longevity)
- b. Turnover (Sales)
- c. Growth in number of employees
Managerial Performance and Business Success: Gender Differences in Canadian and Israeli Entrepreneurs

Table 1
Means, standard deviations and correlations $^{a,b}$

<table>
<thead>
<tr>
<th>Means</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<tbody>
<tr>
<td>Managerial performance: (1-5)</td>
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<tr>
<td>Innovation</td>
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<td>Change</td>
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<td>.534**</td>
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<tr>
<td>People</td>
<td>3.283</td>
<td>.516</td>
<td>.643**</td>
<td>.600**</td>
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<tr>
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<td>.806</td>
<td>.210**</td>
<td>.404**</td>
<td>.271**</td>
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<tr>
<td>Networking</td>
<td>2.884</td>
<td>.805</td>
<td>.342**</td>
<td>.210**</td>
<td>.150</td>
<td>.220*</td>
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<tr>
<td>Bus. Age</td>
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<td>10.943</td>
<td>.038</td>
<td>.260**</td>
<td>.217*</td>
<td>.247**</td>
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<tr>
<td>Turnover -sales (%)</td>
<td>115.247</td>
<td>232.727</td>
<td>.014</td>
<td>.041</td>
<td>.008</td>
<td>.026</td>
<td>.203*</td>
<td>.010</td>
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<tr>
<td>Growth (in number of employees)</td>
<td>4.513</td>
<td>12.024</td>
<td>.055</td>
<td>.032</td>
<td>.064</td>
<td>.239*</td>
<td>.003</td>
<td>.419*</td>
<td>.023</td>
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<tr>
<td>Gender (1-women, 2-men)</td>
<td>.154</td>
<td>.148</td>
<td>.189*</td>
<td>.028</td>
<td>-.047</td>
<td>.212*</td>
<td>.038</td>
<td>-.215**</td>
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<tr>
<td>Nationality (Canada-1; Israel-0)</td>
<td>.002</td>
<td>-.092</td>
<td>.018</td>
<td>.208*</td>
<td>.475*</td>
<td>.014</td>
<td>-.302**</td>
<td>.182</td>
<td>-.456</td>
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</tbody>
</table>

$^{a}$Correlations greater than 0.15 indicate $p < 0.05$; $^{b}$n = 235
Table 2

Summarized expected and actual results from examination of H1-H3

H1. Gender and managerial performance split by nationality

<table>
<thead>
<tr>
<th>Managerial behavior</th>
<th>Canada and Israel Expected Women</th>
<th>Men</th>
<th>Women Results-Canada</th>
<th>Men</th>
<th>Women Results-Israel</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation</td>
<td>High</td>
<td></td>
<td>High</td>
<td></td>
<td>High</td>
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<tr>
<td>People</td>
<td>High</td>
<td></td>
<td>High</td>
<td></td>
<td>High</td>
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</tr>
<tr>
<td>Change</td>
<td>High</td>
<td></td>
<td>High</td>
<td></td>
<td>High</td>
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<tr>
<td>Goals</td>
<td>High</td>
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<td></td>
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<tr>
<td>Networking</td>
<td>High</td>
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</table>

H2, H3. Managerial performance and gender by business' success

<table>
<thead>
<tr>
<th>Managerial behavior</th>
<th>Women Expected</th>
<th>Men</th>
<th>Women Results</th>
<th>Men</th>
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<tbody>
<tr>
<td>Innovation</td>
<td>Turnover</td>
<td></td>
<td>Turnover</td>
<td></td>
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<tr>
<td>People</td>
<td>Growth in size</td>
<td></td>
<td>Growth in size</td>
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<tr>
<td>Change</td>
<td>Turnover</td>
<td></td>
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<tr>
<td>Goals</td>
<td>Longevity</td>
<td></td>
<td>Turnover</td>
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<tr>
<td>Networking</td>
<td>Turnover</td>
<td></td>
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</table>
Regression analyses for business success measures -by managerial performance, gender and nationality and control variables—personal and business characteristics

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<tr>
<th>Independent variables</th>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 1</th>
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<td>Turnover</td>
<td>Growth in size</td>
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<td>A. Managerial performance</td>
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<td>.212*</td>
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<td>.194*</td>
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<td>.181*</td>
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<td>B. Moderating Variables</td>
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<tr>
<td>Gender (1-women;2-men)</td>
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<td>.017</td>
<td>-.060</td>
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<td>Nationality (0-Israeli; 1-Canadian)</td>
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<td>-.172*</td>
<td>.179*</td>
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<td>c. Control variables</td>
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<tr>
<td>Age</td>
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<td>Past experience(management)</td>
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<td>.100</td>
<td>.075</td>
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<td>Ownership (1-sole; 2-partnership)</td>
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<td>-.015</td>
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<tr>
<td>Professional (0-non prof.; 1-prof)</td>
<td>.057</td>
<td>-.038</td>
<td>.011</td>
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</table>

n =235; 1 Beta coefficients are displayed; *p < 0.05 ; **p < 0.01.

Longevity- $R^2 = 0.061$; adj. $R^2 = 0.035**$; $b R^2 = 0.094$; adj. $R^2 = 0.066$; $\Delta R^2 = 0.040*$; $R^2 = 0.275$; adj. $R^2 = 0.235$; $\Delta R^2 = 0.181*$. 

Turnover- $R^2 = 0.056$; adj. $R^2 = 0.034**$; $b R^2 = 0.079$; adj. $R^2 = 0.050$; $\Delta R^2 = 0.024*$; $R^2 = 0.097$; adj. $R^2 = 0.048$; $\Delta R^2 = 0.019$. 

Growth- $R^2 = 0.063$; adj. $R^2 = 0.060**$; $b R^2 = 0.083$; adj. $R^2 = 0.057$; $\Delta R^2 = 0.034*$$; R^2 = 0.111$; adj. $R^2 = 0.063$; $\Delta R^2 = 0.020$. 

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