



Cultivating Innovation through Female Leadership: The Malaysian Perspective

Aida Idris

Faculty of Business and Accountancy, University of Malaya

50603 Kuala Lumpur, Malaysia

Tel: 603-79673994 E-mail: aida_idris@um.edu.my

Abstract

Research indicates that innovation thrives under certain leadership styles. However, existing typologies of leadership style do not adequately describe the female perspective, especially in a non-western society such as Malaysia. The objective of the study, therefore, is to examine how Malaysian women entrepreneurs lead their employees and influence other stakeholders towards building an innovative organizational culture. Due to the intended depth of the analysis, a qualitative approach is considered more suitable. Based on the responses four distinct styles of female leadership are identified, which demonstrate that at least where innovation is concerned female leadership styles do not neatly fit into existing typologies. Findings of the study have several theoretical and practical implications; in particular they provide direction on training issues to policy-makers and managers, as well as researchers in the areas of culture, gender, leadership and innovation.

Keywords: Malaysia, Women entrepreneurs, Leadership, Innovation

1. Introduction

The increasing prominence of Asian women entrepreneurs has raised a lot of debate about their characteristics, which have been shown to be significantly different from those of their male counterparts. Compared to the men, they are said to be better at cultivating interpersonal relationships (Licuanan, 1992) but poorer at planning, organizing and controlling (Abdul Rashid, 1992). Abdul Rashid (1995) demonstrates that Malaysian women entrepreneurs are less motivated by financial reasons, such as money and economic necessity, than the men. Likewise, Turkish women surveyed by Hisrich and Ozturk (1999) indicate that one of their reasons for starting a business is boredom from being a housewife. In a study in Singapore, Lee and Choo (2001) find that the women face specific challenges in the form of family commitments and sex-role conflicts. Interestingly there are signs that even within the continent the women differ in some aspects; findings in a more recent study (Al-Riyami et al, 2002) suggest that in Oman, instead of hampering, families are a source of motivation and support for the women.

Although the above studies have helped to sketch a colorful profile of Asian women entrepreneurs, research on the subject is still very much at an infant stage. There is a wide range of strategic issues which has not received in-depth scrutiny such as their styles of leadership and how that affects organizational performance. Given that innovation is one of the most critical functions of entrepreneurship, an attempt is made in this study to examine female leadership in the context of cultivating innovativeness in business organizations. The study is carried out in Peninsular Malaysia, where approximately 15% of businesses are owned by women (Department of Statistics, 2004). Although small in numbers, this segment of the Malaysian business population serves huge social and political purposes, as discussed in the following section.

2. Women Entrepreneurs in Malaysia

Malaysian women's participation in commerce may exist in any of the four categories of employment status, i.e. as an employer, an employee, an own-account worker or an unpaid family worker. As indicated in Table 1, the Malaysian Labour Force Report (Department of Statistics, 2004, p.44) documents that out of the total working female population in 2003, 77.5% were paid employees, 11.7% were own-account workers and 9.6% were unpaid family workers. Only 1.2% were categorised as employers. For men, the percentages were higher for the employers and own-account workers categories but lower for employees. The fact that the number of unpaid female family workers is almost five times higher than the males' is particularly disturbing. It seems to suggest that Malaysian women are being exploited and made to work for free by their own family members.

Based on that scenario, it is believed that some women become entrepreneurs to secure financial independence. But financial independence alone cannot explain women's decision to set up their own business; after all 77.5% of Malaysian working women find financial independence by being employed. So what are the real motives for entrepreneurial intention among these women? Although previous research shows that the most common appear to be intrinsic such as self-satisfaction and interest in business (Sieh et al, 1991), a deeper analysis suggests that there are social and political factors too. As voters, Malaysian women compose about half of the total eligible population (Department of Statistics, 2001). In the elections, it is no secret that women both in the ruling party and the opposition play the biggest role in house-to-house campaigns and getting right down to the grassroots. For the government, empowering women with opportunities in education and career is thus critical to ensure their political support. Since career opportunities in the government and corporate sectors are limited, women are encouraged to become business players. They are given training, funding, and counseling as incentives and business networks are provided through affiliation with political parties. In addition, business equity has been used as a measure of social justice since the era of the New Economic Policy. For UMNO, the Malay component of the ruling coalition, raising Malay equity symbolizes its success as the champion of Malay rights. Unfortunately the young Malay male population suffers from a horde of social ills – from dropping out of school to illegal racing to drug abuse – and UMNO finds itself turning more and more to its womenfolk as role models.

According to the Malaysian Labour Force Report (Department of Statistics, 2004), out of the total number of women employers, a clear majority are located in urban areas and aged between 30 and 49 years. Almost half are Malays, followed by 40% Chinese, and 5% Indians. These data are summarized in Table 2. In another study (Ariffin, 1994), it is established that Malaysian women entrepreneurs are most likely to be in the service industries, have prior working experience and are small operators i.e. with fewer than 20 full-time employees and earning less than RM100,000 per annum. Their businesses are mainly funded by personal savings, and most are either sole proprietorships or partnerships. They also tend to concentrate on local markets, with less than 10% going international. These findings appear to affirm a widespread and long-term trend in female entrepreneurship. Research in other parts of the world also shows that since the early 1990s female entrepreneurs have been in small, service-oriented sectors, have some previous work experience and are more likely than men to depend on personal sources of capital (Brush, 1992; O'Brien, 1994; Hisrich and Ozturk, 1999; Heilbrunn, 2004).

3. Entrepreneurship and Innovation

The notion of the entrepreneur as an innovator is believed to have been conceived by Schumpeter (1934) who argues that the function of an entrepreneur is to reform or revolutionize the pattern of production by exploiting new or untried technology and processes. Since then, innovative skills have generally been accepted as one of the critical attributes of successful entrepreneurs (Drucker, 1985; Chell, 2001; Johnson, 2001). Some of the most profitable companies in the world have associated their growth with innovation, which they perceive as the ability to change and reinvent themselves as a way to exploit opportunities. In the words of Bill Gates, the founder and CEO of Microsoft Corporation:

“The entrepreneurial mindset continues to thrive at Microsoft because one of our major goals is to reinvent ourselves – we have to make sure that we are the ones replacing our products instead of someone else.” (Lowe, 1998, p.69)

In recent literature, studies have been focused on two major areas: To examine how exactly entrepreneurs use innovations to increase organizational performance, and to determine the organizational cultures which stimulate innovation. In the first area, Zhao (2005) discovers that entrepreneurs use innovations to expand business scope and boost organizational growth. Innovation is also a critical factor in the implementation of other sound management practices including total quality management (Ehigie and Akpan, 2004). These findings support earlier hypotheses by Kanungo (1999) and Sundbo (1998) that entrepreneurs exploit the innovative culture as an opportunity for developing new products or services and penetrating new markets; thus innovation and growth make up a never-ending cycle. The second area deals with the basic values and beliefs of an organization such as tolerance towards mistakes and conflicts (Martin and Terblanche, 2003) which promote creativity and innovation among its members. In general the literature suggests that those values and beliefs flourish under certain leadership styles, implying a relationship between leadership and innovation. This relationship is discussed further as follows.

3.1 The Role of Leadership in Innovation

Early theorists on innovation (Schumpeter, 1934; March and Simon, 1958; Rogers, 1962) argue that innovation is triggered and driven by certain individuals in the society who have the necessary characteristics to make it happen. The perspective is supported by latter thinkers such as Bennis and Nanus (1985) and Nam and Tatum (1997) who also believe that entrepreneurs are the ones primarily responsible for initiating changes and novelties in the society. The explanation offered for the theory is that entrepreneurs possess certain traits such as risk-propensity and ambitiousness that induce them to strive for better and greater things. Entrepreneurs are held responsible too for educating the society on the need for new ways of life and solutions to life's problems.

Although the individualist perspective of innovation has been criticized as overly narrow and simplistic (Van de Ven et al, 1989), the notion of leaders as agents of change has received wide acceptance among management scholars (Kanter, 1984; Drucker, 1985). Lately, researchers have attempted to support the notion with empirical evidence. Zhao (2005) concludes that an open style which encourages and rewards idea development is positively related to innovativeness. De Jong and Den Hartog (2007) summarize in their review of literature that transformational, participative and employee-oriented leaders are more likely to encourage employee innovativeness. However, they concur with Mumford and Licuanan (2004) that existing models of leadership have not been developed specifically to explain innovation-related behaviors. The typology of women entrepreneurs compiled by Bruni et al (2004) accentuates the above argument. The five categories of women entrepreneurs they have identified based on other previous studies - i.e. "aimless", "success-oriented", "strongly success-oriented", "dualists", "return workers", "traditionalists" or "radicals" – also do not appear to be relevant to innovation.

The current paper contends that a fresh typology of female leadership styles is needed which addresses this gap in the literature. In the context of female leadership, the typology is expected to highlight the importance of her relationship not only with employees but other stakeholders as well (Stanger et al, 2002). In collectivistic societies such as Malaysia the stakeholders may range broadly from family to supplier, competitor and customer, to the society at large (Ong and Sieh, 2003).

4. Study Framework and Methodology

The objective of the study is to examine how Malaysian women entrepreneurs lead their employees and influence other stakeholders towards building an innovative organizational culture. Due to the intended depth of the analysis, a qualitative approach is considered more suitable. Ten women entrepreneurs are identified and personally interviewed based on a series of open-ended questions. These women are deliberately chosen from all over Peninsular Malaysia to represent various industries and personal backgrounds. Each interview takes place at the respondent's business premise and lasts for approximately an hour. In some cases, a brief tour of the premise is also provided which gives the author a first hand opportunity to observe some of the innovations implemented by the entrepreneurs. The women are asked to describe the types of innovation carried out in their organizations and how they are implemented, the challenges faced in the process, and how these challenges are overcome. Their responses are then content-analysed to generate a typology of female leadership styles within the context of business innovation.

5. Discussion of Results

The profile of the respondents is summarized in Table 3. As shown:

- (1) Their age ranges from late twenties to early fifties;
- (2) Two received tertiary education, seven higher secondary, and one lower secondary;
- (3) Four of them are in consumer services, one in business services, two in distribution and three in manufacturing;
- (4) Five have been operating for less than 5 years, three for 5 to 10 years and two for more than 10 years;
- (5) Five of them are based in the Central region, two are in the East Coast states, two in the South, and one in the North.

5.1 Types of Innovation

The most common type of innovation among the respondents appears to be product or service-related (eight respondents), followed by administrative (five respondents). The former is usually a result of keeping up with current trends and the latter mainly involves flexibility in the work schedule, either to meet customer needs or to accommodate other personal commitments. The other types of innovation commonly found in the literature such as process, supply and market innovations (Zaltman et al, 1973; Drucker, 1985; Johanessen et al, 2001) are noticeably less popular. Process and supply innovations may not be very relevant because the majority of the women are either in low-technology industries or the service sector while the lack of market innovation may reflect the women's reluctance to venture too far from their families.

PI1: *We've churned out new products beside the chili sauce, which is still our main line. Just recently we started marketing our peanut sauce and ready-to-cook spices. Also we've hired a graduate food technologist as quality controller. Our market, too, has expanded from just the local sundry shops to multinational retail chains such as Carrefour.*

PI2: *I've experimented with new flavours and designs. Packaging is also very important now as some of my customers buy the cookies to give them away as presents.*

PI3: *The most continuous change is the introduction of new packages, which means offering a basket of products and services at an attractive price. In terms of market, I've tried very hard to penetrate the government sector. Basically my clientele consists of small, private enterprises but lately I've started to get orders from a few government departments. I've also introduced a new computing software in the office to upgrade my administration system.*

PI4: *Not much, as I've only started the business. But to me in this line the key thing is being flexible with your operating hours. So I find myself adapting to my customers' schedule very often.*

PI5: *The latest trends are hair coloring and bonding, as well as palm and nail drawing. So we began to offer those services some time back. Hair styling techniques too have evolved over time... now to dry hair, there's more than just hair dryers. We can even iron hair, so that it's not only dry but also straight!*

PI6: *The business had to be relocated to this premise about 5 years ago because the previous one couldn't cope with the increasing size of operation. And then of course I had to acquire new machinery and additional staff.*

PI7: *We opened a retail outlet in KL 2 years ago whilst still maintaining the one in Alor Setar. And as far as the product is concerned, we're constantly experimenting with new fabrics and designs.*

PI8: *We've had to move many times. As the business is highly dependent on the duration of contract, each time a contract expires we have to move on. And every time we get a new place, there are a lot of adjustments to be made. Change of staff, menu, price, size of operation...*

PI9: *I've expanded the number of vehicles from 2 to 6. And in addition to the 2 full-time drivers, I now have 6, 7 part-time ones who can be called in at peak periods such as the weekends and school holidays. Being a single mother, I've also had to make a lot of adjustments in terms of striking a balance between the business and my children.*

PI10: *I've introduced new curriculum and teaching modules such as piano and ballet lessons. Also I find that the operating hours need to be extended and altered from time to time to accommodate the needs of the parents.*

5.2 Typology of Female Entrepreneur-Leaders

Based on their description of how the innovations are implemented, as well as how specific challenges are overcome, four distinct styles of female leadership are identified. These styles, referred here as the "Mother", the "Teacher", the "Boss" and the "Chameleon", are described as follows.

The "Mother"

This style reflects a family-oriented approach in the management of business innovation. The four women who fall into this category, namely PI2, PI7, PI8 and PI9, view their employees and other stakeholders as their extended families. They are extremely protective of others, and often get involved in the personal affairs of those they perceive to be under their care. These women frequently use phrases such as "*help each other out like brothers and sisters*", "*they respect me like their own mother*", and "*I scold them if they do anything wrong*".

In their organizations, innovation is often treated with caution. Each time the entrepreneur decides to embark on a new project, she tries it out herself first. When she is absolutely sure of its success, she demonstrates in detail to others how exactly she wants things to be done and takes great care to minimize the chances of failure.

PI8: *I will try out the new recipe several times and when I am completely satisfied, I will show my girls how to do it. Otherwise, they won't have a clue whatsoever, and end up putting too little or too much of everything.*

She also has very little reservation about asking for personal favours from suppliers and customers.

PI2: *My customers are my best source of ideas. I often borrow women's magazines from them and look up the creativity section to learn about the latest packaging designs.*

PI7: *When I want to get information about my competitors, I will ask my supplier who also delivers material to the other stores. Like for instance, what type of cloth they use, the quantity of order and the price they pay for it. Then I will decide whether I want to follow suit or not.*

The "Teacher"

The style displayed by PI1 and PI10 closely approximates that of an educationist. The women believe in the good of academic qualification, training and continuous upgrading of skill and technology. PI1 tells of her latest recruit, a Chemistry graduate, who is hired as her food technologist and quality controller. And PI10 apologises at the outset of the interview that she only has an hour before having to rush off to Singapore for a workshop on childhood education.

The women have a very open attitude towards the learning process, and regards mistakes as a natural part of it. They encourage their employees to try out new things on their own and the organizations often develop new ideas by trial-and-error. Computerisation and automation are integrated within the process flow to improve quality and maintain standards. They even educate their customers on the benefits of innovation.

PI10: *I tell the parents what new modules we have, and why their children should enroll in a particular module. I remember a girl who had a natural gift for music. I suggested to her parents that she should try out our piano lessons. They were reluctant at first because they wanted her to concentrate on the academic stuff but I convinced them that in*

this age academic excellence alone is not enough. They relented in the end, and now the girl is already in Standard 3, every time they bump into me, they can never thank me enough for introducing piano to their child.

The “Boss”

This particular style describes the entrepreneur’s emphasis on the formalization of innovation. Novelties are adopted as official business targets tied to the employees’ performance evaluation and remuneration packages. Instructions are given in a precise and orderly manner.

PI5: I give incentives to my staff if they are willing to be flexible about their schedule. Most of the time they know exactly what’s expected of them. As long as I give clear instructions, they will carry them out accordingly... When I promote someone I take into consideration their ability to master the latest styles and trends.

PI6 relates of her initial difficulty to get her employees to be cross-functional but says that with persistent assertiveness the problem is gradually ironed out. PI6 also stresses the need for implementing changes systematically.

PI6: My workers are mostly immigrants so they have special requirements, especially in terms of work permits, accommodation, and transportation. I make sure they are well looked after, and I expect them to carry out their jobs well. Otherwise, I will terminate their services and ask for replacements...When I introduce a new material, I will record the manufacturing batch number. Then I will track its movement until the point of consumption. If there are any complaints from the customers, I will immediately call my supplier and cancel other orders from the same batch. Then I will either ask for another supply or switch to another supplier.

The “Chameleon”

This style reflects the entrepreneur’s tendency to be situational. She believes in adopting different approaches to different individuals and circumstances. According to her, to be effective an entrepreneur needs to understand the exact needs and wants of various customers and strive to fulfill each in many different ways. Innovation is perceived as merely a means to an end, and not something which should be actively encouraged. PI3 says she visits government and business clients with two different sets of product catalogue, because she knows that each has a different budget. Therefore, even though she knows which product is the best, she feels that there is no point in educating the customer about the product simply because the budget will not allow for it.

In the case of PI4, she carries products from four parent companies and adjusts her presentation package and style according to the customer. She does not see anything wrong with the practice because she is not legally bound to any one of them.

PI4: Take health supplements, for instance, there are people who prefer Company A’s products and there are those who like Company B’s. So I carry both and promote each accordingly.

6. Conclusion

The study demonstrates that as far as innovation is concerned existing typologies of leadership styles do not adequately explain the female perspective. Dimensions such as transformational versus transactional, participation, and entrepreneur-employee relationship fail to consider the importance of relationships with other stakeholders than employees. The finding supports earlier observations (Al-Riyami et al, 2002; Ong and Sieh, 2003) on the significance of networking to women entrepreneurs, especially in collectivistic societies.

Results of the study show that some women leaders assume traditional roles such as “mother” and “teacher” so that the society will be more tolerant and accepting towards their leadership. This may be explained by the theory of social conditioning (Best and Williams, 1997; Ismail and Ibrahim, 2008) which argues that because society conditions women to be gentle and nurturing, they behave as such. Bruni et al (2004) acknowledge that women often have to resort to alternative leadership styles possibly because social expectation makes it difficult for them to wield formal authority in organizations. Having said that, there are women leaders (as typified by the “boss” personality) who are not afraid to exercise their formal authority. This is quite likely in the Malaysian society which is moderately masculine (Hofstede, 1998) and thus allows some degree of gender role equality.

Of course, due to the limited sample size, it would be presumptuous to conclude that the study’s findings can adequately explain female leadership styles in every setting. As leadership is highly cultural, different cultural groups are expected to have different tendencies towards a particular style. For instance, in highly masculine societies such as Japan (Hofstede, 1998), women leaders may only adopt the “mother” and “teacher” styles while the “boss” may be a clear exception. It is also important to determine which style is more effective for women entrepreneurs: Is the organization more innovative when she behaves in a specific manner? To make reasonable conclusions, obviously more data is required. Hence quantitative studies involving larger samples of women entrepreneurs are recommended to ascertain the following:

- (1) The relationship between culture and leadership style.
- (2) The effect of leadership style on organizational innovation.

In so doing, other criteria including the validity and reliability of the leadership style scale will first have to be met. Future studies may also raise additional issues such as the measure of organizational innovation in women-owned enterprises. For instance, researchers may now want to focus on developing the instruments for product/service and administrative innovations among women entrepreneurs. One particular issue would be: Apart from flexibility in work schedule, what other typical constructs of administrative innovations are there for women?

From the practical point of view, the study is expected to help trainers develop better training programs for women entrepreneurs. Having understood that innovation is very much related to interpersonal relationships within and beyond the organization's boundaries, entrepreneurship training should also incorporate modules on cultural values as well as communication and social skills. In Malaysia, where entrepreneurship training programs are mainly concerned with the development of business plans, this proposal requires changes even at policy level since it also involves retraining the trainers or recruiting new ones. In particular there ought to be an increased effort to rope in more female trainers due to their greater understanding of the unique characteristics and needs of women entrepreneurs.

References

- Abdul Rashid, M.Z. (1992). Management Practices, Motivations and Problems of Male and Female Entrepreneurs in Malaysia. *Malaysian Journal of Small and Medium Enterprise*, 3, 35-46.
- Abdul Rashid, M.Z. (1995). A Comparative Study of Successful Male and Female Entrepreneurs in Malaysia. *Malaysian Journal of Small and Medium Enterprises*, 6, 19-30.
- Al-Riyami, R., Warren, L. and McElwee, G. (2002). Opportunities and challenges for Omani women entrepreneurs. *International Journal of Entrepreneurship and Innovation*, 3(2), 133-144.
- Ariffin, J. (1994). *Readings on Women and Development in Malaysia*. Kuala Lumpur: University of Malaya.
- Bennis, W. and Nanus, B. (1985) *Leaders: The strategies for taking charge*. New York: Harper & Row.
- Best, D.L. and Williams, J.E. (1997) Sex, gender and culture in Berry, J.W., Segall, M.H. and Kagitcibasi, C. (eds.) (1997), *Handbook of Cross-cultural Psychology Volume 3 Social Behavior and Applications*. Needham Heights, MA: Allyn and Bacon.
- Bruni, A., Gherardi, S. and Poggio, B. (2004). Entrepreneur-mentality, gender and the study of women entrepreneurs. *Journal of Organizational Change Management*, 17(3), 256-268.
- Brush, C.G. (1992). Research on women business owners: past trends, a new perspective and future directions. *Entrepreneurship Theory and Practice*, 16(4), 5-30.
- Chell, E. (2001). *Entrepreneurship: Globalisation, Innovation and Development*. London: Thomson.
- De Jong, J.P.J. and Den Hartog, D.N. (2007). How leaders influence employees' innovative behavior. *European Journal of Innovation Management*, 10(1), 41-64.
- Department of Statistics, Malaysia (2001). *Vital Statistics Time Series, Malaysia, 1963-1998*. Putrajaya.
- Department of Statistics, Malaysia, (2004). *Labour Force Survey Report, Malaysia, 2003*. Putrajaya.
- Drucker, P.F. (1985). *Innovation and Entrepreneurship*. New York: HarperCollins.
- Ehigie, B.O. and Akpan, R.C. (2004). Roles of perceived leadership styles and rewards in the practice of total quality management. *Leadership and Organization Development Journal*, 25(1), 24-40.
- Heibrunn, S. (2004). Impact of gender on difficulties faced by entrepreneurs. *International Journal of Entrepreneurship and Innovation*, 5(3), 159-165.
- Hisrich, R.D. and Ozturk, S.A. (1999). Women entrepreneurs in a developing economy. *Journal of Management Development*, 18(2), 114-125.
- Hofstede, G. (1998). *Masculinity and Femininity: The Taboo Dimension of National Cultures*. Thousand Oaks: Sage.
- Ismail, M. and Ibrahim, M. (2008). Barriers to career progression faced by women: Evidence from a Malaysian multinational oil company. *Gender in Management*, 23(1), 51-66.
- Johannessen, J.-A., Olsen, B. and Lumpkin, G.T. (2001) Innovation as newness: what is new, how new and new to whom?, *European Journal of Innovation Management* 4(1), 20-31.
- Johnson, D. (2001). What is innovation and entrepreneurship? Lessons for larger organisations. *Industrial and Commercial Training*, 33(4), 135-140.
- Kanter, R.M. (1984). SMR Forum: Innovation – The Only Hope for Times Ahead? *Sloan Management Review*, Summer, 51-55.

- Kanungo, R.N. (1999). *Entrepreneurship and Innovation: Models for Development*. London: Sage.
- Lee, J.S.K. and Choo, S.L. (2001). Work family conflict of women entrepreneurs in Singapore. *Women in Management Review*, 16(5), 204-221.
- Licuanan, V. S. (1992). *Women Entrepreneurs in Southeast Asia*. Manila: Asian Institute of Management.
- Lowe, J. (1998). *Bill Gates speaks: Insight from the world's greatest entrepreneur*. New York: Wiley & Sons.
- March, J. G. and Simon, H. A. (1958). *Organizations*. New York: Wiley & Sons.
- Martin, E.C. and Terblanche, F. (2003). Building organizational culture that stimulates creativity and innovation. *European Journal of Innovation Management*, 6(1), 64-74.
- Mumford, M.D. and Licuanan, B. (2004). Leading for innovation: conclusions, issues, and directions. *Leadership Quarterly*, 15(1), 163-171.
- Nam, C.H. and Tatum, C.B. (1997). Leaders and champions for construction innovation. *Construction Management Economics*, 15, 259-270.
- O'Brien, E.C. (1994). Women Entrepreneurs in the Small Business Sector: Metropolitan Lima in Heslop, L.A. (1994) *The Ties that Bind*. Calgary: Canadian Consortium of Management Schools.
- Ong, F.S. and Sieh, L.M.L. (2003). Women Managers in the New Millenium: Growth Strategies in Roziah Omar and Azizah Hamzah (eds.) (2003) *Women in Malaysia Breaking Boundaries*. Kuala Lumpur: Utusan.
- Rogers, E.M. (1962). *Diffusion of Innovations*. New York: Free Press.
- Schumpeter, J. A. (1934). *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.
- Sieh, L.M.L., Lang, C.Y., Phang, S. N. and Norma Mansor (1991). *Women Managers of Malaysia*. Kuala Lumpur: University of Malaya.
- Stanger, A., Roffey, B., Forsaith, D.M., Symes, C.F., Xydias, M., Petrone, F. and McInnes, E.M. (2002). Gender differences in small business owner-managers. *International Journal of Entrepreneurship and Innovation*, 3(2), 93-107.
- Sundbo, J. (1998). *The Theory of Innovation: Entrepreneurs, Technology and Strategy*. Northampton, MA: Edward Elgar.
- Van de Ven, A.H., Angle, H.L. and Poole, M.S. (1989). *Research on the Management of Innovation: The Minnesota Studies*. New York: Harper & Row.
- Zaltman, G., Duncan, R. and Holbeck, J. (1973) *Innovations and Organisations*. New York: Wiley.
- Zhao, F. (2005). Exploring synergy between entrepreneurship and innovation. *International Journal of Entrepreneurial Behaviour and Research*, 11(1), 25-41.

Table 1. Distribution of Malaysian Working Population by Gender and Employment Status, 2003

Gender	Total Population	Employer (%)	Employee (%)	Own-account Worker (%)	Unpaid Family Worker (%)
Male	6,323,600	4.6	75.5	17.7	2.2
Female	3,546,100	1.2	77.5	11.7	9.6

Source: Malaysian Department of Statistics, 2004.

Table 2. Distribution of Malaysian Women Entrepreneurs by Ethnicity, Stratum, and Age Group, 2003

Distribution Variable		% out of total
Ethnicity:		
	Malay	47.1
	Chinese	39.6
	Indian	5.0
	Others	8.3
Total		100.0
Stratum:		
	Urban	79.8
	Rural	20.2
Total		100.0
Age Group:		
	Below 20	0.1
	20 – 29	16.2
	30 – 39	34.4
	40 - 49	31.8
	50 and above	17.5
Total		100.0

Source: Malaysian Department of Statistics, 2004.