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## LETTER FROM THE EDITORS

Welcome to the *International Journal of Entrepreneurship*. We are extremely pleased to be able to present what we intend to become a primary vehicle for communication of entrepreneurship research throughout the world.

The Academy of Entrepreneurship® is a non-profit association of scholars and practitioners in entrepreneurship whose purpose is to encourage and support the advancement of knowledge, understanding and teaching of entrepreneurship throughout the world. The *International Journal of Entrepreneurship* is a principal vehicle for achieving the objectives of the organization. The editorial mission of this journal is to publish empirical and theoretical manuscripts which advance the entrepreneurship discipline. To learn more about the Academy, its affiliates, and upcoming conferences, please check our website: [www.alliedacademies.org](http://www.alliedacademies.org).

We are pleased to announce a new Editor and a new sponsor for the *IJE* for 2002. Our new Editor is Reagan McLaurin and our new sponsor is the American University of Sharjah, United Arab Emirates. Manuscript submissions will still be handled through our website, as described in the Submission Instructions included in this volume. We encourage you to welcome Reagan aboard by submitting your manuscripts for review.

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## **MANUSCRIPTS**





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# COCA-COLA AS AN AGENT OF ENTREPRENEURIAL DEVELOPMENT IN EMERGING ECONOMIES

**Douglas P. Woodward, University of South Carolina**

**Sandra J. Teel, University of South Carolina**

**Richard Robinson, University of South Carolina**

## ABSTRACT

*The Coca-Cola Company, developing its global channel network, has been at the core of Coca-Cola's strategy of having its products "within an arm's reach of desire" (Mitchell 1999; Gould, 1975). To assure that Coca-Cola products taste the same worldwide requires that suppliers meet strict quality standards. Oftentimes, in developing countries, finding "qualified" local suppliers presents a problem that The Company addresses well.*

*Using a modified Porter framework, the paper shows how Coca-Cola penetrates local markets. Coca-Cola interacts locally with each element of the framework, depending upon the level of infrastructure development.*

*This paper presents the approach that The Coca-Cola Company has taken to penetrate global markets and overcome problems posed by infrastructure and education, distribution, and supply system weaknesses. The key underlying Coca-Cola's success is its application of the unifying qualitative modified Porter economic development framework. The authors believe that other companies seeking to penetrate global markets would benefit from using this or other similar frameworks.*

## BACKGROUND

A fascinating concept to emerge from the authors' studies of The Coca-Cola Company is its approach to channel development. This concept has been at the core of Coca-Cola's strategy of having its products "within an arm's reach of desire" (Mitchell 1999; Gould, 1975). To assure that Coca-Cola products taste the same, from Junction City (Arkansas), to Montreal, to Tibet, to the sub-Saharan areas of Africa, requires that suppliers meet strict quality standards. Oftentimes, in developing countries, finding "qualified" local suppliers presents a problem that The Coca-Cola Company addresses well.

Complicating global commerce is variability in infrastructure, resources, and technological development. Even within developed countries, the variability is such that physical distribution and logistics strategies are not consistent across countries (Fernie, 1993). The

variability is particularly pronounced in developing countries. Problems with these basics will result in supply chain inefficiency and thereby longer cycle times and higher costs (McKnight, Miskewicz & Liu, 1997). Developing countries recognize the need for improved infrastructure, as evidenced by billions of dollars spent on improved infrastructure in China (McKnight, Miskewicz & Liu, 1997).

For the supply side of the distribution network, Kotler (1984, 171-174) instructs the supply manager to begin by clearly understanding the firm's needs and product specifications, then search for a supplier to match. Kotler continues by listing a number of attributes that may be important to the supply manager, only one of which is product quality. Even though a primary objective of the firm's supply manager is a network of capable suppliers, suppliers are often deficient in areas such as quality (Krause, 1997). Firms finding their suppliers deficient must find ways to improve their suppliers, if the relationship is to continue.

Ohmae (1989) suggests that the key to success for global business is strategic alliances. Traditional strategic alliances, however, are not the success key; rather new strategic alliances that include:

<i>i</i>	<i>commitment from both parties;</i>
<i>ii</i>	<i>management time;</i>
<i>iii</i>	<i>flexibility; and</i>
<i>iv</i>	<i>an appreciation of cultures.</i>

Supplier development programs may have two objectives: one intended to foster immediate changes in the supplier and thereby reduce problems; the other to assist the supplier to make its own improvements (Hartley & Jones, 1997). While the former, "results-oriented supplier development" (ROSD), achieves the objectives of improving the supplies, it often also yields in a weak relationship because the suppliers feel "invaded" rather than "aided." The latter, "process-oriented supplier development" (POSD), puts the relationship between the firm and its supplier in a transitional phase. In this transition, the firm works closely with the supplier for a period of time, then releases control and steps out of the picture to permit the supplier to continue to improve on its own. On the downside, POSD requires a major commitment from the firm in time and human resources and does not effect change as quickly as ROSD, which may result in supplier frustration. Nevertheless, the resulting relationships are stronger and mutually beneficial in the long run.

On the demand side, a fundamental decision concerns the target market (Kotler, 1984, 579). Some of the developmental variability noted above is founded in retail concentration (Ferne, 1993). As with the supply side, strategic alliances can be crucial to success in the global economy (Edwards, 1998). Successful strategic alliances require a strong commitment of the firm to its downstream network.

## STRATEGY IMPLEMENTATION

At the core of Coca-Cola's strategy is a quality, consistent product. To make this strategy work requires Coca-Cola's strong commitment to both its upstream and downstream networks. The Coca-Cola Company works with local (in-country) suppliers to meet Coca-Cola's strict quality standards for product ingredients. The Company adapts to the developmental variability within each country. The resulting Coca-Cola system provides mutual benefits. For The Coca-Cola Company, both strategies-a quality, consistent product "within an arm's length of desire"-are achieved. The primary benefits for its channel members are jobs and knowledge about and experience in a market economy.

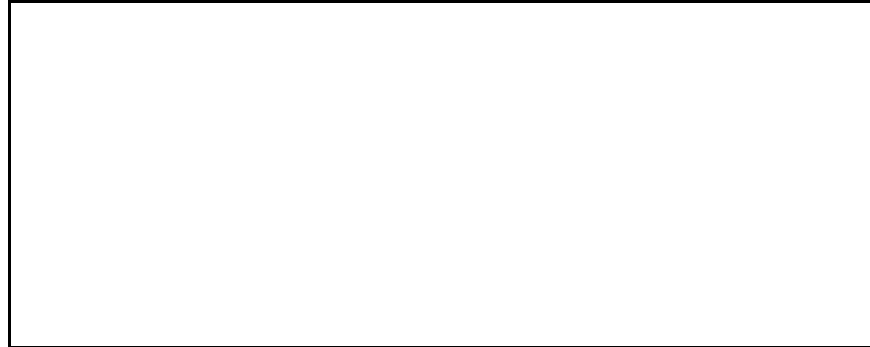
The effect of a multinational enterprise (MNE) on the host country depends on how deeply it interacts with local businesses. Coca-Cola's business is almost entirely local market oriented: neither exporting products to overseas markets, nor importing extensively. Production must be located close to customers, requiring investment in every region where soft-drink demand is strong, and production and distribution are feasible.

The impacts of the Coca-Cola system on market-based economic development may be viewed through a qualitative framework based on the Porter concept of economic development (Porter, 1990). In Porter's view (See Figure 1), a competitive business's viability rests on four pillars. One determinant, home demand conditions for an industry's product or service, dynamically influences the rate and character of improvements. The attributes of home demand are:

<i>i</i>	<i>composition;</i>
<i>ii</i>	<i>size and pattern of growth; and</i>
<i>iii</i>	<i>the ways by which domestic preferences are transmitted.</i>

Factor conditions or factors of production, another determinant, are simply an industry's requirements to compete. Porter notes that important factor conditions are created, not inherent within a nation, and that the creation rate has more positive influence than the stock of factors. The third determinant, firm strategy, structure and rivalry, concerns not only domestic rivalry but also "the context in which firms are created, organized, and managed" (Porter, 1990, 107). The concept here is that national advantage results when the choices of goals, strategies, and organization are well matched with the source of competitive advantage of an industry. The fourth determinant, related and supporting industries, is the presence of internationally competitive supplier or related industries. Two exogenous forces, chance and government, also play a role in Porter's framework. Though firms (and often nations) cannot control chance events, the impact is important because shifts in competitive position may result from the discontinuities they engender. The impact of governments is definitive, but may be positive or negative.

Governments that attempt to be the sole determinant of national competitive advantage will not succeed; whereas, governments that support and reinforce the underlying determinants will.



A modified Porter framework (See Figure 2) facilitates understanding of the success of the Coca-Cola Company in penetrating markets globally. In the modified framework, the four pillars of competitive business viability are demand, supply, resources, and market structure. Each element spurs competitiveness. Demand conditions in the domestic economy spur a cluster to develop to world standards. Discerning and sophisticated consumers push business to improve both products and efficiency. The critical, often scarce resource is skilled labor and managerial talent. A viable cluster also depends on a strong supplier network. A full complement of local suppliers helps anchor a cluster in the local economy. Finally, competitiveness requires real market competition: the particular nature of firm strategy, market structure, and rivalry can spur or deter productivity, efficiency, innovativeness, and new business formation. As with Porter's original model, customer demand pushes a cluster toward world standards of productivity and efficiency. As required to achieve its objectives, Coca-Cola interacts locally with each element of the framework, depending upon the level of infrastructure development.



## **RESULTS**

Several countries were included in the research: Poland, Romania, South Africa, and China. While Coca-Cola's basic approach across countries was largely consistent, some variability existed to accommodate the differing countries, and is reported below. In each country, local Coca-Cola bottlers were surveyed to elicit specific information that could be used as inputs for economic impact analysis. Retailer surveys elicited opinions about Coca-Cola's impact on their business and retailer-specific information. In addition, one author conducted on-site visits to and personal interviews of channel members to collect anecdotal data in each country. The authors collaborated with local researchers for data development.

## **Poland and Romania**

Poland and Romania became open to privatization and deep economic restructuring only after the fall of communism in 1989. Each entered the market economy with similar infrastructure: a relatively even split between agriculture and industry and relatively high household spending on food and beverage. Yet each was unique in its approach to macroeconomic policy.

### **Poland**

Poland used shock therapy to implement privatization. Its goal was to put international competitive pressures on domestic monopolies, to help Polish exporters, to permit enterprises and consumers to import freely, and to end decades of consumer subjugation. Foreign direct investment was actively encouraged.

Although a minor presence in Poland since 1972, Coca-Cola's major push began in 1991. From 1991 through 1994, The Coca-Cola Company invested \$300 million, the largest investment in Poland's economy at that time. By 1994, the Coca-Cola system included 7 bottlers and 19 distributors. In some instances, Coca-Cola developed joint ventures with global companies operating in Poland. An example of Coca-Cola's early experience in Poland is the Neopolomice bottling plant. Although construction was complete in mid-1993, the output did not meet quality standards until a year later. Even so, the plant could not meet peak summer demand.

Bottlers in Poland made their own supply contracts from an approved list. The supplier network included 5 import sources and 20 local sources. Direct bottler employment in January 1994 was 1,226 jobs. Eight-supplier firms were surveyed or interviewed. These report having 12,000 employees.

Coupled with the bottler development was the development of suppliers. After an adequate water supply, sugar is the most important input and did not meet quality standards at the time of Coca-Cola's initial investment. Coca-Cola's expansion created the impetus for its sugar supplier to produce high-grade sugar. Because of sugar's tie to agriculture, this permitted the Polish beet farmers to develop efficient production methods and upgrade quality.

Transportation was also affected by Coca-Cola's involvement in Poland's economy as trucking was generally contracted out to independent truckers, each typically having a local driver and assistant. At the time of the study, the majority of input materials (88 percent for plastic bottles and 100 percent for glass bottles) was produced locally.

On the downstream side, Coca-Cola was just as aggressive, with members of its Warsaw marketing department spending substantial time and effort with local retailers. Because Poland's retail sector was somewhat developed, the transformation was rapid. The retail sector, which consisted of retail out-lets, shops, kiosks, stands, booths, and other small points of sale, grew 298 percent from 1989 to 1992 (Earle et al., 1994). Coca-Cola supported its retailers contracts and supplied them with materials used in their operations such a t-shirts, umbrellas, and signage. Coca-Cola also trained their retailers: route sales-men would show retailers how merchandising could attract customers and improve sales. This effort was so successful that Coca-Cola conducted training for the Congress of the Association of Cinemas at its annual meeting of movie theater operators.

In 1994, Coca-Cola served between 50,000 and 60,000 customers in Poland, in the home market (grocery and small points of sale) and the cold drink market (bars, kiosks, restaurants, and fast food establishments). Coca-Cola's survey of its retailers to better segment its market was likely the first of its kind in Poland. From the survey results, Coca-Cola was able to understand improvements and development that could be made; the results were also provided to retailers so they too could better manage their businesses. Survey results suggest that sales of Coca-Cola products represented, on average, 6 percent of retailer sales.

The experience in Poland reveals Coca-Cola's impact on distribution networks in transitional economies. Coca-Cola's requirements focused efforts on upgrading quality both upstream and down-stream. Coca-Cola maintained an arm's length approach to its suppliers, exposing them to business in a market economy where they too commanded quality from their suppliers. Coca-Cola also improved over-all organization competence through its training programs for both upstream and downstream companies. Downstream, trainees learned marketing basics for increasing sales such as product display, point-of-purchase displays, sales, and merchandizing.

## **Romania**

In contrast with Poland, Romania, the poorest of the emerging eastern block countries, encouraged both political and economic reform, and faced a tougher battle with its pluralism approach. Although Coca-Cola had no presence until 1990, within two years, Coca-Cola was Romania's market leader in carbonated soft drinks.

The basic approach to the Romanian economy was the same as that for the Polish economy; namely, the development of upstream and downstream networks. However, the road to development in Romania was more difficult. Thus, a serious push to develop local suppliers was not evident in the first two years because it was more cost effective to import supplies. Nevertheless, at the time of the study, Coca-Cola's Romanian operations included 6 bottlers and a

Bucharest country office. By mid-1994, Coca-Cola's total capital investment in Romania was \$77.7 million.

Local sourcing of sugar was the biggest difference between Poland and Romania. To address the issue, Coca-Cola looked for a foreign-based company to help revive the moribund local refining industry. However, because sugar was classed as a "strategic industry," the Romanian government controlled im-ports and affected local prices for sugar. Even though Coca-Cola had worked with local suppliers to try to achieve its quality objectives, by 1994, no local company was able to produce the quality sugar at the out-put level required. Thus, Coca-Cola imports its sugar in Romania.

For bottling, Coca-Cola approached Stirom, a state bottler until 1989, who was actively searching for customers for its first time. Coca-Cola requirements of bottlers remained stringent, and Coca-Cola demanded a prototype of higher quality bottles before placing an order with Stirom. Although this was an unheard of demand, Stirom was able to adjust and now claims that 90-95 percent of raw materials are locally sourced. Another supplier also learned that Coca-Cola meant business. When the supplier fell below quality levels, Coca-Cola began to import the supplies; the local supplier quick adjusted its procedures to regain its position within the Coca-Cola system.

As with the Polish economy, Romanian retailers appeared to be the greatest beneficiaries of the new economy. A host of kiosks, which arose following the economy's collapse, were dependent upon high turnover products like soft drinks and cigarettes. In 1991, Coca-Cola trucks began delivering, free of charge, not only products, but also point-of-purchase materials, umbrellas, displays and the other important assistance from Coca-Cola: coolers. Coca-Cola was the first to put coolers in Romania. About half of survey respondents report assistance from Coca-Cola in marketing and making their businesses successful.

In Romania, 450 retail outlets in Bucharest were surveyed (locally conducted by the Academy of Economic Studies, Bucharest). The sample was a random selection of the client list of Coca-Cola Serv-ices Romania. The majority of the retailers have 10 or fewer employees, and sell both food and non-food products. Self-reported store type is store (54%), kiosk (20%), confectionery-pastry shop (9%), bar or tavern (8%), and restaurant (8%).

More than one-third of the retailers (35%) report that The Coca-Cola Company helped them start their business. Notable in the ways that Coca-Cola helped are:

25%	product delivery,
23%	supply of products that are in demand, well known, and bring profits,
21%	regular prompt supply,
19%	advertising materials, and
12%	freezing equipment.

Nearly three-fourths (71%) of these retailers report that selling Coca-Cola products helped increase their sales. The principal aid was the provision of products that are in great demand and bring high sales and profits. Almost half (47%) report that Coca-Cola personnel help them to improve their business. Many of the ways that Coca-Cola personnel helped are noted above. In addition, these retailers note other support from Coca-Cola personnel:

9%	good collaboration,
5%	promptness and seriousness,
4%	advice, discussion,
3%	arranging display, and
2%	visiting, all of which are ways that Coca-Cola trained its retailers.

An estimated 67 percent of kiosk sales were Coca-Cola products, with less than 10 percent of the products offered accounting for 80 percent of income. Profits were used for inventory, operations, and expansion.

Because of the poorer economic development in Romania, The Coca-Cola Company had closer ties with its suppliers to encourage the suppliers' development. Romanian firms serving as suppliers found that working with Coca-Cola gives them a "stamp of approval" that signals other businesses of their ability to deliver quality on time.

### **South Africa**

The Coca-Cola Company approached the South African economy in much the same way as it entered the economies of Poland and Romania, with an interesting twist. A defining characteristic of South Africa's economy is the large network of "informal retailers." Informal retailers (neither recognized by the government, International Labour Organization, 1993) abound in South Africa, manifesting the entrepreneurial spirit of Black South Africans. After apartheid laws were relaxed in the early 1980s, street hawkers suddenly appeared in upscale shopping districts and other locations that had heretofore been off limits to Black businesses. In addition to presenting problems to governments that wish to exact taxes on sales of informal retailers, informal retailers present problems to global businesses that want to satisfy the demands of their customers served by informal retailers.

Though apartheid's crumble opened the doors for non-Whites into the South African economy, the country is fraught with problems that jeopardize the economy's development. One of these is the creation of enough formal sector jobs to satisfy enormous labor demands. This is one of the factors fomenting the burgeoning informal sector. Pat's Tuck Shop in Soweto is a good example of South Africa's informal retailers. Every week, Pat's Tuck Shop sells 20 cases of Coca-Cola, the biggest selling item in the store. The owner is a relatively new entrepreneur (since the end of apartheid) who formerly worked as a security guard in the formal sector. If another job



were obtained in the formal economy, the owner would turn over the daily operation of the shop to his wife. Coca-Cola distributors interact with a multitude of small retail businesses like Pat's Tuck Shop every day. The interaction of the Coca-Cola system with the most "trivial" micro business in a squatter camp penetrates all consumer markets and, consequently, all levels of retail.

Coca-Cola has identified 3 segments among its South African consumers. The "developed" consumer segment shares characteristics, particularly per capita consumption, with consumers in industrialized nations. The "emerging" consumer segment is the largest and served by informal trade such as spazas and shebeens. As formal retailers have largely ignored the "subsistence" consumer segment, the Coca-Cola system is investing in training and vending and refrigeration equipment to assist those who wish to start retail operations in squatter camps. An official at Coca-Cola has asserted that Africa, with South Africa as the springboard, has the potential to be one of "the largest growth opportunities of any of our global markets" (Lunsche, 1998).

Coca-Cola's has built an extensive downstream network in South Africa, reaching from the formal into the informal sector. At the end of this network in the formal sector are runners who truck the product to small retail channels with little space for large inventories. A singular role model for South African entrepreneurs involved in the Coca-Cola network is undoubtedly the Kunene brothers. The Kunenes started as entrepreneurs in the downstream network, selling Coca-Cola in Boksburg. They now have moved into the manufacturing system, retaining ownership in a multimillion-dollar Coca-Cola bottling enterprise.

As in other reported countries, Coca-Cola's South African office works with highly competitive bottlers. In contrast with Poland and Romania, many South African bottlers were already established and required little management support to bring their operations to required quality standards. In South Africa, Coca-Cola works primarily with anchor bottlers; that is, bottlers who are strong, capable bottlers that consolidate regional bottling systems and are fundamental to the penetration of new marketing channels. This distribution strategy has proven effective for the Coca-Cola system.

To understand the penetration and importance of Coca-Cola in the informal sector, the Bureau of Market Research (BMR) at the University of South Africa conducted 815 surveys (and processed the data). One hundred of these were personal interviews to provide more in-depth information. With this survey, data collected included costs for operations, capital expansion, and monthly income.

Respondents represented metropolitan retailers (50%), urban retailers (25%), and rural retailers (25%). The typical business (evidenced by the largest proportion of respondents) has been in operation 5 years, sells food and beverage products, is owner managed, and has sold Coca-Cola products since it began operations. A breakdown of the informal sector by type of outlet is:

60,200 Spaza/tuck shop
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23,000 Shebeen
130,400 Hawker/street vendor
16,600 Other informal outlets

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Start-up funding is a problem for informal retailers. Metropolitan and urban retailers report getting start-up funding within about six months, but the waiting period for rural retailers was about 12 months. A third of urban retailers report capital expansions within the last year, compared to 29 percent and 20 percent for metropolitan and rural retailers, respectively. The table shows the average expenditures by type and location among those reporting expansion in the past year. The "weighted total" weights the average by the number in the location category. As is evident, urban retailers who expanded spent about one-third more than either metropolitan or rural retailers on expansion. Notably, urban retail outlets also report larger operating costs and monthly income than their metropolitan or rural counterparts.

For its South Africa network, Coca-Cola is affiliated with 6 local bottlers, operating 30 soft-drink manufacturing plants. In 1998, the Coca-Cola system employed 16,500 workers in South Africa. The Coca-Cola system's total contribution to South Africa's gross domestic product is estimated at \$1.9 billion in 1998.

## China

Another study examined Coca-Cola in the People's Republic of China, an economy under communist control in transition from a command to a market economy. Coca-Cola has had a presence longer in China than in the other countries reported, beginning with two bottling plants in Shanghai and Tianjian in 1927. In 1948, the Shanghai plant was the first plant outside the United States to post sales of more than 1 million units. In 1949, all foreign companies were asked to leave; Coca-Cola plants were nationalized; and the Tianjian plan was dismantled. For the following 30 years, the beverage industry remained dormant. In the 1960s and 1970s, the industry became more fragmented and localized.

In 1979, The Coca-Cola Company reentered the market, following the re-establishment of relations between China and the United States, and the first batch of 28,000 cases of Coca-Cola cans and bottles were transported from Hong Kong to Guangzhou, Shanghai, and Beijing. To cement its long term commitment to China would require that The Coca-Cola Company be innovative and flexible, and The Company became one of the first global enterprises to commit to long term localization. Bottling plants were built or re-structured to compete in the emerging market economy. In the mid-1980s, The Company formed alliances with local firms to strengthen its upstream and downstream networks.

Positive negotiations with the Chinese government permitted The Coca-Cola Company's distribution network to become well formed by the mid-1990s. As in South Africa, anchor bottlers form the basis of the network. The primary development of the network is in the coastal provinces, which contain about 80 percent of China's population. For the downstream network, Swire Pacific covers the interior and southern regions, while Kerry Beverages serves the northern and interior regions. But the remote regions are not ignored. Coca-Cola brands have been sighted in Tibet, although there is no bottling plant for 1,000 miles (the nearest are in Chengdu and Kunming). The products found in Tibet came from Qinghai and Xinjiang provinces, reaching these provinces from Beijing. Other Coca-Cola products in Tibet have originated from Chengdu or Wuhan.

Often entrepreneurs acting on their own initiative distribute these products in creative ways. Bottles or cans are even carried in by camel. Unfortunately, at first some of the cans burst in Tibet. Concerned about the quality of its product, Coca-Cola investigated to find that the reason was not the cold, but that the cans had been taken from their packaging and put individually into camel packs. Without the protective packaging, the cans were knocking around inside the camel pack, causing their shells to weaken or crack from stress. The unpacking process was stopped.

China's northernmost province (Heilongjiang) boasts Coca-Cola's successful pushcart program in Harbin, the province's capital. As China restructures, jobs must be generated to absorb unemployment. The pushcart program is an example of job creation without draining scarce government funds. The objective of the Harbin Coca-Cola Beverage Company pushcart program was threefold: (i) to increase sales; (ii) to support local government efforts to reduce unemployment; and (iii) to exert downward pressure on prices at other retail outlets. To achieve its objective, the bottler trains Harbin's residents as pushcart operators (salespeople). In addition, to equip each newly trained vendor, the Harbin bottler provides push-cart, ice chest, sun umbrella, Coca-Cola T-shirt, and 10 ice packs. The investment to date in the Harbin pushcart program is about 1.5 million RMB.

One entrepreneur in the Guangdong province is a beverage wholesaler. In addition to seeing his revenue triple since becoming a distribution partner with Coca-Cola, this wholesaler believes his reputation among retailers and wholesalers has risen. Coca-Cola's business has provided him with routine, direct service to retailers which, in turn, has enhanced his competitiveness. His relationship with the local Coca-Cola bottler has made him eager to expand to other areas where there is no direct delivery service. This partner also believes that Coca-Cola's business has fostered his son's interest and involvement in the business. Thus, he credits Coca-Cola with not only increasing his profits but also helping his son to become an astute businessman.

As in other countries, channel members (either upstream or downstream) report benefits of their relationship with Coca-Cola in the form of enhanced reputation, increased knowledge of business in market economics, and training and support. Coca-Cola continues to have rigid quality requirements for its inputs but this has proven to be a mutually beneficial requirement. A case in point is Zhong Fu, a member of the Coca-Cola system. After seeing the benefits of quality

production and trained employees, the head of Zhong Fu give up all product but polyethylene terephthalate (PET) bottles, labels, caps, cups, and PC containers in the mid-1990s. As a result, Zhong Fu now has an extensive regional presence with a uni-form price in every region to prohibit cross-regional sales and limit market cannibalization. The company's leader, Mr. Huang argues that Zhong Fu needs to be within an "arm's reach" of its customers.

As in other countries, Coca-Cola is committed to human resource development in the form of technical and business training. But its commitment to human resources is not limited to employees of firms within the Coca-Cola system. Over the long run, cultivating human resources means supporting the education system. In higher education, the Coca-Cola system, along with the Chinese Youth Development Foundation and The China Youth News, began a cooperative arrangement with 50 universities across the country to offer the Coca-Cola First Generation University Scholarships. These scholarships, earmarked for underprivileged students, are awarded to top university students from poor, rural areas of China. In addition to supporting education through scholarships, Coca-Cola China has donated more than 15 million RMB for the building of 50 Project Hope schools and related activities. Started by Deng Xiaoping in 1989, Project Hope is a nonprofit program providing education in underdeveloped areas. Like in the college scholarship program, Coca-Cola works with the China Youth Development Foundation, which runs Project Hope activities in more than 2,000 schools. This clearly demonstrates Coca-Cola's commitment to long run business in China.

At the present time, there are 24 local Coca-Cola bottlers with 28 bottling plants, and development is continuing. Researchers at Qinghua and Peking Universities surveyed about 400 retailers in Guangdong Province, Xian, Shanghai, and Harbin. The results, by region, follow. Included in these surveys is greater information concerning their day-to-day dealings with the Coca-Cola system.

### **Guangdong Province (along the southern coast)**

Guangdong retailers, running the gamut from grocery store to street vendor, have been in operation an average of 3.6 years and have been selling Coca-Cola products for 3.3 years. Almost all sell both food and non-food items. The 103 retailers employ an average of 3.2 persons, 56% of which are female. Sixteen percent of these retailers report being unemployed prior to their association with Coca-Cola. Three-fourths of them report having no other income other than their retail business.

As with the South African informal sector, start-up funding is a problem. About half got their funding within 6 months, and about 25% had to wait longer than 12 months. Family and friends is the funding source for 78 percent, with the remaining percentage using personal savings. Almost all (95%) report no capital improvements within the last year.

One-third of Guangdong retailers order Coca-Cola products every week, and half receive shipments directly from the distributor. About 20 percent pick up their products. An interesting

characteristic of the latter is that half use either a bicycle or motorcycle to pick up their products. Survey respondents report the following types of help from Coca-Cola:

57%	shipments of products
20%	refrigerator
18%	grass bottles
15%	signage
10%	umbrella

### **Xian (an interior city just above the geographic midpoint of China)**

Xian retailers, representing convenience stores (46%), grocery stores (29%), drug stores (21%), and restaurants (10%), have been in operation an average of 4.3 years and have been selling Coca-Cola products for 3.3 years. The majority sell both food and non-food items. The 103 retailers employ an average of 2.4 persons, 61% of which are female. Twenty-three percent of these retailers report being unemployed prior to their association with Coca-Cola. Less than half report having no other income other than their retail business.

For start-up funding, half got their funding within 6 months, and 43% had to wait 6-12 months. For Xian retailers, 70% used personal savings for their start-up funds. More than three-quarters (80%) report no capital improvements within the last year.

More than half (54%) of Xian retailers order Coca-Cola products every week, and 70% receive their order via Coca-Cola transportation vehicles. Fewer than 5 percent pick up their products, but the majority use rental cars to do so. Survey respondents report the following types of help from Coca-Cola:

45%	shipments of products
22%	refrigerator
16%	umbrella
15%	grass bottles
14%	signage

### **Shanghai (large coastal metropolis)**

Three-fourths of Shanghai retailers have been in operation 5 or fewer years and have been selling Coca-Cola products since they began operations. The majority (68%) sell both food and non-food items. The 100 retailers employ an average of 2.1 persons (employee gender unknown).

Thirty-eight percent of these retailers report being unemployed prior to their association with Coca-Cola. Eighty percent report having no other income other than their retail business.

For start-up funding, half got their funding within 6 months, and 28% had to wait more than 12 months. For Shanghai retailers, 99% used family and friends for their start-up funds. Almost all (95%) report no capital improvements within the last year.

About half (42%) of Shanghai retailers order Coca-Cola products every week, and 45% pick up their products. Forty percent use handbarrows, and 31% use rental cars to pick up their products. Survey respondents report the following types of help from Coca-Cola:

44%	shipments of products
5%	equipment (refrigerator, umbrella, grass bottle)
13%	signage

### **Harbin (capital of the northernmost coastal province)**

Forty percent of Harbin retailers, representing convenience stores (10%), restaurants/bars (24%), small convenience stores (34%), and fast food restaurants (26%), have been in operation 4 or more years and 37% have been selling Coca-Cola products for 4 or more years. The majority (80%) sell foods including soft drinks. The 100 retailers employ an average of 4.4 persons (gender data not collected). Prior to their association with Coca-Cola, 21% of Harbin's retailers were unemployed. Three-fourths report having no other income other than their retail business.

For start-up funding, 42% got their funding within 6 months, and 48% had to wait 6-12 months. Only 8% had to wait longer than a year. For Harbin retailers, 89% used family and friends for their start-up funds. About three-quarters (73%) report no capital improvements within the last year.

More than half (59%) of Harbin retailers have no regular schedule for ordering Coca-Cola products, and 51% receive their order via Coca-Cola transportation vehicles. While few Harbin retailers pick up their products, about 10% simply walk to where the products are, pick them up, and carry them back to their outlet. Survey respondents report the following types of help from Coca-Cola:

46%	shipments of products
8%	equipment (refrigerator, umbrella, grass bottle)
5%	refrigerator
10%	signage

## CONCLUSION

### Developing the Upstream Network

In each of the countries reported, one of the first problems faced was supplies that did not meet The Coca-Cola Company's quality standards. In particular, water, sugar, and bottles from local suppliers were inadequate. To address these issues, The Coca-Cola Company worked with local suppliers to enhance their operations in such a manner that the quality standards could be met. Supplier alliances were developed using the "process-oriented supplier development" mechanism that, Hartley and Jones (1997) suggest, generates stronger, more reliable, long run relationships. The Coca-Cola Company exhibits great flexibility in working within the development stage of the host country—from basic developing in Romania, to building and enhancing in China, to working within the system in South Africa.

### Developing the Downstream Network

Management teams from The Coca-Cola Company also worked with distributors. A primary objective here was to assist the distributors with managing product flow. The objective here was to get Coca-Cola products "within arm's reach of desire." Alliances were developed that matched the criteria for success identified by Ohmae (1989):

<i>i</i>	<i>commitment of both parties;</i>
<i>ii</i>	<i>management time;</i>
<i>iii</i>	<i>flexibility; and</i>
<i>iv</i>	<i>an appreciation of cultures.</i>

In the countries studied, many retailers reported greater sales when they had a "fridge" or "cooler" for keeping soft drinks cold, with such equipment supplied by Coca-Cola. In addition, The Coca-Cola Company provided training for retailers in operating in a market economy. Again, Coca-Cola's flexibility is evident in its ability to develop a network that fits the infrastructure and development of the host country.

### Additional Benefits

In-country bottlers report they have learned much about producing quality bottles. In China, some of the Coca-Cola trained bottlers have expanded operations to offer bottling services to companies other than Coca-Cola. Distributors report they have developed a greater understanding of a market economy. Retailers, too, report enhanced understanding of a market economy. For many retailers particularly those in South Africa, the sale of Coca-Cola products

provided them with employment. In most of these countries, the retailers range in size from large to umbrella-stands in China, kiosks in Poland and Romania, and spazas in South Africa.

### **Implications for Success in the Global Market**

This paper has presented the approach that The Coca-Cola Company has taken to penetrate global markets and overcome problems posed by infrastructure and education, distribution, and supply system weaknesses. The key underlying Coca-Cola's success is application of the unifying qualitative modified Porter economic development framework. The authors believe that other companies seeking to penetrate global markets would benefit from using this or other similar frameworks.



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## REFERENCES

- Division of Research (1995). Foreign Direct Investment in Transitional Economies: The Coca-Cola System in Poland and Romania. The Darla Moore School of Business, University of South Carolina.
- Division of Research (1999). Multinational Enterprise, Employment, and Local Entrepreneurial Development: Coca-Cola in South Africa. The Darla Moore School of Business, University of South Carolina. 1999.
- Earle, J. S., Frydman, R., Rapaczynski, A. & Turkewitz, J. (1994). Small Privatization: The Transformation of Retail Trade and Consumer Services in the Czech Republic, Hungary, and Poland. New York: Central European University Press.
- Edwards, N. (1998). Sweet success. *Supply Management*. 3(5), 30-32.
- Fernie, J. (1993). Distribution strategies of European Retailers. *Logistics Information Management*. 6 (1), 24.
- Gould, W. (1975). VGM Business Portraits Coca-Cola. *VGM Career Horizons*, Lincolnwood, ILL: NTC Publishing Group, 9.
- Hartley, J. L. & Jones, G. E. (1997). Process oriented supplier development: Building the capability for change. *Journal of Supply Chain Management*. 33(3), 24-29.
- International Labour Organization. (1993). Bureau of Statistics, Fifteenth International Conference of Labor Statisticians, Resolution II, Resolution Concerning Statistics of Employment in the Informal Sector. January 1993, 19-28.
- Kotler, P. (1984). *Marketing Management: Analysis, Planning, and Control*. Englewood Cliffs: Prentice-Hall, Inc.
- Krause, D. R. (1997). Supplier development: Current practices and outcomes. *Journal of Supply Chain Management*. 33(2), 12-19.
- Lunsche, S. (1998). Knauss to Satisfy Coca-Cola's Thirst for New Markets. *Business Times*. May 17 at Homepage of Business Times [<http://www.btimes.co.za/98/0517news/news.htm>].
- McKnight, B., Miskewicz, R. L. & Liu, Y. (1997). Asia supply chains: The Hong Kong/China connection. *Transportation & Distribution*. 38(6), 79-82.
- Mitchell, A. (1999). Marketers intensify push to control supply chains. *Marketing Week* 22(27), 22-23.
- Ohmae, K. (1989). The Global Logic of Strategic Alliances. *Harvard Business Review*. 67(2), 143.
- Porter, M. (1990). *The Competitive Advantage of Nations*. New York: The Free Press.



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# **ARE COMMON PURPOSE AND ENTREPRENEURIAL GOALS EXPORTABLE?: A COMPARATIVE TRAIT STUDY OF AMERICAN AND FINNISH ENTREPRENEURS**

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## **ABSTRACT**

*This paper develops the key aspects of the entrepreneurial psyche as depicted in the American model of entrepreneurship. The authors empirically compare an American group of entrepreneurs to a Finnish group in terms of traits. The paper concludes with a discussion of the implications of identified differences for the potential success of the exportation of the American model to other nations attempting to encourage entrepreneurship.*

## **INTRODUCTION**

With the crumbling of the centrally planned economies of Eastern Europe has come the cry: *ENTREPRENEURSHIP!* Virtually everyone seems to be looking toward the resurgence of entrepreneurship to drive a conversion of these economies toward free enterprise and to fuel an increase in standards of living and in the health of the nations (Roman, 1991). A similar attitude toward entrepreneurship seems to exist throughout the world as numerous countries look toward the phenomenon as a savior of stagnating economies (i.e., Kohi & Sood, 1987; Tiffin, 1987; Gupta, 1989; Meredith, 1989; Balkenhol, 1990; Giamartino, 1991; Nelson, 1991). Like the legendary Phoenix rising from its ashes to live again, entrepreneurship is expected to surge from its grave and leap to the defense of crumbling economies around the world.

Americans seem to see this international focus as proof of the superiority of the American model of entrepreneurship. Those who are more generous might say that the American view is a result of history. Less generous ones might say that the American view has its roots in innate feelings of superiority. At any rate, increasing numbers of American researchers are traveling the globe to teach entrepreneurship. The American ideology has dominated the conventional world view of entrepreneurship (Peterson, 1988). There is great danger in this view because entrepreneurship occurs differently in other nations (Giamartino, McDougall & Bird, 1993).

Entrepreneurship is unique among organizational and economic functions in that it is initiated by an act of human volition (Hofer & Bygrave, 1992). It is this intentionality that distinguishes the entrepreneur (Bird & Jelinek, 1988). If one wishes to understand the entrepreneurial process, one must understand the role of the individual in triggering that process (Carland, Hoy & Carland, 1988). Further, entrepreneurship is enmeshed with culture (Peterson, 1988). The natural conclusion drawn from these perspectives is that the American model of entrepreneurship is not necessarily effective in understanding or encouraging entrepreneurship in a given nation. Before one can export the American philosophy to a given nation, one must investigate and seek to understand differences in the entrepreneurial psyche in that nation.

In the 1930s, Aksel Sandemose described the rules of behavior in a fictitious city called Jante. The *Jante Laws* were hailed as an erudition of Norwegian culture. That culture is clearly different today, but the undertones persevere (Hjelmervik, 1988). In fact, a similar attitude seems to exist throughout much of the world (Peterson, 1988). Sandemose's perspective is translated as follows (Peterson, 1988):

The Jante Laws	
1.	You shall not believe that you are something.
2.	You shall not believe that you are as good as we are.
3.	You shall not believe that you are wiser than we are.
4.	You shall not believe that you are better than we are.
5.	You shall not believe that you know more than we do.
6.	You shall not believe that you are more than we are.
7.	You shall not believe that you are capable of anything.
8.	You shall not laugh at us.
9.	You shall not believe that anyone cares for you.
10.	You shall not believe that you can teach us anything.

The central tenet of the American model of entrepreneurship is individualism. In fact, a plethora of articles focussing on the *personal characteristics* of entrepreneurs has emerged (i.e., McClelland, 1961; Pickle, 1964; Hornaday & Aboud, 1971; Timmons, 1978; Brockhaus, 1980; Dunkelberg & Cooper, 1982; Brockhaus & Horwitz, 1986; Carsrud, Olm & Eddy, 1986; Solomon & Winslow, 1988; Winslow & Solomon, 1989; Carland & Carland, 1991). Still other researchers have posited *types* of entrepreneurs (i.e., Smith, 1967; Webster, 1977; DeCarlo & Lyons, 1979; Vesper, 1980; Mescon & Montanari, 1981; McClelland, 1987; Louis, Blumenthal, Gluck & Stoto, 1989; Gartner, Mitchell & Vesper, 1989). Much of the American research in entrepreneurship has been founded upon the premise that entrepreneurs embody distinctive personality characteristics which can be identified (Cooper & Dunkelberg, 1987), and used to indicate a potential for entrepreneurship (Lachman, 1980). Clearly, the focus of the great mass of this research is the individual and his or her role in venture creation. This may be quite natural given the historic antecedents of the United States, however, the cult of individualism is unacceptable in many countries of the world (Peterson, 1988).

Can the American insight into entrepreneurship be successfully exported to other nations? The importance of this issue cannot be overstated as it goes to the validity of attempts to aid and support entrepreneurship internationally with any model which is American based. However, these researchers feel that an antecedent to the export issue lies in an earlier question. Just how much do the entrepreneurs in America differ from those in other nations? If culture is enmeshed with entrepreneurship, there must be differences and those differences are likely to vary from nation to nation. This paper presents an exploratory study of differences in entrepreneurs. The authors have approached the question by investigating the entrepreneurial drive and the key components of the entrepreneurial psyche as espoused in the American model. Clearly, any comparison of the American view of the entrepreneurial psyche must be made on a nation by nation basis. Any other approach would be so confounded by cultural differences as to make interpretation of the findings problematic, if not impossible. Because there is a dramatic, nationwide focus on entrepreneurship in Finland and because there is a cadre of entrepreneurship researchers in that nation who are vitally interested in exploring the nature of the entrepreneurship phenomenon, the authors have begun this exploratory study with a comparison between American and Finnish entrepreneurs. This paper will describe the results of an empirical comparison between entrepreneurs in the two nations and will explore the significance of the differences in terms of the potential value of the American model in Finland.

### **THE AMERICAN MODEL OF ENTREPRENEURSHIP**

From the time of Adam Smith in 1776 through the middle of the Twentieth Century, the literature was dominated by economists focusing upon the outcomes of the entrepreneurship phenomenon. McClelland (1961), with his landmark work on individual need for achievement, kindled an inferno of interest in the two generations of American entrepreneurship researchers who followed. The concomitant interest in entrepreneurship inputs placed the focus of the American model of entrepreneurship squarely on the individual. As a result, three major characteristics have emerged as primary aspects of the entrepreneurial personality.

The first of these characteristics is the propensity for risk taking, the earliest identified entrepreneurial characteristic. Cantillon (circa 1700) portrayed an entrepreneur as the individual who assumed the risk for the firm (Kilby, 1971), a perspective echoed by Mill (1848).

Palmer (1971) proffered that risk assessment and risk taking are the primary elements of entrepreneurship. Some studies have indicated no significant differences in risk taking propensities for entrepreneurs as compared to the general population (i.e., Brockhaus, 1980; Sexton & Bowman, 1983), but others have discovered a higher propensity for risk taking among entrepreneurs (i.e., Sexton & Bowman, 1986; Carland, Carland, Carland & Pearce, 1995), when confronted with business risk (Ray, 1986), but moderated by experience, age, education, and type of business (Schwer & Yucelt, 1984). Further, entrepreneurs evidence low uncertainty avoidance irrespective of culture (McGrath, MacMillan & Scheinberg, 1992). Risk taking

propensity remains a key aspect of the entrepreneurial psyche as visualized by American researchers (Carland, Carland & Stewart, 1996).

The second characteristic which is central to the American model is preference for innovation. Schumpeter's view of entrepreneurial innovation was rooted in the classic theories of economists such as Say and Marshall (Hornaday, 1992). In the literature, innovation remains a frequently identified functional characteristic of entrepreneurs (e.g., McClelland, 1961; Hornaday & Aboud, 1971; Timmons, 1978; Brockhaus, 1982; Carland, Hoy, Boulton & Carland, 1984; Gartner, 1990). Timmons (1978) suggested that creativity and innovation were conditions inherent in the role of entrepreneurship. Drucker (1985) actually defined entrepreneurship as innovation in a business setting. Olson (1985) included invention, an activity analogous to innovation, as a primary entrepreneurial activity. This contention was intensified by Carland, Hoy, Boulton and Carland (1984) who proposed that innovation was the critical factor in distinguishing entrepreneurs from managers and small business owners. Hornaday (1992) deftly illustrated that while innovation is a necessary element of entrepreneurship, alone it is insufficient to fully circumscribe entrepreneurial behavior because of the broad parameters of the function. The preference for innovative behavior is firmly established as central to the American view of the entrepreneurial psyche (Carland, Carland & Stewart, 1996).

The third, and perhaps the most ubiquitous entrepreneurial characteristic, is the need for achievement. This insight was initiated by the work of McClelland (1961). In a study of behavior in young men, McClelland (1961, 1965) concluded that a high need for achievement would influence the self selection of an *entrepreneurial* position, defined as a salesman, company officer, management consultant, fund-raiser, or owner of a business. Numerous subsequent studies have shown a positive relationship between achievement motivation and entrepreneurship (i.e., Hornaday & Bunker, 1970; Hornaday & Aboud, 1971; DeCarlo & Lyons, 1979; Lachman, 1980; Begley & Boyd, 1986). Other studies have shown that need for achievement is not the most important variable for predicting the likelihood of starting a business (Borland, 1974; Hull, Bosley, & Udell, 1980). Johnson (1990) suggested that because of the variability of the samples, different operationalizations of the achievement motive, and convergent validity problems in instrumentation, more research is necessary to prove a definitive link between achievement motivation and entrepreneurship. Nevertheless, achievement motivation remains a central tenet in the American view of the entrepreneurial psyche (Carland, Carland & Stewart, 1996).

A relatively new, yet promising perspective of the entrepreneurial psyche involves cognitive or managerial style (i.e., Hoy & Carland, 1983; Brodzinski, Scherer & Wiebe, 1990; Dugan, Feeser & Plaschka, 1990; McKee, 1991; Shaver & Scott, 1991; Carland & Carland, 1992; King & Masters, 1993; Carland, Carland & Stewart, 1996). Carland, Carland and Hoy (1992) posited a perspective of entrepreneurship which treats the phenomenon as an individual drive; the drive toward entrepreneurial behavior. They developed and validated an instrument which measures the strength of that drive, the Carland Entrepreneurship Index, and demonstrated that entrepreneurial drive is normally distributed (Carland, Carland & Hoy, 1992). They hypothesize that the differences in entrepreneurial drive explain the differences in observed

entrepreneurial behavior. Carland, Carland and Stewart (1996) describe the entrepreneurial psyche as a *gestalt* of multiple personality factors including the need for achievement, the propensity for risk taking, the preference for innovation, and cognitive style. They demonstrated that the various factors are normally distributed and that the varying strengths of the traits in an individual entrepreneur combine to affect that individual's behavior. It is this gestalt of drives which combine to produce differences in entrepreneurial behavior.

These authors conclude that the American model of entrepreneurship is based upon a view that the individual is the key to the process and that the individual is characterized by several key attributes. Among these attributes are the need for achievement, the propensity for risk taking, and the preference for innovative behavior. The synthesis of varying levels of attribute strength in an individual results in a gestalt of drives which affects one's approach to entrepreneurship. In essence, the process of entrepreneurship is a result of an individual's actions, and that individual's actions are profoundly affected by his or her personality.

## THE RESEARCH METHODOLOGY

Logically, if the American model of entrepreneurship is valid in other nations, then the perspective of the individual entrepreneur as the driving force behind the entrepreneurial process must be valid. To test such validity, the researchers selected instruments to measure the key entrepreneurial traits, combined them into a survey with demographic questions and questions concerning the goals, objectives and strategies of the firm, and translated the survey into Finnish.

The survey was administered to a group of American and a group of Finnish entrepreneurs.

### The Instruments

The instrument used to measure the need for achievement is the Achievement Scale of the Personality Research Form (Jackson, 1974). The instrument has been shown to have reliability (Jackson, 1974), to display convergent and discriminant validity, and high correlations with self and peer ratings; .65 and .46 respectively (Jackson and Guthrie, 1968). It consists of 16 forced choice questions, and is scored by untrained people. Odd-even reliabilities for two groups (N=83 & N=84) were .57 and .66 after application of the Spearman-Brown correction (Jackson, 1974).

To measure risk taking propensity, the authors used the Risk Taking Scale of the Jackson Personality Inventory (Jackson, 1976), which consists of 20 forced choice questions and can be scored by untrained people. It displays high reliability and validity and exhibits high correlations with self and peer ratings; .77 and .52, respectively (Jackson, 1976). Jackson (1976), in a test involving two samples (N=82 & N=307), reported internal consistency reliability values of .93 and .91 using Bentler's coefficient theta and .81 and .84 using coefficient alpha.

The instrument selected to measure preference for innovation was the Innovation Scale of the Jackson Personality Inventory (Jackson, 1976) which also consists of 20 questions in a forced

choice format and can be scored by untrained people. It has been reported to display high reliability and validity and to exhibit high correlations with self and peer ratings; .73 and .37, respectively (Jackson, 1976). Jackson (1976), in tests involving two samples (N=82 & N=307), reported internal consistency reliability values of .94 and .93 using Bentler's coefficient theta and .83 and .87 using coefficient alpha.

<b>TABLE 1: DEMOGRAPHICS OF SAMPLES</b>			
(May not add to 100% due to missing responses)		American	Finnish
Type of Business	Retail	38%	18%
	Service	44%	44%
	Wholesale	3%	4%
	Construction	9%	15%
	Manufacturing	4%	15%
Annual Sales	\$100,000 or less	36%	34%
	\$100,000 to \$250,000	19%	16%
	\$250,000 to \$500,000	18%	19%
	\$500,000 to \$1,000,000	9%	14%
	\$1,000,000 and over	14%	15%
Number of Employees	10 or less	84%	78%
	11 to 25	8%	10%
	26 to 50	5%	2%
	51 or more	2%	2%
Business Form	Proprietorship	51%	25%
	Partnership	13%	38%
	Corporation	36%	38%
Age of Business	Over 10 years	54%	50%
	5 to 10 years	38%	32%
	1 to 4 years	4%	17%
Sex of Respondent	Male	68%	75%
	Female	32%	25%
Age of Respondent	25 to 35 years	23%	15%
	36 to 45 years	35%	29%
	45 to 55 years	24%	41%
	Over 55 years	13%	13%
Education of Respondent	12 years or less	33%	73%
	12 to 15 years	27%	9%
	16 years	23%	3%
	More than 16 years	13%	9%
Role of Respondent	Started Business	75%	81%
	Purchased Business	21%	13%
	Inherited Business	5%	5%



Primary Objectives	Profit and Growth	47%	21%
	Family Income	53%	77%

The instrument selected to measure entrepreneurial drive was the Carland Entrepreneurship Index. The instrument consists of 33 forced choice questions, can be scored by untrained people, and results in a scaler score which can be interpreted as a representation of the strength of one's entrepreneurial drive. The test-retest correlation for the Entrepreneurship Index was .80 with a split-half, odd-even reliability of .73. The Kuder-Richardson test for validity was .73 indicating good reliability and validity for the Index (Carland, Carland, & Hoy, 1992).

### **The Samples**

The American sample consisted of 211 principal owners of small businesses as defined by the U.S. Small Business Administration. Graduate students from the southeastern United States were asked to have small business owners complete the surveys. The group represented a convenience sample, however, it was sufficiently large as to eliminate most criticism since the central limit theorem holds that larger samples have a level of confidence which approaches that of a random sample (Mason, 1982). Further, the methodology of collection minimized non-response bias. Since the data were collected through personal approaches, there was a high level of participation; fewer than 20% of owners approached declined to participate. The result was data collected from individuals who might not have responded to a mail questionnaire.

The Finnish sample consisted of 424 principal owners of small businesses which meet the U.S. Small Business definition. The sample was developed by mailing the surveys to a group of 1,000 owners of small businesses throughout Finland. The high response rate, 43%, demonstrates the keen interest which Finnish entrepreneurs have in supporting entrepreneurship research. Further, the high response rate suggests a minimal non-response bias. The demographics of the two groups, displayed in Table 1, show remarkably similar distributions.

## **RESULTS OF THE STUDY**

Descriptive statistics for the two samples are displayed in Table 2. The table reports the key statistics for each of the instruments included in the survey.

The first phase of the empirical analysis consisted of a correlation between the scores on the four instruments for each of the two samples, as well as for the combined sample. The results are displayed in Table 3. As the table shows, the correlations were high, and were remarkably similar for each of the two groups.

The next phase of the investigation involved an analysis of variance. The results are displayed in Table 4. Each of the four instruments were compared across nationalities. As the table shows, there were significant differences between the Americans and Finnish scores on all of the instruments except for the preference for innovation. To determine the direction of the

difference revealed by the analysis of variance, t-tests were conducted between the scores of the two groups on the three instruments with significant differences. The results, also displayed in Table 4, showed that the Americans produced significantly higher scores on all three instruments, the Entrepreneurship Index, need for achievement, and propensity for risk taking.

<b>TABLE 2: DESCRIPTIVE STATISTICS</b>				
CEI: The Carland Entrepreneurship Index      ACH: The Jackson Need for Achievement Score INN: The Jackson Preference for Innovation Score      RISK: The Jackson Risk Taking Propensity Score				
The American Sample				
	CEI	ACH	INN	RISK
Mean Score	20.5	12.3	13.7	9.5
Variance	30.1	7.7	19.1	27.0
Standard Deviation	5.5	2.8	4.4	5.2
Minimum Score	6	3	1	0
Maximum Score	35	16	20	19
Number of Cases	209	209	209	209
The Finnish Sample				
	CEI	ACH	INN	RISK
Mean Score	18.3	10.6	13.3	7.3
Variance	26.2	5.8	18.3	16.0
Standard Deviation	5.1	2.4	4.3	4.0
Minimum Score	4	4	1	0
Maximum Score	31	16	20	19
Number of Cases	434	434	434	434
The Combined Sample				
	CEI	ACH	INN	RISK
Mean Score	19.0	11.1	13.5	8.0
Variance	28.4	7.0	18.5	20.6
Standard Deviation	5.3	2.7	4.3	4.5
Minimum Score	4	3	1	0
Maximum Score	35	16	20	19
Number of Cases	643	643	643	643

<b>TABLE 3: CORRELATION MATRIX</b>				
CEI: Carland Entrepreneurship Index    ACH: Jackson Need for Achievement INN: Jackson Preference for Innovation    RISK: Jackson Risk Taking Propensity				
The American Sample				
	CEI	ACH	INN	RISK
CEI	1.00			
ACH	0.45	1.00		
INN	0.55	0.45	1.00	
RISK	0.58	0.28	0.55	1.00
The Finnish Sample				
	CEI	ACH	INN	RISK
CEI	1.00			
ACH	0.50	1.00		
INN	0.54	0.44	1.00	
RISK	0.60	0.40	0.51	1.00
The Combined Sample				
	CEI	ACH	INN	RISK
CEI	1.00			
ACH	0.51	1.00		
INN	0.54	0.43	1.00	
RISK	0.60	0.39	0.52	1.00

<b>TABLE 4: ANALYSIS OF VARIANCE</b>					
Between American and Finnish Responses					
Dependent Variable:Carland Entrepreneurship Index Squared Multiple R: .04					
Source	Sum of Squares	DF	Mean-Square	F-Ratio	p
Nationality	665.18	1	665.18	24.23	.000
Error	17595.82	641	27.45		
Dependent Variable:Need for Achievement Squared Multiple R: .09					
Source	Sum of Squares	DF	Mean-Square	F-Ratio	p
Nationality	413.17	1	413.17	64.42	.000
Error	4110.95	641	6.41		
Dependent Variable:Preference for Innovation Squared Multiple R: .01					
Source	Sum of Squares	DF	Mean-Square	F-Ratio	p
Nationality	15.95	1	15.95	0.86	.354
Error	11881.62	641	18.54		
Dependent Variable:Propensity for Risk Taking Squared Multiple R: .05					
Source	Sum of Squares	DF	Mean-Square	F-Ratio	p
Nationality	686.63	1	686.63	35.17	.000
Error	12515.24	641	19.53		
<b>T-TEST BETWEEN GROUPS WITH SIGNIFICANT F-RATIOS</b>					
The Carland Entrepreneurship Index					
Group	Mean	N	SD	t	p
American	20.46	209	5.49	4.80	.000
Finnish	18.29	434	5.12		
The Jackson Need for Achievement Score					
Group	Mean	N	SD	t	p
American	12.30	209	2.78	7.63	.000
Finnish	10.59	434	2.40		
The Jackson Risk Taking Propensity Score					
Group	Mean	N	SD	t	p
American	9.53	209	5.19	5.42	.000
Finnish	7.33	434	3.99		

Since the Carland Entrepreneurship Index purports to be a measure of the gestalt of individual traits, the researchers conducted a regression analysis with the CEI as the dependent variable. The results, displayed in Table 5, showed a strong relationship for both American and Finnish groups with  $R^2$  scores of 46% and 48%, respectively. Regression on the combined sample, also shown in Table 5, produced only a slightly higher  $R^2$  of 49% but with strong significance.

TABLE 5: REGRESSION ANALYSES						
The American Sample						
Dependent Variable: CEI Squared Multiple R: .457						
Variable	Coefficient	Std Error	Std Coef of Tolerance		t	p
Constant	6.794	1.331	0.000 0.0000		5.103	.000
Ach Score	0.476	0.114	0.241 0.7985		4.190	.000
Innovation Score	0.287	0.083	0.228 0.6072		3.456	.001
Risk Taking Score	0.408	0.065	0.386 0.7005		6.281	.000
Source	Sum of Squares	DF	Mean-Square		F	p
Regression	2859.142	3	953.047		57.483	.000
Residual	3398.838	205	16.580			
The Finnish Sample						
Dependent Variable: CEI Squared Multiple R: .475						
Variable	Coefficient	Std Error	Std Coef of Tolerance		t	p
Constant	5.425	0.846	0.000 0.0000		6.411	.000
Ach Score	0.526	0.085	0.247 0.7650		6.187	.000
Innovation Score	0.282	0.051	0.236 0.6751		5.543	.000
Risk Taking Score	0.483	0.054	0.377 0.6993		9.025	.000
Source	Sum of Squares	DF	Mean-Square		F	p
Regression	5389.787	3	1796.596		129.88	.000
Residual	5948.049	430	13.833			
The Combined Sample						
Dependent Variable: CEI Squared Multiple R: .487						
Variable	Coefficient	Std Error	Std Coef of Tolerance		t	p
Constant	5.759	0.696	0.000 0.0000		8.309	.000
Ach Score	0.523	0.065	0.260 0.7746		8.082	.000
Innovation Score	0.280	0.043	0.226 0.6733		6.544	.000
Risk Taking Score	0.453	0.040	0.385 0.6984		11.361	.000
Source	Sum of Squares	DF	Mean-Square		F	P
Regression	8886.173	3	2962.058			

Residual	9374.825	639	14.671	201.90	.000
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The previous investigation concerning correlations, displayed in Table 3 above, suggested that the scores on the various instruments were significantly correlated. This suggests that the regression analysis displayed above could have been affected by multicollinearity. Consequently, the researchers collapsed the scores on risk taking, innovation and achievement into a single variable. A new regression analysis, displayed in Table 6, employing the combined scores shows that the effect on the CEI was not distorted. The  $R^2$  scores remain high at 46%, 47% and 48%, for the American, Finnish and combined samples.

<b>TABLE 6: REGRESSION ANALYSES</b> using a combined independent variable					
Dependent Variable: CEI      Squared Multiple R: .453					
Variable	Coefficient	Std Error	Std Coef of Tolerance	t	p
Constant	7.176	1.053	0.000 0.0000	6.815	.000
Combined Scores	0.374	0.029	0.673 .100E+01	13.095	.000
Source	Sum of Squares	DF	Mean-Square	F	p
Regression	2835.331	1	2835.331	171.48	.000
Residual	3422.650	207	16.535		
The Finnish Sample					
Dependent Variable: CEI      Squared Multiple R: .467					
Variable	Coefficient	Std Error	Std Coef of Tolerance	t	p
Constant	5.609	0.677	0.000 0.0000	8.288	.000
Combined Scores	0.406	0.021	0.683 .100E+01	19.439	.000
Source	Sum of Squares	DF	Mean-Square	F	p
Regression	5290.197	1	5290.197	377.89	.000
Residual	6047.639	432	13.999		
The Combined Sample					
Dependent Variable: CEI      Squared Multiple R: .479					
Variable	Coefficient	Std Error	Std Coef of Tolerance	t	p
Constant	5.975	0.558	0.000 0.0000	10.714	.000
Combined Scores	0.399	0.016	0.692 .100E+01	24.271	.000
Source	Sum of Squares	DF	Mean-Square	F	P
Regression	8745.046	1	8745.046	589.07	.000
Residual	9515.952	641	14.845		

**TABLE 7: T-TESTS FOR DIFFERENCES IN MEAN SCORES**

The Carland Entrepreneurship Index	N	Mean	SD	t	p
Americans Pursuing Profit & Growth	99	22.778	4.999	1.904	0.058
Finns Pursuing Profit & Growth	89	21.360	5.186		
The Jackson Need for Achievement Score	N	Mean	SD	t	p
Americans Pursuing Profit & Growth	99	12.778	2.609	3.595	0.000
Finns Pursuing Profit & Growth	89	11.506	2.242		
The Jackson Preference for Innovation Score	N	Mean	SD	t	p
Americans Pursuing Profit & Growth	99	14.768	4.048	-0.393	0.695
Finns Pursuing Profit & Growth	89	14.989	3.663		
The Jackson Risk Taking Propensity Score	N	Mean	SD	t	p
Americans Pursuing Profit & Growth	99	11.576	4.899	2.469	0.014
Finns Pursuing Profit & Growth	89	9.888	4.476		
The Carland Entrepreneurship Index	N	Mean	SD	t	p
Americans Pursuing Family Income	110	18.382	5.070	1.645	0.102
Finns Pursuing Family Income	335	17.478	4.789		
The Jackson Need for Achievement Score	N	Mean	SD	t	p
Americans Pursuing Family Income	110	11.864	2.869	4.944	0.000
Finns Pursuing Family Income	335	10.364	2.400		
The Jackson Preference for Innovation Score	N	Mean	SD	t	p
Americans Pursuing Family Income	110	12.709	4.427	-0.397	0.692
Finns Pursuing Family Income	335	12.901	4.337		
The Jackson Risk Taking Propensity Score	N	Mean	SD	t	p
Americans Pursuing Family Income	110	7.691	4.760	2.069	0.040
Finns Pursuing Family Income	335	6.669	3.573		
The Carland Entrepreneurship Index	N	Mean	SD	t	p
Respondents Pursuing Profit & Growth	188	22.106	5.124	10.029	0.000
Respondents Pursuing Family Income	445	17.701	4.870		
The Jackson Need for Achievement Score	N	Mean	SD	t	p
Respondents Pursuing Profit & Growth	188	12.176	2.518	6.513	0.000
Respondents Pursuing Family Income	445	10.735	2.602		
The Jackson Preference for Innovation Score	N	Mean	SD	t	p
Respondents Pursuing Profit & Growth	188	14.872	3.862	5.780	0.000
Respondents Pursuing Family Income	445	12.854	4.356		
The Jackson Risk Taking Propensity Score	N	Mean	SD	t	p
Respondents Pursuing Profit & Growth	188	10.777	4.767	9.781	0.000
Respondents Pursuing Family Income	445	6.921	3.919		

<b>TABLE 8: T-TESTS FOR DIFFERENCES IN MEAN SCORES</b>					
The Carland Entrepreneurship Index	N	Mean	SD	t	p
Americans Business Founders	156	20.878	5.578	1.977	0.051
American Non-Founders	53	19.245	5.057		
The Jackson Need for Achievement Score	N	Mean	SD	t	p
Americans Business Founders	156	12.455	2.698	1.348	0.181
American Non-Founders	53	11.830	2.985		
The Jackson Preference for Innovation Score	N	Mean	SD	t	p
Americans Business Founders	156	13.846	4.258	0.878	0.382
American Non-Founders	53	13.208	4.675		
The Jackson Risk Taking Propensity Score	N	Mean	SD	t	p
Americans Business Founders	156	9.609	5.306	0.387	0.700
American Non-Founders	53	9.302	4.886		
The Carland Entrepreneurship Index	N	Mean	SD	t	p
Finnish Business Founders	353	18.218	5.055	-0.575	0.566
Finnish Non-Founders	80	18.600	5.430		
The Jackson Need for Achievement Score	N	Mean	SD	t	p
Finnish Business Founders	353	10.564	2.444	-0.306	0.760
Finnish Non-Founders	80	10.650	2.234		
The Jackson Preference for Innovation Score	N	Mean	SD	t	p
Finnish Business Founders	353	13.320	4.325	-0.181	0.857
Finnish Non-Founders	80	13.413	4.074		
The Jackson Risk Taking Propensity Score	N	Mean	SD	t	p
Finnish Business Founders	353	7.263	3.941	-0.722	0.472
Finnish Non-Founders	80	7.638	4.240		

Having established that significant differences in scores on the various instruments do exist between the American and Finnish entrepreneurs, the researchers turned to an investigation of the source of those differences. A series of t-tests were conducted on various subgroups of the two samples. First, the researchers partitioned the respondents based upon whether their principal objectives were profit and growth or the pursuit of family income. Scores were compared between the various subgroups. The results, displayed in Table 7, showed that



Americans pursuing profit and growth scored higher than their Finnish counterparts on need for achievement and risk taking propensity. The same results appeared when Americans pursuing family income were compared to the respective Finnish subgroup. In the combined sample, entrepreneurs pursuing profit and growth scored significantly higher on all four instruments.

One of the demographic questions included in the survey concerned whether an owner had founded his or her business or acquired it through purchase or inheritance. The researchers partitioned the respondents based upon their founder status and investigated differences on the four instruments. The results of the first test, displayed in Table 8, showed that there were no significant differences within the American or within the Finnish groups, when compared by founder status.

<b>TABLE 9: T-TESTS FOR DIFFERENCES IN MEAN SCORES</b>					
The Carland Entrepreneurship Index	N	Mean	SD	t	p
Americans Business Founders	156	20.878	5.578	5.102	0.000
Finnish Business Founders	353	18.218	5.055		
The Jackson Need for Achievement Score	N	Mean	SD	t	p
Americans Business Founders	156	12.455	2.698	7.500	0.000
Finnish Business Founders	353	10.564	2.444		
The Jackson Preference for Innovation Score	N	Mean	SD	t	p
Americans Business Founders	156	13.846	4.258	1.279	0.202
Finnish Business Founders	353	13.320	4.325		
The Jackson Risk Taking Propensity Score	N	Mean	SD	t	p
Americans Business Founders	156	9.609	5.306	4.951	0.000
Finnish Business Founders	353	7.263	3.941		
The Carland Entrepreneurship Index	N	Mean	SD	t	p
American Non-Founders	53	19.245	5.057	0.699	0.486
Finnish Non-Founders	80	18.600	5.430		
The Jackson Need for Achievement Score	N	Mean	SD	t	p
American Non-Founders	53	11.830	2.985	2.458	0.016
Finnish Non-Founders	80	10.650	2.234		
The Jackson Preference for Innovation Score	N	Mean	SD	t	p
American Non-Founders	53	13.208	4.675	-0.260	0.795
Finnish Non-Founders	80	13.413	4.074		

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The Jackson Risk Taking Propensity Score	N	Mean	SD	t	p
American Non-Founders	53	9.302	4.886	2.026	0.045
Finnish Non-Founders	80	7.638	4.240		

The researchers turned to an investigation of differences between American and Finnish groups by founder status. The results, displayed in Table 9, showed that American founders scored significantly higher than their Finnish counterparts in all areas except the preference for innovation. American non-founders scored significantly higher than their Finnish counterparts on need for achievement and risk taking propensity.

### CONCLUSION AND IMPLICATIONS OF THE STUDY

The results of this exploratory study cannot be extrapolated to broader, international populations. The results are of value strictly with regard to Finland. Nevertheless, the results demonstrate the feasibility of comparing American entrepreneurs to the entrepreneurs in any given nation to determine how well the American model of entrepreneurship fits that nation.

This study suggests that there are significant differences in the strength of several key, personality traits between American and Finnish entrepreneurs. Among these are need for achievement and risk taking propensity. Nevertheless, the basic entrepreneurial function is a reality in both nations. The results of the regression which demonstrated a valid entrepreneurial drive function with key personality drive traits as independent variables is far reaching. It suggests that, even though the relative strength of various traits important to entrepreneurial behavior do differ between the United States and Finland, the role of those traits in producing entrepreneurial drive are the same.

The researchers conclude that the American model of entrepreneurship can be exported to Finland. Consequently, the American experience can be of value in helping to explain the entrepreneurial process in Finland. However, attempts to influence entrepreneurial behavior in Finland must take different avenues from attempts which might be successful in the United States. Specifically, there is a dramatic difference in risk taking propensity displayed between Finnish and American entrepreneurs. This difference suggests that any attempts to influence Finnish entrepreneurship must be predicated on activities which are perceived by Finns to be much less risky than would be required in the United States. On the other hand, Finns are just as strongly oriented toward innovation as are Americans. That similarity suggests that Finnish entrepreneurs will be just as likely as Americans to react well to new and different approaches and opportunities.

The entrepreneurial mystique in Finland is as much a gestalt as it is in the United States. Further, the role of the individual in the entrepreneurial process is as central in Finland as it is in the United States. Consequently, these authors conclude that much of the American perspective of entrepreneurship can be of value in understanding and supporting Finnish entrepreneurship.

To gain the maximum from sharing our models and our knowledge with each other, we must be sure that we share a common foundation. The United States and Finland do. We cannot speak for other nations, however, we do know that all nations share one basic, overriding reality. For all nations, wealth, and the common good are dependent upon people. Sharing knowledge and insight can endow us with common purpose. If we employ that purpose to pursue entrepreneurial goals, we can, each of us and each nation, become the best that we can be.

## REFERENCES

- Begley, T. & Boyd, D. (1986) A comparison of entrepreneurs and managers of successful firms. *Journal of Management*, 13(1), 99-108.
- Bird, B. & M. Jelinek. (1988) The operation of entrepreneurial intentions, *Entrepreneurship: Theory and Practice*, 13 (2), Winter, 21-30.
- Borland, C. (1974) Locus of control, need for achievement, and entrepreneurship. Unpublished doctoral dissertation, University of Texas at Austin.
- Brockhaus, R.H. (1980) Risk taking propensity of entrepreneurs, *Academy of Management Journal*, 23(3), 509-520.
- Brockhaus, R.H. (1982) Psychology of the entrepreneur. In Kent, Sexton, Vesper (Eds), *Encyclopedia of Entrepreneurship*. Englewood Cliffs: Prentice Hall, 39-57.
- Brockhaus, R.H. & P.S. Horwitz (1986) The psychology of the entrepreneur, In D.L. Sexton & R.W. Smilor (eds.) *The Art and Science of Entrepreneurship*, Cambridge, MA: Ballinger, 25-48.
- Brodzinski, J.D., R.F. Scherer & F.A. Wiebe (1990) Boundary spanning activity: A function of the small business owner's decision style. *Journal of Business & Entrepreneurship*, 2(2), October, 1-12.
- Carland, J.A., J.W. Carland & W.H. Stewart (1996) Seeing what's not there: The enigma of entrepreneurship. *Journal of Small Business Strategy*, 7(1), Spring, 1-20.
- Carland, J.W. & Carland, J.A. (1991) An empirical investigation into the distinctions between male and female entrepreneurs and managers. *International Journal of Small Business*, 9(3), April-June, 62-72.
- Carland, J.W. & Carland, J.A. (1992) Managers, small business owners, entrepreneurs: The cognitive dimension. *Journal of Business and Entrepreneurship*, 4(2), 55-66.
- Carland, J.W. III, Carland, J.W., Carland, J.A. & Pearce, J.W. (1995). Risk taking propensity among entrepreneurs, small business owners and managers. *Journal of Business and Entrepreneurship*. 7(1), March, 12-23.
- Carland, J.W., J.A. Carland & F. Hoy (1992) An entrepreneurship index: An empirical validation, Paper presented at the Babson Entrepreneurship Conference, Fontainebleau, France, July.
- Carland, J.W., Hoy, F., Boulton, W.R. & Carland, J.A. (1984) Differentiating entrepreneurs from small business owners. *The Academy of Management Review*, 9(2), April, 354-359.
- Carland, J.W., Hoy, F. & Carland, J.A. (1988) Who is an entrepreneur? Is a question worth asking. *American Journal of Small Business*, 12(4), Spring, 33-39.
- Carsrud, A.L., K.W. Olm & G.G. Eddy (1986) Entrepreneurship: Research in quest of a paradigm, In D.L. Sexton & R.W. Smilor (eds.) *The Art and Science of Entrepreneurship*, Cambridge, MA: Ballinger, 367-378.

- 
- Cooper, A. & Dunkelberg, W. (1987) Entrepreneurial research: Old questions, new answers and methodological issues. *American Journal of Small Business*, 11(3): 11-23.
- DeCarlo, J. & Lyons, P.R. (1979) Comparison of personal characteristics of minority and non-minority female entrepreneurs, *Journal of Small Business Management*, December, 22-29.
- Drucker, P. (1985) *Innovation and Entrepreneurship*. New York: Harper & Row.
- Dugan, K.W., H.R. Feeser & G.R. Plaschka (1990) A comparison of personality characteristics among women entrepreneurs, corporate business women and the general population, in T.W. Garsombke & D.J. Garsombke (Eds) *Shaping Entrepreneurial Thinking for the 1990s: Conference Proceedings*, Orlando, FL: United States Association for Small Business and Entrepreneurship, 88-94.
- Dunkelberg, W.C. & Cooper, A.C. (1982) Entrepreneurial typologies. In K. Vesper (Ed), *Frontiers of entrepreneurship*, Wellesley, Ma: Babson Center for Entrepreneurial Studies, 1-15.
- Gartner, W.B. (1990) What are we talking about when we talk about entrepreneurship?. *Journal of Business Venturing*, 5(1), 15-28.
- Gartner, W.B., T.R. Mitchell, & K.H. Vesper (1989) A taxonomy of new business ventures, *Journal of Business Venturing*, 4 (3), 169-186.
- Giamartino, G.A. (1991). Will Small business be the answer for developing economics? *Journal of Small Business Management*, 29(1), January, 81-93.
- Giamartino, G.A., P.P. McDougall & B.J. Bird (1993) International entrepreneurship: The state of the field. *Entrepreneurship, Theory & Practice*, 18(1), Fall, 1993, 37-42.
- Gupta, S.K. (1989). Entrepreneurship development: The Indian case. *Journal of Small Business Management*, 29, January, 67-69.
- Hjelmervik, O. (1988) In R. Peterson, M.A. Peterson & N.B. Tieken (Eds.), *Encouraging Entrepreneurship Internationally*. Dubuque, IO: Kendall-Hunt Publishing Co., 54-59.
- Hofer, C.W. & W.D. Bygrave. (1992) Researching entrepreneurship, *Entrepreneurship: Theory and Practice*, 16 (3), Spring, 91-100.
- Hornaday, J. (1992) Thinking about entrepreneurship: A fuzzy set approach. *Journal of Small Business Management*, 30(4): 12-23.
- Hornaday, J.A. & Aboud, J. (1971) Characteristics of successful entrepreneurs, *Personal Psychology*, 24, 141-153.
- Hornaday, J. & Bunker, C. (1970) The nature of the entrepreneur. *Personnel Psychology*, 23, 47-54.
- Hoy, F. & Carland, J.W. (1983) Differentiating between entrepreneurs and small business owners in new venture formation. In J. A. Hornaday, J.A. Timmons, & K. H. Vesper (Eds.), *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College, 180-191.
- Hull, D., Bosley, J. & Udell, G. (1980) Reviewing the heffalump: Identifying potential entrepreneurs by personality characteristics. *Journal of Small Business Management*, 18(1): 11-18.
-

- Jackson, D.N. (1974) *Personality Research Form Manual*, Goshen, N.Y.: Research Psychologists Press.
- Jackson, D.N. (1976) *Personality Inventory Manual*, Goshen, N.Y.: Research Psychologists Press.
- Jackson, D.N. & Guthrie, S.M. (1968) A multi-trait evaluation of the personality research form. *Proceedings, A P A*.
- Johnson, B. (1990) Toward a multidimensional model of entrepreneurship: The case of achievement motivation and the entrepreneur. *Entrepreneurship Theory and Practice*, 14(3): 39-54.
- Kilby, P. (1971) *Entrepreneurship and Economic Development*. New York, NY: Free Press.
- King, W.L. & R.J. Masters (1993) Thinking styles and the payoff of planning. *Journal of Business & Entrepreneurship*, 5(2), July, 55-63.
- Kohi, H.S. & A. Sood. (1987). Fostering enterprise development, *Finance & Development*, March, 34-36.
- Lachman, R. (1980) Toward measurement of entrepreneurial tendencies. *Management International Review*, 20(2): 108-116.
- Liles, P.R. (1974) *New Business Ventures and the Entrepreneur*, Homewood IL: Irwin.
- Louis, K.S., D. Blumenthal, M.E. Gluck, & M.A. Stoto (1989) Entrepreneurs in academe: An exploration of behaviors among life scientists, *Administrative Science Quarterly*, 34 110-131.
- Mason, R.D. (1982) *Statistical Techniques in Business and Economics* (5th Ed). Homewood, IL: Richard D. Irwin, Inc.
- McClelland, D.C. (1961) *The Achieving Society*. Princeton: Van Nostrand.
- McClelland, D. (1965) Need achievement and entrepreneurship: A longitudinal study. *Journal of Personality and Social Psychology*, 1, 389-392.
- McClelland, D.C. (1987) Characteristics of successful entrepreneurs, *Journal of Creative Behavior*, 21, 219-233.
- McGrath, R.G., MacMillan, I.C., & Scheinberg, S. (1992) Elitists, risk-takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. *Journal of Business Venturing*, 7(2), 115-135.
- McKee, D. (1991) The role of cognitive style and managerial experience in the decision to enter a new venture. *Journal of Business & Entrepreneurship*, 3(2), October, 69-81.
- Meredith, G.G. (1989). Successful small agro-enterprises as catalysts for small enterprise development in the Pacific. *Entrepreneurship & Regional Development*, 1, 371-380.
- Mescon, T.S. & J.R. Montanari (1981) The personalities of independent and franchised entrepreneurs, *Academy of Management Proceedings*, 413-317.
- Mill, J.S. (1848) *Principles of Political Economy with Some of Their Applications to Social Philosophy*. London: John W. Parker.

- 
- Nelson, K. (1991). Development from the bottom up. *The China Business Review*, 18(1), January-February, 18-19.
- Olson, P. (1985) Entrepreneurship: Opportunistic decision makers. *Journal of Small Business Management*, 11(2): 25-31.
- Palmer, M. (1971) The application of psychological testing to entrepreneurial potential, *California Management Review*, 13(3), 78.
- Peterson, R. (1988). Understanding and encouraging entrepreneurship internationally, *Journal of Small Business Management*, 26(2), April, 1-7.
- Pickle, H.B. (1964). *Personality and success: An evaluation of personal characteristics of successful small business managers*, Small Business Research Series No. 4. Washington, DC: US Government Printing Office.
- Ray, D.M. (1986) Perceptions of risk and new enterprise formation in singapore: An exploratory study. In R. Ronstadt, J. Hornaday, R. Peterson, and K. Vesper (Eds.), *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College, 119-145.
- Roman, S. (1991). Entrepreneurship and Small Business: The Hungarian Trajectory. *Journal of Business Venturing*, 6(6), November, 447-465.
- Schwer, K. & Yucelt, U. (1984) A study of risk-taking propensities among small business entrepreneurs and managers: An empirical evaluation. *American Journal of Small Business*, 8(3): 31-40.
- Sexton, D.L. & Bowman, N.B. (1983) Comparative entrepreneurship characteristics of students. In J. Hornaday, J. Timmons, and K. Vesper (Eds.), *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College, 465-478.
- Sexton, D.L. & Bowman, N.B. (1986) Validation of a personality index: Comparative psychological characteristics analysis of female entrepreneurs, managers, entrepreneurship students and business students. In R. Ronstadt, J. Hornaday, R. Peterson, and K. Vesper (Eds.), *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College, 40-57.
- Shaver, K.G. & L.R. Scott. (1991) Person, process, choice: The psychology of new venture creation, *Entrepreneurship: Theory and Practice*, 16 (2), Winter, 23-46.
- Smith, N. (1967) *The Entrepreneur and his Firm: The relationship between type of man and type of company*. East Lansing: Michigan State University.
- Solomon, G.T. & E.K. Winslow (1988) Toward a descriptive profile of the entrepreneur, *Journal of Creative Behavior*, 22, 162-171.
- Thompson A.A. & A.J. Strickland (1989). *Strategy Formulation and Implementation*. Homewood, IL: Irwin.
- Tiffin, S. (1987). Technological innovation and technical entrepreneurship for the development of a nigerian agricultural machinery industry, *World Development*, 15(3), 387-398.
- Timmons, J.A. (1978) Characteristics and role demands of entrepreneurship, *American Journal of Small Business*, 3, 5-17.
- Vesper, K.H. (1980) *New Venture Strategies*, Englewood Cfs: Prentice Hall.
-

- Webster, F.A. (1977) Entrepreneurs and ventures: An attempt at classification and clarification, *Academy of Management Review*, 2(1), 54-61.
- Winslow, E.K. & G.T. Solomon (1989) Further development of a descriptive profile of entrepreneurs, *Journal of Creative Behavior*, 23, 149-161.



# A NEW MEASURE OF ENTREPRENEURIAL DECISION-MAKING STYLE

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## ABSTRACT

*This study examines the development of a new measure: The Entrepreneurial Decision-Making Inventory to investigate a previously neglected area of research, namely entrepreneurial decision-making style. Questionnaires were distributed to 578 Victorian New Enterprise Incentive Scheme graduates resulting in 255 useable responses. Confirmatory factor analysis using AMOS 4.0 (Arbuckle and Wothke, 1999) indicated three distinct dimensions in the instrument: Convergent, Divergent, and Inventive decision-making styles. Semi-structured interviews were conducted to gather qualitative data which supported the confirmatory factor analysis and confirmed the multi-dimensional nature of the construct. The new instrument should assist researchers and practitioners to further understanding of the role of decision-making in small business development and growth.*

## INTRODUCTION

The decision-making process underlies business activity and has fundamental importance for problem-solving, the development of business plans, and goal-directed behavior. Mintzberg, Rasinghani, and Thearet (1976:246) defined a decision process as “a set of actions and dynamic factors that begins with the identification of a stimulus for action and ends with a specific commitment to action.” The importance of decision-making has been well recognized by researchers: “If one process in particular characterizes the manager’s or entrepreneur’s job it is that of making decisions or solving problems” (Mosley, O’Brien and Pietri, 1991:5). Given the importance of decision-making in business, the current study investigates entrepreneurial decision-making based on the assumption that decision-making plays a central role in small business performance.

While considerable research has focused on decision-making in organizations (eg., Buttner and Gryskiewicz, 1993; Hoy and Hellreigel, 1982; Nutt, 1989), the extant literature often views small businesses as merely smaller versions of large organizations. However, the use of various business and economic principles that assist in explaining corporate manoeuvres may be of little assistance in understanding the successes and failures of small business. While the conditions that influence the decision to establish a business have been given adequate attention in the entrepreneurship literature, Amit, Gosten and Muller (1990:1233) commented that there has been “surprisingly little theoretical, quantitative and rigorous literature [which] focuses on decisions of entrepreneurs to develop their ventures.” In a meta-analysis of studies which examined small business failure, Berryman (1994) recommended that further research should be conducted to observe the processes and decision-making within small firms. The current study

examines decision-making as a process in order to address the deficiencies identified in the literature, and to make a contribution to the development of theories of small business management.

There are a number of difficulties in attempting to discover best prescriptive procedures for decision-making. For example, human decision-making processes cannot be repeated to test the effects of different approaches (Lipshitz, 1995), and different paradigms cannot be compared in terms of the goodness of their results (Watson, 1992). Several approaches to decision-making are evident in the literature. The 'scientific method', where prescriptive frameworks featuring stages or steps in the decision-making process has been described in detail by many researchers (e.g., Bantel and Jackson, 1989; Dewey, 1933; Robbins, 1994). The scientific method provides a logical foundation for decision-making, but fails to ensure good outcomes (Nutt, 1989). Further, in a study of 150 people including fire chiefs, tank platoon leaders, and design engineers making decisions under time pressure, Klein (1989:51) concluded that "...relatively few decisions are made using analytical processes, such as generating a variety of options and contrasting their strengths and weaknesses." Typically, decision-makers do not have the luxury of analytically working through all options attached to a problem (Lord and Maher, 1990). Consequently, although rational models of decision-making are logical, the response to the need for a decision is usually too rapid to allow for orderly sequential analysis (Simon, 1987).

The behavioral decision theory literature elucidates decision-making procedures used to counter the limited human ability to process information. For example, studies have investigated heuristics, the 'rules of thumb' used to reduce mental effort and to simplify decision-making (e.g., Busenitz and Barney, 1997). However, relying on heuristics may interfere with successful problem solving if expert knowledge is applied inappropriately. "Creative strategies for problem solving may require a suspension of one's expertise" (Finke, Ward and Smith, 1992:173). Therefore, even if decision-makers are aware of the need for creative strategies that go beyond the heuristics they normally employ, there is still the problem of knowing when applying expertise is counter-productive and creative thinking is necessary. Decision-makers often arrive at solutions intuitively without being able to report how they attained the result (Agor, 1986; Watson, 1992). Bowers, Regehr, Balthazard and Parker (1990) propose that intuitions are like hunches that may or may not lead to correct insights or solutions. Thus "managers acquire a set of intuitions, a problem-solving style which is one of the key components of effective managerial behavior" (Simon, 1987:63). Therefore, decision-making style has been defined as the "learned, habitual response pattern exhibited by an individual when confronted with a decision situation" (Scott and Bruce, 1995:820).

Creative decision-making is important because it enhances the quality of solutions to life's problems (Milgram, 1990). Creative behavior is considered to be highly intentional even if the intention is not initially evident. According to Albert (1990:19), a person's creativity and personal identity are both emergent: "...they drive one another and are dependent on the other's development." Thus the study of creative decision-making is particularly important in terms of emerging entrepreneurs. Further, pragmatic approaches to the development of creativity have suggested that it is possible to train people to think in more creative ways (Finke, Ward and Smith, 1992). Therefore, research on creative decision-making could lead to the development of new and more effective creative techniques.

## Measurement of Decision-Making Style

Several studies on decision-making have applied the Kilmann and Herden (1976) model of organizational effectiveness criteria to small business (Brodzinski, Scherer and Weibe, 1990; Hoy and Hellreigel, 1982). The underlying premise of the Kilmann and Herden (1976) model, based on Jung's theory of psychological types, is that managers perceive and solve problems in different ways depending on their preferred problem-solving style. The model has been tested using the Myers-Briggs Type Inventory (MBTI) (Myers and Briggs, 1962). Other studies have used the MBTI to investigate decision-making and problem solving. For example, Nutt (1989) developed a Decision Style Survey based on the Jungian classification categories. However, the MBTI was considered too long and time consuming to administer in the current study, and has been discredited as a suitable research instrument (Boyle, 1995). Further, Wiggins (1989:538) stated that "the principal stumbling block to more widespread acceptance of the MBTI lies in the bipolar, discontinuous types to which the test authors are firmly committed." In view of the controversy surrounding the use of the MBTI in research, a multi-dimensional instrument to evaluate entrepreneurial decision-making style, taking into account the criticisms of the MBTI was developed in the current study.

Mosley, O'Brien and Pietri (1991) tested managerial problem-solving styles using a 20-item questionnaire which was a simplified version of the Keirsey Temperament Sorter (Keirsey and Bates, 1984) derived from the Myers-Briggs Type Inventory. Although the current study tested the inventory used by Mosley et al. (1991) in the pretest, the instrument lacked content validity and was considered inappropriate for the purpose of the current study.

Kirton (1976) proposed a theory describing different cognitive styles of creativity, problem-solving and decision-making within an organizational context. He developed a 32-item, self-report scale, the Kirton Adaption-Innovation Inventory (KAI) to measure individual differences in adaption-innovation. Respondents with low scores were labeled Adaptors 'preferring to do things better', while respondents with high scores were labeled Innovators, 'preferring to do things differently' (Taylor, 1989:297). Thus, adaptors and innovators are determined according to whether the score falls below or above the mean (Kirton, 1987). Most applications have treated the KAI as a summed scale (eg., Goldsmith and Kerr, 1991; Holland, 1987). Consequently, a criticism of the KAI relates to the treatment of measures as unidimensional or bi-polar (Caird, 1993; Payne, 1993). According to Payne (1993:7), "multi-dimensional models seem to suggest the possibility of more sophisticated explanations/theories." A further criticism of the instrument relates to the instructions. Respondents are required to assess "How difficult or easy is it to present yourself consistently over a long period?" The degree of difficulty in maintaining an image may not equate with decision-making style. For these reasons, the KAI was considered inappropriate for use in the current study.

According to Scott and Bruce (1995), interest in decision-making style has been hindered by the lack of a psychometrically sound instrument for measuring decision-making style and yet, theoretical progress is impossible without adequate measures (Schwab, 1980). Therefore, a new instrument specifically to ascertain entrepreneurial decision-making style was developed in the

current study based on the assumption that “in small companies, strategies [the outcomes of decisions] are usually the sole reflection of the owner/operator” (Olson and Currie, 1992:49).

The objective in designing a new instrument was to address the deficiencies evident in the instruments described previously and to tap into the underlying characteristics of decision-making style such as focusing on detail, risk-taking, or taking the initiative. Further, the current study focuses on the adequacy of the Entrepreneurial Decision-Making Inventory from the perspective of scale construction. In most studies where new instruments are developed, the underlying factor structure is not theoretically predicted but is derived post hoc using exploratory factor analysis. Even though items cluster together, the statistical technique does not ensure that the items are measuring the same theoretical content. In contrast, the current study uses confirmatory factor analyses to examine the factor structure by testing hypothesized factor solutions derived from theory.

According to Schriesheim, Powers, Scandura, Gardiner and Lankau (1993), Confirmatory Factor Analyses (CFA) can improve the rigor with which content validity is assessed. CFA has a number of advantages over exploratory factor analysis. CFA tests the theoretically derived hypothetical structures of an instrument and overcomes the limitations associated with mathematically determined factor structures using exploratory factor analysis (Long, 1983). Empirical data reduction techniques such as exploratory factor analysis do not address the issue of content adequacy which should be based on the theoretical correspondence between a measure's items and a construct's delineated content domain (Schriesheim et al., 1993). However, specific theoretical relationships among observed indicator items can be identified and tested using CFA.

Apart from examining the factor structure of the instrument, there is a need to establish whether entrepreneurial decision-making is a multi-dimensional construct. Qualitative data were gathered in the current study to assist in examining whether the theoretical distinctiveness of the factors could be established. The current study focuses on the psychometric properties of the instrument under review and therefore, the substantive findings of the study have been omitted.

## **METHOD**

Quantitative and qualitative research methods were combined in the current study to enable triangulation, and to examine the results for convergence (Creswell, 1994). The use of multiple methods strengthens the researcher's claims for the validity of the conclusions drawn where mutual confirmation of results can be demonstrated (Bryman, 1988). Further, Patton (1990) suggested that where significant patterns of responses emerge through quantitative methods, it is often helpful to fill out the meaning of those patterns through in-depth study using qualitative methods to give substance to the areas of focus. Consequently, quantitative data were gathered by means of a questionnaire and semi-structured, face-to-face interviews were conducted to gather qualitative data.

### **Data Collection**

A self-administered questionnaire was distributed to 578 graduates from the New Enterprise Incentive Scheme (NEIS) conducted at centers in metropolitan and country Victoria, which included the instrument, the Entrepreneurial Decision-Making Inventory resulting in 255 useable responses (a 45 per cent response rate). In-depth, semi-structured interviews were conducted with approximately ten per cent of respondents (25 in all) based on stratified proportionate sampling to represent both metropolitan and regional respondents. The following question was used during interviews to yield comments concerning decision-making style: “How do you go about making major decisions in your business? “

## **Sample**

Over three-quarters (77 per cent) of respondents were male. Almost two-thirds (63 per cent) of the sample was aged under 40 years when the respondents started their businesses. The sample was better educated than the Victorian population with over half (52 per cent) having post-secondary qualifications. The majority of respondents (80 per cent) had businesses that continued to operate at least a year after completing the NEIS course. Only 13.7 per cent of respondents had ceased trading (the criterion for business failure in the current study) and 3.1 per cent of respondents had sold their businesses. A further two per cent of respondents had never started in business. The majority of respondents (64 per cent) did not employ others.

## **Instrumentation**

The new instrument design process was commenced by drafting specific measurement questions based on the literature (for example, Buttner and Gyskiewicz, 1993; Keirse and Bates, 1984; Kirton, 1976, 1984; Mosley, O'Brien and Pietri, 1991). The draft instrument was tested among academic colleagues (N=22) and the interrater reliability estimate was calculated based on the formula suggested by Goodwin and Goodwin (1985:7): “number of coding agreements/ number of coding agreements plus number of coding disagreements.” ‘Agreement’ meant that raters concurred on the classification of an item. The resulting mean interrater reliability estimate for the instrument was .93, ranging from a low of .86 to 1.00. Modifications to the instrument were made according to the results obtained and suggestions for improvements.

Respondents were required to indicate on a five-point Likert scale how often they used particular decision-making styles. All items in the 17-item scale were rated from never (0) to most of the time (4). The statements were presented in random order to minimize order bias. The standardized item Cronbach alpha coefficient for the instrument was .69, which exceeded the Cronbach alpha of .63 for a new instrument developed by Niehoff, Enz and Grover (1990:343), who stated that the result was “reasonable, considering the newness of the scale.”

## **Analyses of Data**

The statistical software package, AMOS (Arbuckle and Wothke, 1999) was used to undertake confirmatory factor analysis (CFA) of quantitative data. The most basic form of CFA is a one-factor congeneric measurement model as described by Jöreskog (1971) which enables

the specified interrelationships among observed variables for a single latent factor to be examined in detail. The method allows for differences in the degree to which each individual measure contributes to the overall composite (latent) variable (Fleishman and Benson, 1987) and thus the model provides a more accurate representation of the data.

The model produced as a result of confirmatory factor analysis formed the conceptual framework for analysis of qualitative data as suggested by Gray and Densten (1998). Aspects concerning decision-making style were inferred from an examination of the comments which were categorised according to the three identified themes. Comments have been used to illustrate the themes in each category and selected background details have been provided for interest while anonymity of respondents has been preserved.

Interrater comparisons were used to assess face validity and to check that the comments assigned to categories reflected the designated theme. An independent researcher recoded the data and interrater reliabilities were calculated. The mean interrater reliability of 0.86 was adequate given the suggestion that 0.70 (70 per cent) intercoder reliability is considered satisfactory (Miles and Huberman, 1984).

## RESULTS

### Confirmatory Factor Analysis

A series of one-factor congeneric measurement models was calculated based on substantive theory. Although three observed variables are considered statistically adequate for a just identified model, Chin (1998) suggested that four items loading on each latent variable is preferable to test for convergent validity. Item 17, Prefer to delegate routine tasks was omitted from the start as a result of feedback from respondents indicating that the item was irrelevant as the majority of respondents did not employ others. Items with t-values which were not significant and where the standardized regression weights indicated weak effects (less than 0.3) were not good measures of the construct and were omitted from further calculations. Three factors were generated with four items loading on each factor. Table 1 provides details of the items that were retained and the three factor structure of the instrument.

<b>Table 1</b> <b>Confirmatory Factor Analysis for the Three-Factor Entrepreneurial Decision-Making Style Inventory</b> <b>(N=255)</b>				
Item No.	Factor Items	X	$\lambda_x$	$\delta$
	Convergent			
5	Stick to tried and true methods	$X_1$	.525	.106
7	Use a common sense approach	$X_2$	.782	.098
11	Pay attention to detail	$X_3$	.359	.101
14	Stick to a routine	$X_4$	.178	.102
	Divergent			

8	Work on many ideas at once	X <sub>5</sub>	.447	.060
12	Approach a problem from a new angle	X <sub>6</sub>	.671	.095
15	Enjoy new situations	X <sub>7</sub>	.614	.111
16	Prefer to do things differently	X <sub>8</sub>	.476	.109
	Inventive			
1	Come up with new ideas	X <sub>9</sub>	.571	.107
6	Come up with a risky idea	X <sub>10</sub>	.534	.123
10	Invent a way of your own	X <sub>11</sub>	.357	.114
13	Always manage to think of something	X <sub>12</sub>	.672	.082
X = Manifest Variable, $\lambda_x$ = Lambda, $\delta$ = Residual (error term).				

Several summary measures of the overall fit of the model to the data were calculated. Table 2 provides details of the fit statistics including the Goodness of Fit Index (GFI) and the Adjusted Goodness of Fit Index (AGFI). Values close to unity for the GFI and the AGFI indices indicate that the model accounts for most of the joint variances and covariances among observed variables in the model. Unlike the chi-square statistic, the GFI and AGFI indices are independent of sample size and are relatively robust against departures from normality (Rowe, 1995). The Root Mean Square Residual error (RMR) is a measure of the average of the residual variances and covariances when the observed and predicted covariance matrices are compared and should be less than 0.05. Additional indices for assessing model fit are provided including the Comparative Fit Index (CFI) and the Tucker Lewis Index (TLI). Values for CFI are constrained to fall between 0 and 1 but should be greater than 0.95. Values for TLI, an incremental fit index should be greater than 0.95 but values greater than 1.0 indicate a lack of parsimony (Rowe, 1995).

<b>Table 2</b> <b>Entrepreneurial Decision-Making Style Inventory Fit Statistics</b> (N=255)									
Model	$\chi^2$	df	$\chi^2/df$	P	GFI	AGFI	RMR	CFI	TLI
Factor 1 (4 items)	1.519	1	1.519	0.218	0.997	0.970	0.012	0.993	0.961
Factor 2 (4 items)	1.990	1	1.990	0.137	0.992	0.961	0.025	0.983	0.950
Factor 3 (4 items)	0.440	1	0.440	0.507	0.999	0.991	0.008	0.999	0.974
12 item model	232.35	29	8.012	0.000	0.865	0.802	0.078	0.663	0.576
3 composite factors model	2.836	1	2.836	0.092	0.993	0.956	0.014	0.980	0.940

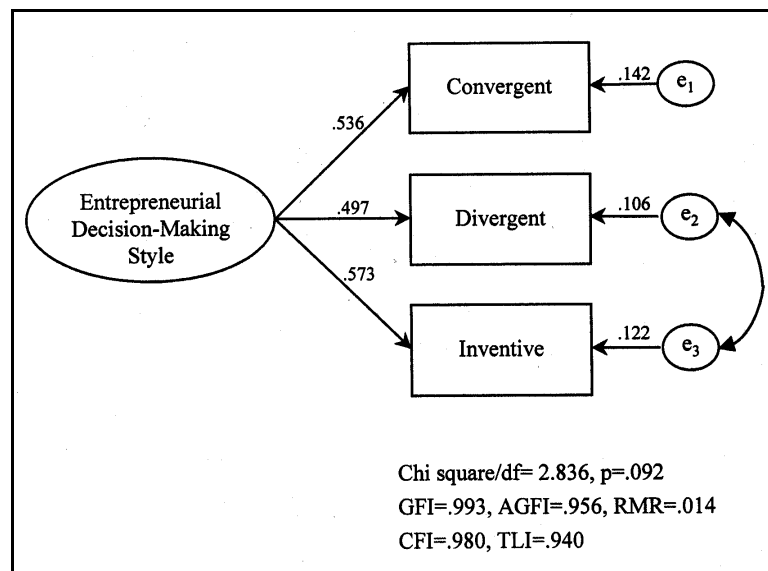
### Dimensionality of The Entrepreneurial Decision-Making Style Inventory

In order to check whether the Entrepreneurial Decision-Making Style Inventory was unidimensional or multi-dimensional, a null hypothesis, that there were no differences among the factors identified in previous analyses, was tested. A congeneric model was tested with all 12

items constituting one factor which produced a chi-square value of 232.351  $df=29$ ,  $p=.000$ , for a chi-square/degrees of freedom ratio of 8.012, a GFI of .865 (AGFI of .802), and a RMR Residual of .078. The Comparative Fit Index of .663 and the Tucker-Lewis Index of .576 which should have approximated 1.0 indicated a poor fitting model. Overall, the results suggest that this was not a robust congeneric model and therefore, the model did not provide an adequate fit of the data.

Further testing was conducted with the items which loaded on two of the factors to check whether each factor was a single factor. A congeneric model was established with all eight items. Analyses indicated that the Goodness-of-Fit Index of .887 was still not as good as the fit statistics obtained when the factors were analysed separately. The above analyses confirmed that the model should comprise of three factors in order to parsimoniously fit the data, and therefore the inventory would appear to be multi-dimensional.

A final model was estimated for Entrepreneurial Decision-Making Style based on the three composite factors. The composite factors were calculated by multiplying each raw score for each case by the corresponding standardized weight. The process ensures that the estimation of the composite factor is proportionally weighted by the actual contribution made by each indicator (item). Further, the composite factors take into account individual and joint measurement error of the item indicators (Rowe, 1995). Table 2 indicates that the model produced a chi-square value of 2.836,  $df=1$ ,  $p=.092$ , for a chi-square/degrees of freedom ratio of 2.836, a GFI of .993 (AGF of .956), and a RMR of .014. The Comparative Fit Index of .980 and the Tucker-Lewis Index of .940 indicated satisfactory fit of the model compared to the null or independence model in which no relationships amongst the variables were proposed. Figure 1 provides a graphic representation of the measurement model.



Based on the nature of the items loading on each factor, factor one was named 'Convergent', factor two 'Divergent', and factor three 'Inventive'. Rummel (1970:473-474),



suggested that in selecting factor names, it is important that the labels “communicate the essence of the results . . . [to enable] the rapid identification of similar factors across studies.” Further, labels should be “descriptive of the interrelationships in the data.”

Hudson (1966), in a study of mental processes, classified respondents into two groups: ‘convergers’ who were narrow and focused on their point of view and concentrated on practical results; and ‘divergers’ who tended to enlarge problems and expand the boundaries of consideration and sought new things to consider. Mathôt (1989:52), in discussing thought processes in innovation, referred to Convergent, a logical thought process which complemented Divergent, a more creative thought process. Thus Convergent thinking is ideal for well-defined problems for which there is only one allowable conclusion (Finke, Ward and Smith, 1992). Items reflecting a strongly Convergent style of decision-making in the inventory included: “Use a commonsense approach” and “Stick to a routine”. Divergent decision-makers were considered to be more likely to take risks and to approach a problem from a new angle. Thus Divergent thinking allows the exploration of different ideas and idea combinations that may serve as solutions (Finke, Ward and Smith, 1992). Items reflecting a strongly Divergent decision-making style in the inventory included: “Enjoy new situations”, and “Work on many ideas at once”.

The third factor included three items such as “Come up with new ideas” and “Always manage to think of something” and was labeled Inventive. Inventive behavior, or the generation of new ideas, has been linked to decision-making style in the literature (e.g., Woodman, Sawyer and Griffin, 1993) and is closely associated with innovative and creative behavior. Thus, the label was selected based on the nature of the items in the cluster and the literature including the Kirton Adaption Innovation Inventory (KAI) which described an Innovator as someone who prefers to “do things differently ... [and] discovers problems and avenues of solution” (Kirton, 1984:137-138). Therefore, Inventive decision-making style relates specifically to creative strategies for problem solving.

## Qualitative Data

Interviewees commented on the way they made major decisions in business and the responses were analyzed in relation to the style of decision-making that was evident. A quasi-statistical approach was used to calculate the frequencies of comments classified in each category. Table 3 presents the frequencies, percentage frequencies, and interrater reliabilities for each category.

<b>Table 3</b> <b>Analysis of Interview Data: Frequency, Percentage Frequency Distributions, and Interrater Reliabilities</b>			
Theme	f	% <sup>a</sup>	I.R. <sup>b</sup>
Decision-Making Style			
Convergent	9	39	.88
Divergent	8	35	.87

Inventive	6	26	.83
Theme total	23	100	
<sup>a</sup> Percentages have been rounded <sup>b</sup> Interrater Reliability			

### Convergent Decision-Making Style

*Interrater reliability: 0.88:* Convergent decision-making style represents a conservative and cautious approach to problem solving in business. The concept is related to the theory that convergers tend to be narrow and focused on their point of view and concerned with the details in a decision and the practical results (Hudson, 1966). A total of nine comments reflected a Convergent style of decision-making including:

<i>"I'm pretty cautious when it comes to making big decisions so I think about all the alternatives and I often lie awake at night nutting it all out" (Male, 49 years old, hydroponic farming business, four employees).</i>
<i>"I'm a stickler for methodically evaluating all the alternatives- just the way I was trained to do. I'm a great one for attention to detail" (Male, 60 years old, accountancy practice, no employees).</i>
<i>"I'm usually in here by six and the first thing I do is sit down and work out all the things to do that day and I like having them in my mind so that I can decide what has to be done" (Female, 32 years old, garment manufacturing business, seven employees).</i>

The comments reflected a decision-making style characterised by paying attention to detail, carefully weighing up alternatives and being methodical in order to solve problems in business. A Convergent style has been described as "providing a logical framework for problem solving as it helps to select the best alternative from those available by narrowing down the range of possibilities" (Stevens, 1988:23).

### Divergent Decision-Making Style

*Interrater reliability: 0.87:* Divergent decision-making style is considered most appropriate in novel situations which challenge entrepreneurs. The style is consistent with the theory that 'Divergers' tend to enlarge problems, expand the boundaries of consideration and seek new things to consider (Hudson, 1966). Divergent thought processes are considered more creative than thought processes associated with a Convergent style (Mathôt, 1989; Shouksmith, 1973). A total of eight comments reflected a Divergent style of decision-making including:

<i>"We make decisions without a lot of deliberation or discussion. We are pretty flexible really" (Male, 56 years old, with partner, accommodation business, no employees).</i>
<i>"As soon as one project is underway, I'm already thinking of the next" (Female, 39 years old, training consultancy, no employees).</i>

*"It seemed a pretty good idea and there was no harm in trying it out" (Male, 52 years old, fencing business, no employees).*

The comments reflected a decision-making style that is adapted to novel and challenging situations where a degree of spontaneity is required to solve problems in business. A Divergent decision-making style has been described as a process that "... creates a large range of ideas for solutions. It requires looking beyond the obvious, creating ideas which may, at first, seem unrealistic or have no logical connection with the problem" (Stevens, 1988:23).

### **Inventive Decision-Making Style**

*Interrater reliability: 0.83:* Inventive decision-making style represents a creative approach to problem solving where entrepreneurs formulate innovative solutions. The concept is consistent with the theory that creativity is the generation of ideas that results in improved efficiency or effectiveness (Matherly and Goldsmith, 1985). Similarly, Kirton (1984:137) described an 'Innovator' as someone who prefers to "do things differently [and] discovers problems and avenues of solution." A total of six comments reflected an Inventive style of decision-making including:

*"A lot of it was trial and error - trying out new ideas and sometimes coming up with my own ways of doing things" (Female, 30 years old, retail business, no employees).*

*"I'm good at thinking of lots of new ideas" (Male, 53 years old, property services business, one employee).*

*"I just go for it and I'm always thinking up new ideas" (Male, 49 years old, hydroponic farming business, four employees).*

The comments reflected a decision-making style that is characterised by the generation of unusual ideas as a means of solving problems in business.

Different aspects of decision-making style were clearly discernible in the comments which were classified into Convergent, Divergent, and Inventive decision-making style according to the definitions generated in the quantitative analysis. The comments expanded the definitions of the factors by providing contextual information concerning entrepreneurial decision-making style. Therefore, the qualitative data provided content validation and support for construct validation of the factors in the Entrepreneurial Decision-Making Inventory.

## **DISCUSSION**

The Entrepreneurial Decision-Making Inventory was developed in the current study to investigate a previously neglected area of research, namely entrepreneurial decision-making style.

The qualitative procedures included in the study provided a means of accessing unquantifiable aspects of the research and captured respondents' personal experiences and perspectives. Overall, The qualitative data supported the confirmatory factor analysis and confirmed the

multi-dimensional nature of the construct. The results highlight the inadequacies of bi-polar or unidimensional scales used in previous instrument designs such as the KAI (Kirton, 1976) or the Keirsey Temperament Sorter (Keirsey and Bates, 1984) to evaluate decision-making. Therefore, the instrument design in the current study supports Payne's (1993) comments that a multi-dimensional model seems to account for the complexities of decision-making style in a more appropriate manner.

Several limitations need to be taken into account in this study. Individuals were invited to participate in the study and therefore self-selection by respondents could influence the results. Data gathering techniques relied on self-reporting which may limit the conclusions that can be drawn.

In order to assess the validity of the new instrument, replication of the study is required using multiple samples including: sole traders who are entirely responsible for all the decision-making; small business owners who are in partnerships; as well as individuals involved in medium-sized businesses where collaborative decision-making occurs. Samples should draw on populations interstate and overseas. The potentially moderating effects of variables such as risk-taking propensity, optimism, and decision comprehensiveness need to be investigated. The relationship between previous experience and decision-making style requires further study to determine how entrepreneurs can draw on previous experience and education to improve decision-making.

The development of a new instrument to evaluate decision-making style may assist in the identification of businesses at risk of failure. With professional counselling, measures could be initiated to reduce the likelihood of failure and the personal and social consequences that often accompany business closure.

## **CONCLUSION**

In conclusion, the current study was conducted in order to advance research on entrepreneurial decision style. The use of confirmatory factor analyses techniques in the current study provided a rigorous assessment of the content and construct validity of the instrument which was supported by the qualitative data. A reliable and valid measure of entrepreneurial decision making style should be of interest to researchers and practitioners to further understanding of the role of decision-making and its relationship to key dependent variables such as business strategy and business success.

## **EDITORS' NOTE**

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## REFERENCES

- Agor, W.H. (1986). The logic of intuition: How top executives make important decisions. *Organizational Dynamics*, Winter, 5-18.
- Albert, R.S. (1990). Identity, experiences, and career choice among the exceptionally gifted and eminent. In M.A. Runco & R.S. Albert (Eds.). *Theories of Creativity*, Newbury Park: Sage Publications.
- Amit, R., Glosten, L. & Muller, E. (1990). Entrepreneurial ability, venture investments, and risk sharing. *Management Science*, Oct. 1232-1245.
- Arbuckle, J.L. & Wothke, W. (1999). *AMOS 4.0 User's Guide*. Chicago: SPSS.
- Bantel, K.A., & Jackson, S.E. (1989). Top management and innovations in banking: Does the composition of the top team make a difference? *Strategic Management Journal*, 10, (Special Issue): 107-124.
- Berryman, J.E. (1994). Small business failure and bankruptcy: What progress has been made in a decade? *Small Enterprise Research - The Journal of SEAAANZ* 2, 5-27.
- Bowers, K.S., Regehr, G., Balthazard, C. & Parker, K. (1990). Intuition in the context of discovery. *Cognitive Psychology*, 22, 72-109.
- Boyle, G.J. (1995). Myers-Briggs Type Indicator (MBTI): Some Psychometric Limitations. *Australian Psychologist*, 30(1), 71-74.
- Briggs, K. & Briggs Myers, I. (1977). *Myers-Briggs Type Indicator*. Palo Alto, CA: Consulting Psychologists Press.
- Brodzinski, J., Scherer, R. & Weibe, R. (1990). Boundary spanning activity as a function of the small business owner's decision style. *Journal of Business and Entrepreneurship* 2(2), 1-11.
- Bryman, A. (1988). *Quantity and Quality in Social Research*. London: Unwin Hyman.
- Busenitz, L.W. & Barney, J.B. (1997). Differences between entrepreneurs and managers in large organizations: Biases and heuristics in strategic decision-making. *Journal of Business Venturing*, 12(1), 9-30.
- Buttner, E.H. & Gyskiewicz, N. (1993). Entrepreneurs' problem-solving styles: an empirical study using the Kirton Adaption/Innovation theory. *Journal of Small Business Management*, Jan., 22-31.
- Caird, S.P. (1993). What do psychological tests suggest about entrepreneurs? *Journal of Managerial Psychology*, 8(6), 11-20.
- Chin, W.W. (1998). Issues and opinion on structural equation modeling. *MIS Quarterly*, March, 7-16.
- Creswell, J. (1994). *Research Design. Qualitative and Quantitative Approaches*. Thousand Oaks, CA: Sage Publications.
- Dewey, J. (1933). *How We Think*. Boston, MA: D.C. Heath.
- Finke, R.A., Ward, T.B. & Smith, S.M. (1992). *Creative Cognition: Theory, Research, and Applications*. Cambridge, MA: MIT Press.
- Fleishman, J. & Benson, J. (1987). Using LISREL to evaluate measurement models and scale reliability. *Educational and Psychological Measurement*, 47, 929-939.

- Goldsmith, R.E., & Kerr, J.R. (1991). Entrepreneurship and adaption-innovation theory. *Technovation*, 11(6), 373-382.
- Goodwin, L.D. & Goodwin, W.L. (1985). Statistical techniques in AERJ articles, 1979-1983: The preparation of graduate students to read the educational research literature. *Educational Researcher*, 14(2), 5-11.
- Gray, J.H. & Densten, I.L (1998). Integrating quantitative and qualitative analysis using latent and manifest variables. *Quality and Quantity International Journal of Methodology*, 32(4): 419-431.
- Holland, P.A. (1987). Adaptors and innovators: Application of the Kirton Adaption-Innovation Inventory to bank employees. *Psychological Reports*, 60, 263-270.
- Hoy, F. & Hellreigel, D. (1982). The Killman and Herden model of organizational effectiveness: criteria for small business managers. *Academy of Management Journal*, 25, 308-322.
- Hudson, L. (1968). *Contrary Imaginations: A Psychological Study of the English Schoolboy*. Harmondsworth: Penguin.
- Jöreskog, K.G. (1971). Statistical analysis of sets of congeneric tests. *Psychometrika*, 36, 109-133.
- Keirse, D. & Bates, M. (1984). *Please Understand Me*. Delmar, CA: Prometheus Nemesis Press.
- Kirton, M. (1976). Adaption and innovation: a description and measure. *Journal of Applied Psychology*, 61, October, 622-629.
- Kirton, M. (1984). Adaptors and Innovators - why new initiatives get blocked. *Long Range Planning*, 17(2), 137-143.
- Klein, G.A. (1989). Recognition-primed decisions. *Advances in Man-Machine Systems Research*, 5, 47-92.
- Lipshitz, R. (1995). Judgment by outcomes: Why is it interesting? *Organizational Behavior and Human Decision Processes*, 62, 123-126.
- Long, J.S. (1983). *Confirmatory Factor Analysis: A Preface to LISREL*. Newbury Park, CA: Sage Publications.
- Lord, R.G. & Maher, K.J. (1990). Alternative information processing models and their implications for theory, research and practice. *Academy of Management Review*, 15, 9-28.
- Matherly, T.A. & Goldsmith, R.E. (1985). The two faces of creativity. *Business Horizons*, September-October, 8.
- Mathôt, G.B. (1989). How to get new products to market quicker in B. Lloyd (Ed.). *Entrepreneurship Creating and Managing New Ventures*. Oxford: Pergamon.
- Miles, M.B. & Huberman, A. (1984). *Qualitative Data Analysis: A Sourcebook of New Methods*. Beverley Hills, CA: Sage.
- Milgram, R.M. (1990). Creativity: An idea whose time has come and gone? In M.A. Runco & R.S. Albert (Eds.). *Theories of Creativity*, Newbury Park: Sage Publications.
- Mintzberg, H., Rasinghani, D. & Theoret, A. (1976). The structure of unstructured decision processes. *Administrative Science Quarterly*, 21, 246-275.
- Mosley, D.C., O'Brien, F.P. & Pietri, P.H. (1991). Problem-solving styles determine manager's approach to making decisions. *Industrial Management*, Sept/Oct, 5-9.

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- Myers, I.B. & Briggs, K.C. (1962). *The Myers-Briggs Type Indicator*. Princeton, NJ: Educational Testing Service.
- Rummel, R.J. (1970). *Applied Factor Analysis*. Evanston, IL: Northwestern University Press.
- Niehoff, B.P., Enz, C. & Grover, R.A. (1990). The impact of top-management actions on employee attitudes and perceptions. *Group and Organization Studies*, 15(3), September, 337-352.
- Nutt, P. (1989). *Making Tough Decisions*. San Francisco, CA: Jossey-Bass Inc. Publishers.
- Olson, S.F. & Currie, H.M. (1992). Female entrepreneurs: personal value systems and business strategies in a male-dominated industry. *Journal of Small Business Management*, Jan. 49-57.
- Patton, M.Q. (1990). *Qualitative Evaluation and Research Methods*. Newbury Park, CA: Sage Publications.
- Payne, R. (1987). Individual differences and performance amongst R and D personnel: Some implications for management development. *R & D Management*, 17, 153-161.
- Robbins, S. (1994). *Management*. (4th ed.). Englewood Cliffs, NJ: Prentice Hall.
- Rowe, K. (1995). Structural Equation Modelling. A Thematic, Integrated Course. Paper presented at the Social Research Methods and Research Technology Conference, University of Adelaide, South Australia.
- Rummel, R.J. (1970). *Applied Factor Analysis*. Evanston, IL: Northwestern University Press.
- Schriesheim, C.A., Powers, K.J., Scandura, T., Gardiner, C. & Lankau, M. (1993). Improving construct measurement in management research: Comments and a quantitative approach for assessing the theoretical content adequacy of paper-and-pencil survey-type instruments. *Journal of Management*, 19(2), 385-417.
- Schwab, D. (1980). Construct validity in organizational behavior. In B. Staw & L. Cummings, (Eds.). *Research in Organizational Behavior*, Vol. 2. Greenwich, CT: JAI.
- Scott, B.R. & Bruce, R. (1987). Five stages of growth in small business. *Long Range Planning*, 20(3), 45-52.
- Shouksmith, G. (1973). *Intelligence, Creativity and Cognitive Style*. Sydney: Angus and Robertson.
- Simon, H.A. (1987). Making management decisions: The role of intuition and emotion. *Academy of Management Executive*, Feb., 57-64.
- Stevens, M. (1988). *Practical Problem Solving for Managers*. London: Kogan Page
- Taylor, W.G. (1989). The Kirton Adaption-Innovation Inventory: A re-examination of the factor structure. *Journal of Organizational Behavior*, 10, 297-307.
- Watson, S.R. (1992). The presumptions of prescription. *Acta Psychologica*, 80, 7-31.
- Wiggins, J.S. (1989). Review of the Myers-Briggs Type Indicator. *Tenth Mental Measurements Yearbook*, 1, 537-538
- Woodman, R.W., Sawyer, J.E. & Griffin, R.W. (1993). Toward a theory of organizational creativity. *Academy of Management Review*, 18, 293-321.





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# **SMALL BUSINESS EXPORTING: THE IMPACT OF ORGANIZATIONAL CULTURE AND QUALITY MANAGEMENT ON PREPLANNING EFFECTIVENESS**

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## **ABSTRACT**

*This study examines the influences of organizational culture and quality management on export planning effectiveness. A model is developed that allows the impacts of both cultural substance (values, beliefs, and norms) and forms (practices) of planning to be explored. Testing the model with a sample of small exporters generates two important findings. First, firms whose leaders value planning outperform those whose leaders do not, based on export intensity. Second, exporting firms using quality practices predicated on getting, and staying, close to customers, outperform firms which do not apply these methods.*

## **INTRODUCTION**

Exporting, the act of shipping products abroad, is a growth strategy more and more small and even new businesses are employing. Increased export activity by small businesses, in turn, has stimulated research on the subject (Aaby & Slater, 1989; Bijmolt & Zwart, 1994; Kamath, Rosson, Patton & Brooks, 1987; Miesenbock, 1988; Zahra, Neubaum & Huse, 1997). Although past research has helped improve our export understanding, additional research is essential.

One small business export topic needing further research is the planning-performance relationship. A common prescription or belief about this relationship is that planning improves performance. Export studies verifying this position, however, are scarce, because early export research found that it was unsolicited export orders which triggered exporting (Bilkey, 1978; Brasch & Lee, 1987). Hence, it has been difficult to test the prescription. Practices, however, are changing. That is, in newer industries where exporting is more common and in some cases expected, and in other industries where product life cycles are shortening, firms are increasingly preplanning or soliciting export sales. This proactive behavior is in bold contrast to the reactive practices of firms studied in early export research. Given this change, data is now more readily available than in the past for determining whether export preplanning improves performance.

To help guide studies in this area, research conducted on the planning-performance relationship from the strategic management field is useful. Although this literature stream has focused on domestic rather than export operations, many issues are still relevant. In terms of providing direction for the current study, one past key strategic management findings is that the impact of planning (i.e., preparing written plans) on performance is unclear. That is, when

planning is defined as preparing a written plan and when it is the only explanatory variable being considered, some studies have shown planning improves performance while others have not. This dilemma has stimulated researchers to identify factors that could clarify the context in which planning improves performance. Two factors to consider are organizational culture (Denison, 1990; Trice & Beyer, 1993) and quality management (Deming, 1982; Crosby, 1979; Reeves & Bednar, 1994). A cultural perspective suggests that for planning to be effective an organization's shared values, beliefs, and norms toward planning, not just practices such as preparing written plans, are important considerations. A quality perspective suggests that for planning to be effective it should be specifically focused on meeting and/or exceeding customers' needs.

The purpose of this study is to examine empirically the influences organizational culture and quality management have on export planning effectiveness. It is believed such an approach can shed additional light on our understanding of successful export performance. Background information on planning, culture, and quality plus a model and hypotheses are presented next, followed by sections on methodology, results, and discussion.

## **BACKGROUND**

In strategic management, the impact various planning strategies have on a firm's performance has been a research topic since the 1960s. Early work centered on large firms and one research stream has been the impact "formal" planning has on a firm's performance. Formal is defined differently by researchers. Armstrong (1982) mentions the use of an explicit goal achievement process, while Fredrickson (1984) emphasizes employing a comprehensive process.

### **Formal Planning**

Researchers have used different ways to measure formal planning in their studies. One frequently employed approach in large firm studies is to measure the degree of written documentation. Most small business researchers have continued this convention, using the completeness of a business plan to gauge formal planning (Bracker, Keats & Pearson, 1988; Gilmore, 1971; Robinson & Pearce, 1983; Still, 1974). A business plan is a written document that summarizes information about a business, including competitive strategies, industry analysis, marketing plan, financial plan, and key personnel. Accordingly, a recommended practice for new ventures is: prepare a business plan and update it periodically. Some small business capital providers will not consider a firm's funding request unless it is accompanied by a business plan, regardless of whether the firm's leaders value preparing one.

Although the practice of preparing a business plan is appealing--because many believe it should improve a firm's performance, results from small business studies are mixed. That is, while empirical findings from some studies have found that business plan development improves performance (Bracker et al., 1986; Rue & Ibrahim, 1998; Sexton & Van Auken, 1985; Wood, Johnston & DeGenaro, 1988), other studies have not found a positive relationship between these two variables (Orpen, 1985; Robinson & Pearce, 1983; Watts & Ormsby, 1990). Two research strategies have been pursued because of the mixed results. First, Robinson (1982) has

recommended another way to operationalize formal planning. Instead of measuring the degree to which the planning process generates written documentation, his suggestion is to measure the degree to which advisors are relied upon in the planning process. Robinson (1982) found in his study that profitability and improvement in effectiveness were higher for small firms which engaged in the use of advisors than for firms which did not. The second research strategy concerns identifying factors or variables that may help clarify when planning, in an explicit or comprehensive sense, is effective. Two of these factors are culture and quality.

## **Organizational Culture**

Trice and Beyer (1993) define organizational cultures as collective phenomena that include two components: 1) substance, an organization's ideologies or systems of beliefs, values and norms that are shared by its members, and 2) forms, the observable ways employees express the organization's ideologies (i.e., the practices and behaviors of an organization's members).

Trice and Beyer (1993) state further that the substance of cultures, shared beliefs, values and norms, is what holds people in an organization together and helps them cope with work uncertainties and ambiguities. These authors define beliefs as expressed cause and effect relations (i.e., statements about which behaviors will lead to which outcomes), values as expressed desires or preferences for certain practices, behaviors or outcomes, and norms as expressed behaviors that are expected by organizational members. While cultural substance issues are abstract, cultural forms are concrete, observable entities through which members of a culture communicate substance to one another. Four categories of cultural forms are: symbols, language, narratives, and practices. Choices of a firm's ideologies and forms can be heavily influenced by its founders and managers, especially in new and small firms.

Applying the wider cultural perspective to the planning-performance relationship contrasts with past studies focusing on forms of planning. That is, past research has concentrated on practices--use of written plans and advisors--and not on planning beliefs, values and norms. This recognition may be important because small business founders/leaders will likely differ on their planning ideologies. For example, some leaders will value formal planning, others will not. One distinguishing feature of using this cultural perspective is that both the substance and forms of planning culture can be explored.

## **Quality**

The quality concept has a long history in the business literature and it has taken on many meanings. Quality has been defined as value (Feigenbaum, 1951), conformance to specifications (Gilmore, 1974), and conformance to requirements (Crosby, 1979). Probably the most frequently employed current definition of quality, however, is the degree to which a product or service meets and/or exceeds customers' needs or expectations (Buzzell & Gale, 1987; Gronroos, 1990). This definition has its origins in the marketing literature. Tied close to this definition is the "customer-first" idea presented by Demming (1986), and the "staying close to customers" prescription discussed by Peters and Waterman (1982).

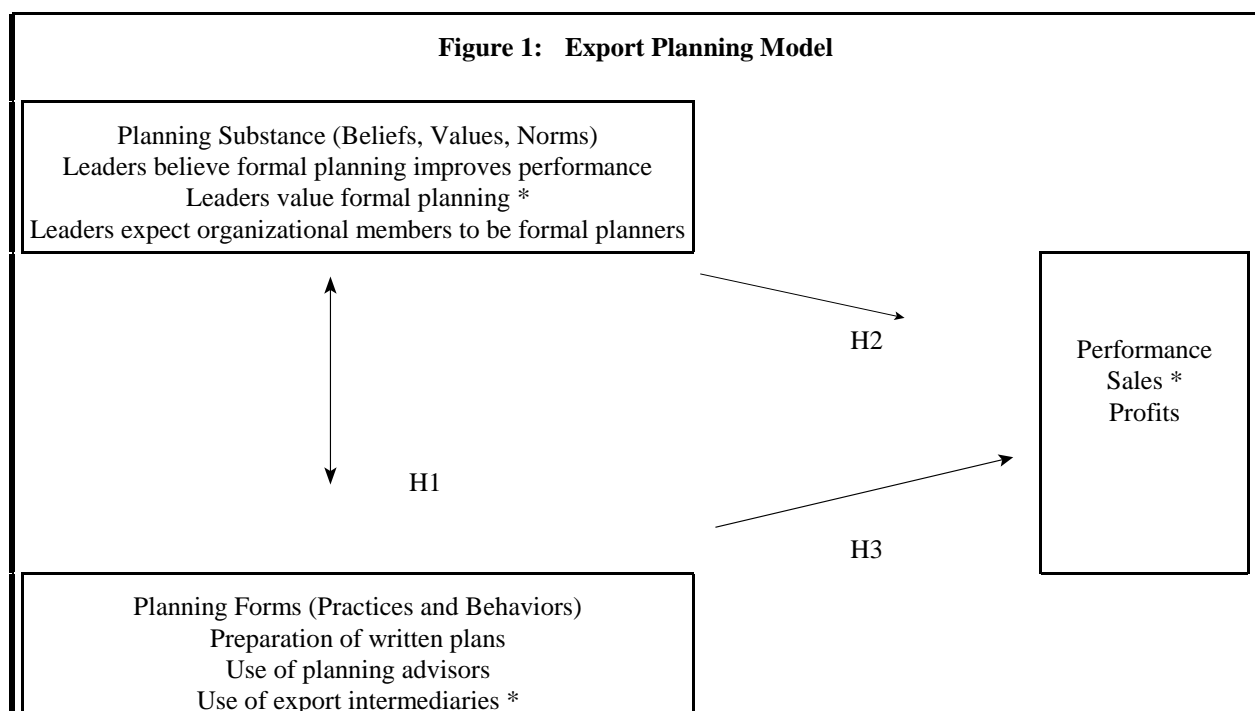
To date little empirical research exists linking quality to organizational outcomes (Saraph, Benson & Schroeder, 1989; Flynn, Schroeder & Sakakibara, 1995). This relationship would appear to be important to small firms (Keats & Bracker, 1988) as they enter new markets

(Chandler & Hanks, 1993), especially foreign ones (Cavusgil, 1980; Samiee & Waiters, 1990; McDougall & Oviatt, 1996). Overall, it can be argued that quality strategies should provide firms with competitive advantages that improve their performances (Porter, 1985). Export strategies, however, are difficult for small firms to implement because they often have limited resources to overcome differences in languages, laws, and customs (Bilkey, 1978; Madsen, 1987; Miesenbock, 1988; Aaby & Slater, 1989; Gemuenden, 1991; Naidu & Prasad, 1994).

Export decisions small businesses face include: 1) how to enter foreign markets given differences in laws, customs, etc., 2) what are the needs of foreign customers, and 3) how to meet and/or exceed foreign customers' expectations. To address these issues, firms can utilize several quality management practices in addition to (or as an alternative to) the strategic management practices of preparing written plans and consulting with advisors. These methods include using export intermediaries and developing customer-focused methods or procedures. Export intermediaries (both domestic and foreign) can help firms overcome weaknesses regarding a lack of information about foreign languages, laws, and customs. Customer-focused methods (e.g., direct customer communication including phone, FAX and E-mail, and individualized customer activities) can assist firms in identifying as well as meeting customers' needs.

## Model

The model presented in Figure 1 was developed from Denison (1990) and Trice and Beyer (1994). It includes both cultural and quality influences on export planning effectiveness. More specifically, the model shows the relationships between: a) substance (i.e., export planning beliefs, values, and norms) and forms (i.e., export planning practices suggested from both the strategic and quality management fields); b) substance and performance; and c) forms and performance. In the figure, H1 through H3 represent the current study's hypotheses.



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Development of customer-focused methods \*

Note: Only some of the different possible planning beliefs, values, norms, practices and behaviors plus performance outcomes are listed. Starred items are tested in the current study.

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## Hypotheses

Limited research has been conducted on cultural substance effects on exporting. Bradley (1984) and Axinn, Savitt, Sinkula and Thach (1995) have examined export intentions (norms) and attitudes (beliefs), but a lack of research exists about export cultural values. Shared values are important because they represent expressed desires for certain practices or outcomes. In a small firm (and in a new one, also) it is the firm's founder/leader who often plays a leading role in establishing shared values and, in turn, the firm's culture (Trice & Beyer, 1994). Further, it is argued that firms whose leaders value formal export planning are also the ones most likely to demonstrate this value by developing associated planning practices. In addition, they are the ones most likely to use the outcomes or results of these practices. By comparison, it is logical to purpose that firms whose leaders do not value these practices are least likely to develop them. Thus, the expectation is that the planning value of a firm's leaders should correspond or relate to practices within the firm which match the value. This position is consistent with Naumann's (1995) suggestion that the use of planning practices, either reactive or proactive, is a reflection of the firm's cultural values. Keep in mind that not all firms fit this expectation. For example, some small businesses seeking capital are requested (required) to develop written plans by outside capital providers, even though their leaders do not value this practice. The specific hypothesis is (see Figure 1, also):

*H1: Small businesses whose leaders value (support) formal export planning correspond with small businesses which consider the following practices important: use of domestic export intermediaries (H1a); use of foreign export intermediaries (H1b); use of direct customer communication (H1c); and use of individualized customer activities (H1d).*

Another hypothesis concerns the relationship between export values and export performance. It is believed that firms whose leaders value planning should be those best able to capitalize on the benefits of this activity--i.e., improved performance. This logic results in:

*H2: Small businesses whose leaders value (support) formal export planning outperform those whose leaders do not value this activity.*

Despite reasons to expect the direct relationship stated in H2, connections between values and performance have not commonly been explored and tested in empirical research. It has been more customary for researchers to examine the influences of practices on performance, while implicitly assuming the underlying shared values are consistent with the practices.

Turn next to relationships between export planning practices and export performance. In a prior study (Olson & Gough, 2001), the strategic management practices of preparing a business

plan and using consultants or advisors were explored. Interestingly, only the use of consultants was found to be effective in improving performance. The current study extends this research direction by examining the two quality management practices listed in Figure 1. Regarding export market intermediaries, small businesses may enter export markets either directly or through the use of intermediaries. Koh and Robicheaux (1988) and Haigh (1994) suggest that using intermediaries may provide performance benefits. This position is also reinforced by findings in small firm strategic planning research that show positive performance from using planning consultants (Robinson, 1982). Another suggested export quality management practice concerns the process of determining and meeting customers' needs. Kaynak (1992) argues that a customer-focused orientation leads to success in exporting. Methods included here are direct customer communication and individualized customer activities. Thus:

*H3: Small businesses which consider the following export practices important outperform those which do not: use of domestic export intermediaries (H3a); use of foreign export intermediaries (H3b); use of direct customer communication (H3c); and use of individualized customer activities (H3d).*

## METHODOLOGY

### Sample

To examine this paper's hypotheses, a sample of firms that export products from the state of Idaho was obtained. Each firm was sent a questionnaire that the current authors designed and pre-tested. The mail survey followed Dillman's (1978) total design methodology: an initial mailing; a post card reminder in one week; and a second mailing two weeks later. The sample was obtained during the summer of 1995 from a list of Idaho firms contained in the *Idaho International Trade Directory 1994-1995*. This list included the name of a contact person to whom the questionnaire was mailed. Positions held by the contact person included CEO, owner, president, and marketing manager. Of the 452 firms contacted, 78 completed and returned the questionnaire, which resulted in a 17% response rate. Follow-up contacts were made with two percent of the non-respondents in order to determine the reasons for non-response. The most frequent reason was lack of time to complete the survey. Other reasons were: exporting was a negligible part of their businesses; and the requested information were not readily available.

The information needed from the surveyed firms concerned their export start-up stage and their first year of exporting. This year was some year prior to 1995 for all the sampled firms. (The directory included all Idaho exporters regardless of their date of export initiation and the initial sample contained 78 of these firms.) Because the focus of this study is small firms, and because remembering facts about a firm's early export years becomes more difficult the longer a firm exports, those firms with 100 or more employees at export initiation and those whose first export pre-dated 1985 were eliminated. In this process, 28 firms were excluded resulting in a sample of 50 firms. The average number of employees for these 50 firms during their first year of exporting was 21 and the standard deviation was 23.

### Measures

Six measures were used in this study. Since the firms were sampled in a time period after their first year of exporting, the responses were retrospective. To control for retrospective biases, questionnaires were directed to personnel who were either members of the firm's leadership when it first began exporting or had knowledge about the firm's initial exporting efforts.

One measure concerned the value each firm's leaders held toward planning in the firm's pre-export period--the year preceding receipt of the first accepted export order. The question was did your firm's leaders support a culture toward exporting that emphasized being explicit, comprehensive, or thorough with strategic export information? The responses were either yes, or no. Other survey questions concerned export practices and export performance. Regarding practices, firms were asked how important both domestic and foreign intermediaries were for entering foreign markets? Additionally, firms were asked how important both direct communication (phone, FAX, E-mail, ect.) and individualized customer activities were for staying close to, or meeting the needs of, their export customers? Possible responses to these export practice questions were configured on a 5-point Likert scale with 1 = not important, 2 = slightly important, 3 = moderately important, 4 = strongly important, and 5 = extremely important. The question on export performance asked firms to state their export intensity (export sales divided by total sales) at the end of the first export year.

## **RESULTS**

### **Descriptive Sample Information**

For the 50 firms in the sample, export intensity had the following traits: range of 1% to 100%, mean of 16.0%, median of 6.5%, and standard deviation of 22.3%. For the export planning value question, 58% of the respondents said that they did not support formal planning.

For the question concerning the importance of domestic intermediaries, the results were: mean of 2.3 (slightly important), standard deviation of 1.6, and median of 1 (53% of respondents said not important). Because of the small number of responses relative to categories, responses were collapsed into two categories based on a median split (not important versus slightly, moderately, strongly, and extremely important) for hypothesis testing. Findings for the question about the importance of foreign export intermediaries were: mean of 2.2 (slightly important), standard deviation of 1.6, and median of 1 (61% of respondents said not important). As with the prior question, the same two categories were developed for hypothesis testing.

For the question concerning the importance of direct customer communication, the results were: mean of 4.6 (important), standard deviation of 0.7, and median of 5 (76% of respondents said extremely important). In this case, a median split resulted in two different categories (not, slightly, moderately, and strongly important versus extremely important) for testing. Findings for the question about the importance of individualized customer activities were: mean of 3.0 (moderately important), standard deviation of 1.5, and median of 3 (59% of respondents said moderately, strongly, or extremely important). A median split resulted in a third set of categories (not and slightly important versus moderately, strongly, and extremely important) for testing.

The sample contained firms from different industries. Of the 50 firms, eight were agricultural firms, eight were in the building or mining fields, one was a chemical firm, 15 were

machinery firms, and 18 were providers of other manufactured goods (e.g., computer, gifts, medical, recreation, and textiles). Because of the multi-industry sample, industry effects may exist. That is, if the relationships being examined in the study differ by industry, then it may be necessary to control for industry effects. A Kruskal-Wallis 1-way analysis of variance test was conducted using export intensity as the dependent variable. The test was not significant at less than the 10% level, suggesting there were no differences in export intensity across industries. This test provided support for treating the sample as one group.

It is also important to note that the sample was obtained through two mailings. Of the 50 firms being examined, 30 returned their questionnaires after the first mailing and 20 after the second mailing. Again, a test (Mann-Whitney U) was conducted to test for any mailing effects with export intensity as the dependent variable. No mail timing effects were found.

## Hypotheses

The findings for hypotheses H1a, H1b, H1c, and H1d are summarized in Table 1. The Chi-square test suggests that a greater proportion of small firms whose leaders value export planning formality, when compared with those whose leaders do not support this position, place a higher level of importance on the following practices: domestic export intermediaries (H1a), foreign export intermediaries (H1b), direct customer communication (H1c), and individualized customer-focused activities (H1d).

Results for H2 and H3 are presented in Table 2. For these hypotheses, the Mann-Whitney U test, a technique with fewer assumptions than the t-test, was utilized. H2 results indicate higher export intensity exists for small firms whose leaders support being formal with export planning (n=20) than for those whose leaders do not (n=28).

<b>Table 1</b>			
<b>Associations Between Substance and Forms of Export Planning</b>			
<b>H1a: Leaders value formal export planning and use of domestic export intermediaries *</b>			
	Use of Domestic Intermediaries		
Value Formal Planning	Not Important	Slightly/Moderately/ Strongly/Extremely Important	n
No	19 (14.9)	9 (13.1)	28
Yes	6 (10.1)	13 (8.9)	19
Total	25	22	47 <sup>1</sup>
Chi-Square	DF	Significance	
5.983	1	.007	
<b>H1b: Leaders value formal export planning and use of foreign export intermediaries *</b>			
	Use of Foreign Intermediaries		



<b>Table 1</b> <b>Associations Between Substance and Forms of Export Planning</b>			
Value Formal Planning	Not Important	Slightly/Moderately/ Strongly/Extremely Important	n
No	21 (17.5)	7 (10.5)	28
Yes	9 (12.5)	11 (7.5)	20
Total	30	18	48 <sup>2</sup>
Chi-Square	DF	Significance	
4.480	1	.017	
<b>H1c: Leaders value formal export planning and use of direct customer communication *</b>			
	Use of Direct Communication		
Value Formal Planning	Not/Slightly/ Moderately/Strongly Important	Extremely Important	n
No	10 (7.0)	18 (21.0)	28
Yes	2 (5.0)	18 (15.0)	20
Total	12	36	48 <sup>3</sup>
Chi-Square	DF	Significance	
4.114	1	.0215	
<b>H1d: Leaders value formal export planning and use of individualized customer activities *</b>			
	Use of Individualized Activities		
Value Formal Planning	Not/Slightly Important	Moderately/Strongly/ Extremely Important	n
No	14 (10.6)	11 (14.4)	25
Yes	5 (8.4)	15 (11.6)	20
Total	19	26	45 <sup>4</sup>
Chi-Square	DF	Significance	
4.377	1	.018	
* Actual and (expected) frequencies are presented in the table cells			
<sup>1</sup> One firm did not answer the question on domestic intermediaries, and two firms did not answer either that question or the question on the value of formal planning			
<sup>2</sup> One firm did not answer the question on the value of formal planning, and one firm did not answer either that question or the question on foreign intermediaries			

<b>Table 1</b> <b>Associations Between Substance and Forms of Export Planning</b>	
<sup>3</sup>	Two firms did not answer either the question on the value of formal planning
<sup>4</sup>	One firm did not answer the question on the value of formal planning, three firms did not answer the question on individualized customer activities, and one firm did not answer either of these questions

Table 2 Relationships Between Export Planning Variables and First Year Export Performance		
<b>H2: Leaders value formal export planning and export intensity</b>		
Value Formal Planning	Mean Ranking of Export Intensity	n
No	20.75	28
Yes	29.75	20
		48 <sup>1</sup>
U	Z	Significance
175.0	-2.206	.0135
<b>H3a: Use of domestic export intermediaries and export intensity</b>		
Use of Domestic Intermediaries	Mean Ranking of Export Intensity	n
Not Important	21.80	25
Slightly/Moderately/Strongly/ Extremely Important	26.50	22
		47 <sup>2</sup>
U	Z	Significance
220.0	-1.178	.1195
<b>H3b: Use of foreign export intermediaries and export intensity</b>		
Use of Foreign Intermediaries	Mean Ranking of Export Intensity	n
Not Important	20.88	30
Slightly/Moderately/Strongly Extremely Important	31.50	19
		49 <sup>3</sup>
U	Z	Significance
161.5	-2.546	.0025
<b>H3c: Use of direct customer communication and export intensity</b>		
Direct Communication	Mean Ranking of Export Intensity	n
Not/Slightly/Moderately/		
Strongly Important	18.04	12
Extremely Important	27.86	38
		50
U	Z	Significance

<b>Table 2</b> <b>Relationships Between Export Planning Variables and First Year Export Performance</b>		
138.5	-2.042	.0205
<b>H3d: Use of individualized customer activities and export intensity</b>		
Individual Activity	Mean Ranking of Export Intensity	n
Not/Slightly Important	17.89	19
Moderately/Strongly/Extremely Important	27.44	27
		46 <sup>4</sup>
U	Z	Significance
150.0	-2.388	.0085
<sup>1</sup> Two firms did not answer the question on the value of formal planning <sup>2</sup> Three firms did not answer the question on the importance of domestic intermediaries <sup>3</sup> One firm did not answer the question on the importance of foreign intermediaries <sup>4</sup> Four firms did not answer the question on the importance of individualized activities		

The result for H3a suggests that higher export intensity does not exist for small firms which place greater importance on domestic export intermediaries (n=22) than those that place lesser importance (n=25). Although this finding was not statistically significant, the difference in export performance was in the hypothesized direction. Regarding H3b, the Mann-Whitney U test results indicate higher export intensity exists for small firms which place greater importance on foreign export intermediaries (n=19) than those which place lesser importance (n=30).

For the last two hypotheses, results indicate higher export intensity exists for firms which place greater importance on the following practices than those which place lesser importance: direct customer communication (H3c), and individualized customer activities (H3d).

## DISCUSSION

The purpose of the study was to examine the influences organizational culture and quality management have on export planning effectiveness. A unique feature of including culture in the study is that the impacts of both the substance and forms of planning could be explored. It was assumed that identifying a firm's planning substance (in particular, its planning values) would be helpful in understanding its planning forms (planning practices).

Findings from the study provide support for the position that small businesses whose leaders value formal planning also view the following practices important: use of both domestic and foreign intermediaries, use of direct customer communication, and use of individualized customer activities. These relationships or matches increase our understanding of what is associated with being explicit or comprehensive in export planning. Past research has linked

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strategic management methods, namely preparing written plans and using advisors, with formal planning. A suggestion based on the current study's outcomes is that the aforementioned quality management practices should also be linked with being explicit or comprehensive in export planning. This discovery should be of primary interest to academicians searching for the fullest understanding of the interaction among the elements of planning, organizational culture, and quality management.

Consider next the export performance results. Small businesses whose leaders valued formal export planning outperformed those whose leaders who did not. Further, for three of the practices (foreign intermediaries, direct customer communication, and individualized customer activities), export intensity performance improved when firms using each practice were compared with firms that did not. These results have two fold importance. First, linking quality management practices to higher performance helps to cement their significance in planning models, an area of chief concern to academics. In addition, these findings provide direct guidance to entrepreneurs seeking where to devote scarce resources in their export efforts.

Use of domestic intermediaries was the only practice not linked to improved performance. It may be that these intermediaries are unable to overcome difficulties with foreign languages, laws, and customs. In contrast, domestic intermediaries may be effective at improving export performance but that other factors concerning when, where, why, and how these intermediaries are used need to be included in the study to demonstrate the positive relationship. Additional research is necessary in this area.

The current study has several limitations. First, single item measures were used for the variables in the study. Single item measures can be inferior because many variables (e.g., values, performance) are multi-faceted concepts. Further research utilizing different measures for these concepts could address this concern. Second, because the sample was restricted to a single state, the results may not be generalizable to other states or nations. Third, survey methodologies can be criticized for being cross-sectional, and for introducing response biases. Finally, since the current study assessed past values, practices, and performances, it can be criticized for being retrospective in nature. In conclusion, the authors do not believe these concerns seriously cloud the important relationships found between export planning values, practices, and performance.

## REFERENCES

- Aaby, N.E. & Slater, S.F. (1989). Management influences on export performance: A review of the empirical literature 1978-88, *International Marketing Review*, 6(4), 7-26.
- Armstrong, J.S. (1982). The value of formal planning for strategic decisions, *Strategic Management Journal*, 3, 197-211.
- Axinn, C.N., Savitt, R., Sinkula, J.M. & Thach, S.V. (1995). Export intention, beliefs, and behaviors in smaller industrial firms, *Journal of Business Research*, 32(1), (January), 49-55.
- Bilkey, W.J. (1978). An attempted integration of the literature on the export behavior of firms, *Journal of International Business Studies*, 9(1), (Spring-Summer), 33-46.
- Bijmolt, T.H.A. & Zwart, P.S. (1994). The impact of internal factors on the export success of Dutch small and medium-sized firms, *Journal of Small Business Management*, 32(2), 69-83.
- Brasch, J.J. & Lee, W. (1978). The adoption of export as an innovative strategy, *Journal of International Business Studies*, 9(1), (Spring-Summer), 85-93.
- Bracker, J.S., Keats, B.W. & Pearson, J.N. (1988). Planning and financial performance among small firms in a growth industry, *Strategic Management Journal*, 9, 591-603.
- Bradley, M.F. (1984). Effects of cognitive style, attitude toward growth, and motivation on the internationalization of the firm, *Research in Marketing*, 7, 237-260.
- Buzzell, R. & Gale, B. (1987). *The PIMS Principles: Linking Strategy to Performance*. New York: Free Press.
- Cavusgil, S.T. (1980). On the internationalization process of firms, *European Research*: (November), 273-281.
- Chandler, G.N. & Hanks, S.H. (1993). Measuring the performance of emerging businesses: A validation study, *Journal of Business Venturing*, 8, 391-408.
- Crosby, P.B. (1979). *Quality Is Free: The Art of Making Quality Certain*. New York: McGraw-Hill.
- Deming, W.E. (1982). *Quality, Productivity, and Competitive Position*. Cambridge, MA: Massachusetts Institute of Technology, Center for Advanced Engineering Study.
- Deming, W.E. (1986). *Out of the Crisis*. Cambridge, MA: Massachusetts Institute of Technology, Center for Advanced Engineering Study.
- Denison, D.R. (1990). *Corporate Culture and Organizational Effectiveness*. New York: John Wiley & Sons.
- Dillman, D.A. (1978). *Mail and Telephone Surveys: The Total Design Method*. New York: John Wiley & Sons.
- Flynn, B.B., Schroeder, R.G. & Sakakibara, S. (1995). The impact of quality management practices on performance and competitive advantage, *Decision Sciences*, 26( 5), (September-October), 659-691.
- Feigenbaum, A.V. (1951). *Quality Control: Principles, Practices, and Administration*. New York: McGraw-Hill.
- Fredrickson, J.W. (1984). The comprehensiveness of strategic decision processes: Extensions, observations, future directions, *Academy of Management Journal*, 27(3), (September), 445-466.

- 
- Gemuenden, H.G. (1991). Success factors of export marketing: A meta-analytic critique of the empirical studies, In S.J. Paliwoda (editor), *New Perspectives on International Marketing*. London: Routledge, 33-62.
- Gilmore, F.F. (1971). Formulating strategy in smaller companies, *Harvard Business Review*, 49(3), (May-June), 71-81.
- Gilmore, H.L. (1974). Product conformance cost, *Quality Progress*, 7(5), 16-19.
- Gronross, C. (1990). *Service Management and Marketing: Managing the Moments of Truth in Service Competition*. Lexington, MA: Lexington Books.
- Haigh, R.W. (1994). Export management companies could be the answer, *Columbia Journal of World Business*, 29(4), (Winter), 66-81.
- Kamath, S., Rosson, P.J., Patton, D. & Brooks, M. (1987). Research on success in exporting, In P.J. Rosson & S.D. Reid (Eds.), *Managing Export Entry and Expansion*. New York: Praeger, 389-421.
- Kaynak, E. (1992). A cross regional comparison of export performance of firms in two Canadian regions, *Management International Review*, 32(2), (February), 163-180.
- Keats, B.W. & Bracker, J.S. (1988). Toward a theory of small firm performance: A conceptual model, *American Journal of Small Business*, 12( 4), (Spring), 41-58.
- Koh, A.C. & Robicheaux, R.A. (1988). Variations in export performance due to differences in export marketing strategy: Implications for industrial marketers, *Journal of Business Research*, 17, 249-258.
- Madsen, T.K. ( 1987). Empirical export performance studies: A review of conceptualizations and findings, *Advances in International Marketing*, 2, 177-198.
- McDougall, P.P. & Oviatt, B.M. (1996). New venture internationalization, strategic change, and performance: A follow-up study, *Journal of Business Venturing*, 11(1), (January), 23-40.
- Miesenbock, K.J. (1988). Small businesses and exporting: A literature review, *International Small Business Journal*, 6( 2), (January-March), 42-61.
- Naidu, G.M. & Prasad, V.K. (1994). Predictors of export strategy and performance of small- and medium-sized firms, *Journal of Business Research*, 31, 2-3 (October-November), 107-115.
- Naumann, E. (1995). *Creating Customer Value: The Path to Sustainable Competitive Advantage*. Cincinnati, OH: Thompson Executive Press.
- Olson, P.D. & Gough, N. (2001). Export planning and performance: An organizational culture perspective on small firms, *New England Journal of Entrepreneurship*, 4(1), 31-39.
- Orpen, C. (1985). The effects of long-range planning on small business performance: A further examination, *Journal of Small Business Management*, 23(1), 16-23.
- Peters, T.J. & Waterman, R.H. (1982). *In Search of Excellence: Lessons From America's Best Run Companies*. New York: Harper & Row.
- Porter, M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. New York: Free Press.
- Reeves, C.A. & Bednar, D.A. (1994). Defining quality: Alternatives and implications, *Academy of Management Review*, 19(3), (July), 419-445.
-

- Robinson, R.B. (1982). The importance of 'outsiders' in small firm strategic planning, *Academy of Management Journal*, 25( 1), (March), 80-93.
- Robinson, R.B. & Pearce, J.A. (1983). The impact of formalized strategic planning on financial performance in small organizations, *Strategic Management Journal*, 4, 197-207.
- Rue, L.W. & Ibrahim, N.A. (1998). The relationship between planning sophistication and performance in small businesses, *Journal of Small Business Management*, 36(4), (October), 24-32.
- Samiee, S. & Walters, P.G.P. (1990). Influence of firm size on export planning and performance, *Journal of Business Research*, 20(3), (May), 235-248.
- Saraph, J.V., Benson, P.G. & Schroeder, R.G. (1989). An instrument for measuring the critical factors of quality management, *Decision Sciences*, 20( 4), (Fall), 810-829.
- Sexton, D.L. & Van Auken, P. (1985). A longitudinal study of small business strategic planning, *Journal of Small Business Management*, 23(1), 7-15.
- Still, T.W. (1974). *An Exploratory Investigation of Strategic Planning Behavior in Small Businesses* (an unpublished doctoral dissertation). Tallahassee, FL: Florida State University.
- Trice, H.M. & Beyer, J.M. (1994). *The Cultures of Work Organizations*. Englewood Cliffs, NJ: Prentice-Hall.
- Watts, L.R. & Ormsby, J.C. (1990). Small business performance as a function of planning formality: A laboratory study, *Journal of Business and Entrepreneurship*, 2(1), 1-8.
- Wood, D.R., Johnston, R.A. & DeGenaro, G.J. (1988). The impact of formal planning on the financial performance of real estate firms, *Journal of Business Strategy*, 5(1), 44-51.
- Zahra, S.A., Neubaum, D.O. & Huse, M. (1997). The effect of the environment on export performance among telecommunications new ventures, *Entrepreneurship Theory and Practice*, 22( 1), (Fall), 25-46.





# **GENDER DIFFERENCES BETWEEN FINNISH AND AMERICAN ENTREPRENEURS: AN EXPLORATORY STUDY**

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## **ABSTRACT**

*This paper examines the gender differences between Finnish and American entrepreneurs. The authors empirically compare an American group of entrepreneurs to a Finnish group in terms of risk taking propensity, innovation, need for achievement and entrepreneurial drive. The paper concludes that there appear to be more cultural rather than gender differences in the entrepreneurial behavior between the two groups.*

## **INTRODUCTION**

Can American understanding of the entrepreneurship phenomenon be successfully translated to an understanding of the same phenomenon in other nations? Just how much do the entrepreneurs in America differ from those in other nations? If culture is enmeshed with entrepreneurship, there must be differences and those differences are likely to vary from nation to nation. This paper presents an exploratory study of gender differences in entrepreneurs from the U.S. and Finland. The authors have approached the question by investigating the entrepreneurial drive and the key components of the entrepreneurial psyche as espoused in the American model. Clearly, any comparison of the American view of the entrepreneurial psyche must be made on a nation by nation basis. Any other approach would be so confounded by cultural differences as to make interpretation of the findings problematic, if not impossible. Because there is a dramatic, nationwide focus on entrepreneurship in Finland and because there is a cadre of entrepreneurship researchers in that nation who are vitally interested in exploring the nature of the entrepreneurship phenomenon, the authors have begun this exploratory study with a comparison between American and Finnish entrepreneurs. This paper will describe the results of an empirical comparison between entrepreneurs in the two nations and will explore the significance of the differences in terms of the potential gender differences between the American and Finnish entrepreneurial cultures.

## **ENTREPRENEURIAL CHARACTERISTICS**

In attempting to delineate a profile of entrepreneurs, one must first examine the characteristics which embody that persona. Researchers have long debated these characteristics and have not yet found a consensus as to the specifics of what dictates behavior. However, many have studied the phenomena and continue to examine the attributes which provide an intuitive rationale for entrepreneurial behavior.

### **Risk Taking Propensity**

The first of these characteristics is the propensity for risk taking, the earliest identified entrepreneurial characteristic. Cantillon (circa 1700) portrayed an entrepreneur as the individual who assumed the risk for the firm (Kilby, 1971), a perspective echoed by Mill (1848).

Palmer (1971) proffered that risk assessment and risk taking are the primary elements of entrepreneurship. Some studies have indicated no significant differences in risk taking propensities for entrepreneurs as compared to the general population (i.e., Brockhaus, 1980; Sexton & Bowman, 1983), but others have discovered a higher propensity for risk taking among entrepreneurs (i.e., Sexton & Bowman, 1986; Carland, Carland, Carland & Pearce, 1995), when confronted with business risk (Ray, 1986), but moderated by experience, age, education, and type of business (Schwer & Yucelt, 1984). Further, entrepreneurs evidence low uncertainty avoidance irrespective of culture (McGrath, MacMillan & Scheinberg, 1992). Risk taking propensity remains a key aspect of the entrepreneurial psyche as visualized by American researchers (Carland, Carland & Stewart, 1996).

### **Innovation**

The second characteristic which is central to the American model is preference for innovation. Schumpeter's view of entrepreneurial innovation was rooted in the classic theories of economists such as Say and Marshall (Hornaday, 1992). In the literature, innovation remains a frequently identified functional characteristic of entrepreneurs (e.g., McClelland, 1961; Hornaday & Aboud, 1971; Timmons, 1978; Brockhaus, 1982; Carland, Hoy, Boulton & Carland, 1984; Gartner, 1990). Timmons (1978) suggested that creativity and innovation were conditions inherent in the role of entrepreneurship. Drucker (1985) actually defined entrepreneurship as innovation in a business setting. Olson (1985) included invention, an activity analogous to innovation, as a primary entrepreneurial activity. This contention was intensified by Carland, Hoy, Boulton and Carland (1984) who proposed that innovation was the critical factor in distinguishing entrepreneurs from managers and small business owners. Hornaday (1992) deftly illustrated that while innovation is a necessary element of entrepreneurship, alone it is insufficient to fully circumscribe entrepreneurial behavior because of the broad parameters of the function. The preference for innovative behavior is firmly established as central to the American view of the entrepreneurial psyche (Carland, Carland & Stewart, 1996).

### **Need for Achievement**

The third, and perhaps the most ubiquitous entrepreneurial characteristic, is the need for achievement. This insight was initiated by the work of McClelland (1961). In a study of behavior in young men, McClelland (1961, 1965) concluded that a high need for achievement

would influence the self selection of an *entrepreneurial* position, defined as a salesman, company officer, management consultant, fund-raiser, or owner of a business. Numerous subsequent studies have shown a positive relationship between achievement motivation and entrepreneurship (i.e., Hornaday & Bunker, 1970; Hornaday & Aboud, 1971; DeCarlo & Lyons, 1979; Lachman, 1980; Begley & Boyd, 1986). Other studies have shown that need for achievement is not the most important variable for predicting the likelihood of starting a business (Borland, 1974; Hull, Bosley, & Udell, 1980). Johnson (1990) suggested that because of the variability of the samples, different operationalizations of the achievement motive, and convergent validity problems in instrumentation, more research is necessary to prove a definitive link between achievement motivation and entrepreneurship. Nevertheless, achievement motivation remains a central tenet in the American view of the entrepreneurial psyche (Carland, Carland & Stewart, 1996).

### **Entrepreneurial Drive**

Carland (1982) suggested that entrepreneurship might actually be a continuum. If it is, then much of the conflict in findings and many of the anomalies found in previous studies could be explained: the people under investigation in all of the studies shared entrepreneurial tendencies but not with the same intensity. Carland, Carland and Hoy (1992) posited a perspective of entrepreneurship which treats the phenomenon as an individual drive; the drive toward entrepreneurial behavior. They developed and validated an instrument which measures the strength of that drive, the Carland Entrepreneurship Index, and demonstrated that entrepreneurial drive is normally distributed (Carland, Carland & Hoy, 1992). The function is a personality trait or drive which is translated into a need to create or create and grow a business venture.

### **THE SAMPLES**

The American sample consisted of business owners: 225 surveys were distributed using a convenience sampling technique. The survey consisted of demographic questions about the firm and its owners and contained the Carland Entrepreneurship Index and the Innovation, Achievement and Risk Taking Propensity scales of the Jackson Personality Research Form and the Jackson Personality Inventory. Of the 225 initial surveys, 209 were usable. The others were eliminated, in most cases because the owner had omitted key questions on the survey or the person who responded only had a small percentage of ownership. The final sample of firms were all individually owned and operated small businesses according to the U.S. Small Business Administration definition. The demographics of the final participants are displayed in Table 1.

The Finnish sample consisted of 424 owners of small businesses. The sample was developed by mailing the surveys to a group of 1,000 owners of small businesses throughout Finland. The high response rate, 43%, demonstrates the keen interest which Finnish entrepreneurs have in supporting entrepreneurship research. Further, the high response rate suggests a minimal non-response bias. The demographics of the two groups of respondents are displayed in Table 1. As the table shows, the two groups displayed remarkably similar demographics.

## THE INSTRUMENTS

The instrument selected to measure risk taking propensity was the Risk Taking Scale of the Jackson Personality Inventory (Jackson, 1976). The instrument consists of 20 forced choice questions, can be scored by untrained people, and has been reported to display high reliability and validity and to exhibit high correlations with self and peer ratings (Jackson (1976). Jackson (1976), in a test involving two samples (N=82 & N=307), reported internal consistency reliability values of .93 and .91 using Bentler's coefficient theta and .81 and .84 using coefficient alpha. In a test for validity, Jackson (1976) reported (N=70) correlations with the completion of an adjective checklist, with self rating and peer rating of .75, .77 and .52, respectively.

TABLE 1 DEMOGRAPHICS OF SAMPLES			
(May not add to 100% due to missing responses)		American	Finnish
Type of Business	Retail	38%	18%
	Service	44%	44%
	Wholesale	3%	4%
	Construction	9%	15%
	Manufacturing	4%	15%
Annual Sales	\$100,000 or less	36%	34%
	\$100,000 to \$250,000	19%	16%
	\$250,000 to \$500,000	18%	19%
	\$500,000 to \$1,000,000	9%	14%
	\$1,000,000 and over	14%	15%
Number of Employees	10 or less	84%	78%
	11 to 25	8%	10%
	26 to 50	5%	2%
	51 or more	2%	2%
Business Form	Proprietorship	51%	25%
	Partnership	13%	38%
	Corporation	36%	38%
Age of Business	Over 10 years	54%	50%
	5 to 10 years	38%	32%
	1 to 4 years	4%	17%
Sex of Respondent	Male	68%	75%
	Female	32%	25%
Age of Respondent	25 to 35 years	23%	15%
	36 to 45 years	35%	29%
	45 to 55 years	24%	41%
	Over 55 years	13%	13%
Education of Respondent	12 years or less	33%	73%
	12 to 15 years	27%	9%
	16 years	23%	3%
	More than 16 years	13%	9%
Role of Respondent	Started Business	75%	81%
	Purchased Business	21%	13%
	Inherited Business	5%	5%

Primary Objectives	Profit and Growth	47%	21%
	Family Income	53%	77%

The instrument selected to measure preference for innovation was the Innovation Scale of the Jackson Personality Inventory (Jackson, 1976). This instrument also consists of 20 questions in a forced choice format and can be scored by untrained people. It has been reported to display high reliability and validity and to exhibit high correlations with self and peer ratings (Jackson; 1976). Jackson (1976), in tests involving two samples (N=82 & N=307), reported internal consistency reliability values of .94 and .93 using Bentler's coefficient theta and .83 and .87 using coefficient alpha. In a test for validity, Jackson (1976) reported (N=70) correlations with the completion of an adjective checklist, with self rating and peer rating of .79, .73 and .37, respectively.

The instrument used to measure the need for achievement is the Achievement Scale of the Personality Research Form (Jackson, 1974). The instrument has been shown to have reliability (Jackson, 1974), to display convergent and discriminant validity, and high correlations with self and peer ratings (Jackson and Guthrie, 1968). It consists of 16 forced choice questions which can be scored by untrained people. Odd-even reliabilities for two groups (N=83 & N=84) were .57 and .66 after the Spearman-Brown correction had been applied (Jackson, 1974). In a test for validity, Jackson and Guthrie (1968) reported correlations with self ratings and peer ratings of .65 and .46 respectively, and reported that the form possessed convergent and discriminant validity.

The instrument selected to measure entrepreneurial drive was the Carland Entrepreneurship Index. The instrument requires less than 10 minutes to complete, can be scored by untrained administrators, and results in a scaler score which can be interpreted as a representation of the strength of one's entrepreneurial drive. The test-retest correlation for the Entrepreneurship Index was .80 with a split-half, odd-even reliability of .73. The Kuder-Richardson test for validity was .73 indicating good reliability and validity statistics for the Index (Carland, Carland, & Hoy, 1992).

## DATA ANALYSIS

Since the purpose of our study was an examination of gender differences between the two culturally different groups of entrepreneurs, the respondents were first partitioned by sex and nationality as demonstrated in Table 2.

<b>TABLE 2 DISTRIBUTION OF RESPONDENTS</b>		
	Males	Females
Finnish Respondents	320	104
American Respondents	143	66

Then the differences between the American and Finnish entrepreneurs were analyzed with t-tests for differences in mean responses. The first examination checked for differences

between American male and female entrepreneurs on the four instruments. The results are displayed in Table 3. As the table indicates, American male entrepreneurs scored higher on the preference for innovation scale, but no other significant differences existed.

The second stage of analysis was an investigation of Finnish male and female entrepreneurs. Using the same procedure as for American respondents, t tests were employed to determine the differences in means on all four instruments. The results are displayed in Table 4.

As the table indicates, there were no significant differences between Finnish male and female entrepreneurs on any of the four instruments.

<b>TABLE 3</b>					
<b>T-TESTS FOR DIFFERENCES BETWEEN THE GENDERS IN AMERICA</b>					
Carland Entrepreneurship Index					
	N	Mean	SD	T	P
American Males	143	20.874	5.399	1.575	.118
American Females	66	19.576	5.605		
Need for Achievement					
	N	Mean	SD	T	P
American Males	143	12.490	2.669	1.421	.158
American Females	66	11.879	2.995		
Preference for Innovation					
	N	Mean	SD	T	P
American Males	143	13.881	4.190	0.918	.361
American Females	66	13.258	4.727		
Propensity for Risk Taking					
	N	Mean	SD	T	P
American Males	143	10.287	5.087	3.166	.002
American Females	66	7.894	5.075		

<b>TABLE 4</b>					
<b>T-TESTS FOR DIFFERENCES BETWEEN THE GENDERS IN FINLAND</b>					
Carland Entrepreneurship Index					
	N	Mean	SD	T	P
Finnish Males	320	18.438	4.980	0.970	.333
Finnish Females	104	17.846	5.528		
Need for Achievement					
	N	Mean	SD	T	P
Finnish Males	320	10.653	2.411	0.739	.461
Finnish Females	104	10.452	2.413		
Preference for Innovation					

	N	Mean	SD	T	P
Finnish Males	320	13.216	4.203	-1.005	.326
Finnish Females	104	13.721	4.533		
Propensity for Risk Taking					
	N	Mean	SD	T	P
Finnish Males	320	7.331	3.856	-0.110	.912
Finnish Females	104	7.385	4.420		

The next phase of analysis was an investigation of differences between American and Finnish entrepreneurs. First males were examined. The results, displayed in Table 5, show that male American entrepreneurs scored higher on entrepreneurial drive, need for achievement and propensity for risk taking than the male Finnish entrepreneurs.

<b>TABLE 5</b>					
<b>T-TESTS FOR DIFFERENCES BETWEEN MALES</b>					
Carland Entrepreneurship Index					
	N	Mean	SD	T	P
American Males	143	20.874	5.399	4.594	.000
Finnish Males	320	18.438	4.980		
Need for Achievement					
	N	Mean	SD	T	P
American Males	143	12.490	2.669	7.043	.000
Finnish Males	320	10.653	2.411		
Preference for Innovation					
	N	Mean	SD	T	P
American Males	143	13.881	4.190	1.578	.116
Finnish Males	320	13.216	4.203		
Propensity for Risk Taking					
	N	Mean	SD	T	P
American Males	143	10.287	5.087	6.197	.000
Finnish Males	320	7.331	3.856		

The final stage of analysis was an examination of differences between American and Finnish female entrepreneurs. The results, displayed in Table 6, show that American females scored higher on entrepreneurial drive and need for achievement than did their Finnish counterparts.

## CONCLUSION



The results of this study suggest that there may be little or no differences in the entrepreneurial characteristics of male and female entrepreneurs in Finland. The findings of this study revealed no significant differences on comparisons of entrepreneurial drive, preference for innovation, need for achievement, and risk taking propensity. With regard to American entrepreneurs, it appears that males tend to be more risk taking than females. Previous research has shown that American females in general tend to be less risk taking than American males (Carland, Carland, Carland & Pearce, 1995). Yet, there were no differences on preference for innovation, need for achievement or entrepreneurial drive. This finding is consistent with Carland and Carland (1991).

**TABLE 6**  
**T-TESTS FOR DIFFERENCES BETWEEN FEMALES**

Carland Entrepreneurship Index					
	N	Mean	SD	T	P
American Females	66	19.576	5.605	1.971	.051
Finnish Females	104	17.846	5.528		
Need for Achievement					
	N	Mean	SD	T	P
American Females	66	11.879	2.985	3.265	.001
Finnish Females	104	10.452	2.413		
Preference for Innovation					
	N	Mean	SD	T	P
American Females	66	13.258	4.727	-0.633	.528
Finnish Females	104	13.721	4.533		
Propensity for Risk Taking					
	N	Mean	SD	T	P
American Females	66	7.894	5.075	0.670	.504
Finnish Females	104	7.385	4.420		

Overall, gender differences within the two countries appears to be minimal. However, there were considerable differences between the genders of the two countries. The higher levels of entrepreneurial drive noted among Americans compared to Finns for both genders may be a reflection of cultural differences. Entrepreneurial traditions in America may translate into greater proclivity among the population to consider entrepreneurial careers as desirable and attainable. Perhaps the entrepreneurial drive in Finland is dampened by the socialistic nature of the its government. The need for achievement and risk taking propensity thus are not issues based upon the social programs and financial support garnered by the Finnish entrepreneurs. Anecdotally, the Finns are very reserved which might well translate into a more conservative posture and therefore, a much less measurable propensity for risk taking. Perhaps, too, the

socialistic nature of the economy dampens the drive encompassed within the need for achievement for the Finnish peoples. The ability to advance within such an economy may well depend upon other than psychological factors but rather from position and/or function requirements, not on personal motivation.

American entrepreneurs faced with extreme competition and the emphasis in American business on return on investment tend to score higher on need for achievement by both genders than their Finnish counterparts and higher risk taking propensity among male entrepreneurs. American males demonstrated greater differences from Finnish males than did American females from Finnish females.

Additional research is required to validate such a conclusion, however, these findings suggest that national differences in entrepreneurial personalities is a fruitful area for study. If real differences can be shown to exist, the ramifications of such differences for educational systems and entrepreneurial assistance programs are significant.

### REFERENCES

- Begley, T. & Boyd, D. (1986) A comparison of entrepreneurs and managers of successful firms. *Journal of Management*, 13(1), 99-108.
- Borland, C. (1974) Locus of control, need for achievement, and entrepreneurship. Unpublished doctoral dissertation, University of Texas at Austin.
- Brockhaus, R.H. (1980) Risk taking propensity of entrepreneurs, *Academy of Management Journal*, 23(3), 509-520.
- Brockhaus, R.H. (1982) Psychology of the entrepreneur. In Kent, Sexton, Vesper (Eds), *Encyclopedia of Entrepreneurship*. Englewood Cliffs: Prentice Hall, 39-57.
- Carland, J.W. (1982) Entrepreneurship in a small business setting: An exploratory study. Unpublished doctoral dissertation, University of Georgia.
- Carland, J.W. & Carland, J.A. (1991) An empirical investigation into the distinctions between male and female entrepreneurs and managers. *International Journal of Small Business*, 9(3), April-June, 62-72.
- Carland, J.W., J.A. Carland & F. Hoy (1992) An entrepreneurship index: An empirical validation, Paper presented at the Babson Entrepreneurship Conference, Fontainebleau, France, July.
- Carland, J.W., Hoy, F., Boulton, W.R. & Carland, J.A. (1984) Differentiating entrepreneurs from small business owners. *The Academy of Management Review*, 9(2), April, 354-359.
- Carland, J.W., III, Carland, J.W., Carland, J.A. & Pearce, J.W. (1995). Risk taking propensity among entrepreneurs, small business owners and managers. *Journal of Business and Entrepreneurship*, 7(1), March, 12-23.
- Carland, J.W., Carland, J.A., & Stewart, W.H. (1996). Seeing what's not there: The enigma of entrepreneurship. *Journal of Small Business Strategy*, 7(1), Spring, 1-20.
- DeCarlo, J. & Lyons, P. (1979). Comparison of personal characteristics of minority and non-minority female entrepreneurs, *Journal of Small Business Management*, Dec, 22-29.
- Drucker, P. (1985) *Innovation and Entrepreneurship*. New York: Harper & Row.

- 
- Gartner, W. 1990. What are we talking about when we talk about entrepreneurship?. *Journal of Business Venturing*, 5(1): 15-28.
- Hornaday, J. (1992) Thinking about entrepreneurship: A fuzzy set approach. *Journal of Small Business Management*, 30(4): 12-23.
- Hornaday, J.A. & Aboud, J. (1971) Characteristics of successful entrepreneurs, *Personnel Psychology*, 24, 141-153.
- Hornaday, J. & Bunker, C. (1970) The nature of the entrepreneur. *Personnel Psychology*, 23: 47-54.
- Hull, D., Bosley, J. & Udell, G. (1980). Reviewing the heffalump: Identifying potential entrepreneurs by personality characteristics. *Journal of Small Business Management*, 18(1): 11-18.
- Jackson, D.N. (1974) *Personality Research Form Manual*, Goshen.: Research Psychologists Press.
- Jackson, D.N. (1976) *Personality Inventory Manual*, Goshen, N.Y.: Research Psychologists Press.
- Jackson, D.N. & Guthrie, S.M. (1968) A multi-trait evaluation of the personality research form. Proceedings, A P A.
- Johnson, B. (1990). Toward a multidimensional model of entrepreneurship: The case of achievement motivation and the entrepreneur. *Entrepreneurship Theory and Practice*, 14(3): 39-54.
- Kilby, P. (1971) *Entrepreneurship and Economic Development*. New York, NY: Free Press.
- Lachman, R. (1980) Toward measurement of entrepreneurial tendencies. *Management International Review*, 20(2): 108-116.
- McClelland, D.C. (1961) *The Achieving Society*. Princeton: Van Nostrand.
- McClelland, D. (1965) Need achievement and entrepreneurship: A longitudinal study. *Journal of Personality and Social Psychology*, 1: 389-392.
- McGrath, R. MacMillan, I. & Scheinberg, S. (1992) Elitists, risk-takers, and rugged individualists? An exploratory analysis of cultural differences between entrepreneurs and non-entrepreneurs. *Journal of Business Venturing*, 7(2): 115-135.
- Mill, J.S. (1848). *Principles of Political Economy with Some of Their Applications to Social Philosophy*. London: John W. Parker.
- Olson, P. 1985. Entrepreneurship: Opportunistic decision makers. *Journal of Small Business Management*, 11(2): 25-31.
- Palmer, M. (1971) The application of psychological testing to entrepreneurial potential, *California Management Review*, 13(3), 78.
- Ray, D.M. (1986) Perceptions of risk and new enterprise formation in singapore: An exploratory study. In R. Ronstadt, J. Hornaday, R. Peterson, and K. Vesper (Eds.), *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College, 119-145.
- Schwer, K. & Yucelt, U. (1984) A study of risk-taking propensities among small business entrepreneurs and managers: An empirical evaluation. *American Journal of Small Business*, 8(3): 31-40.

- Sexton, D. & Bowman, N. (1983) Comparative entrepreneurship characteristics of students. In Hornaday, Timmons, & Vesper (Eds.), *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College, 465-478.
- Sexton, D.L. & Bowman, N.B. (1986) Validation of a personality index: Comparative psychological characteristics analysis of female entrepreneurs, managers, entrepreneurship students and business students. In R. Ronstadt, J. Hornaday, R. Peterson, and K. Vesper (Eds.), *Frontiers of Entrepreneurship Research*. Wellesley, MA: Babson College, 40-57.
- Timmons, J.A. (1978) Characteristics and role demands of entrepreneurship, *American Journal of Small Business*, 3, 5-17.

# LIFE CYCLE THEORY: NEW IMPLICATIONS FOR DEFINING ENTREPRENEURIAL TYPES IN DEVELOPING COUNTRIES

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## ABSTRACT

*In this paper, we present an extension of two previous studies of defining entrepreneurship (Jackson, Watts & Wright, 1993; and Carland & Carland, 1997) using the Product Life Cycle as a framing tool. The extension involves demonstrating the applicability in international developing markets. It is further proposed that future researchers to better understand developing nations' entrepreneurs as well as to support previous definitions of entrepreneurial activity in general use this framework.*

## INTRODUCTION

*"Because of the popularity of product and market development strategies as the fundamental basis for the growth of [many firms], the PLC concept provides an important conceptual tool across which one can examine [strategic management practices of entrepreneurial firms]." (Robinson and Pearce, 1986, p. 212)*

In the 1960s, researchers (Levitt, 1965; Buzzell, 1966; and Cox, 1967) lauded a framework that allowed for tracking the transition of a product through time-the Product Life Cycle (PLC). This concept had both its advocates as well as its opponents. From its humble beginning as a marketing tool, the PLC grew to be recognized as more of a managerial tool, and even as a means of framing various areas of research in the field of entrepreneurship.

This paper addresses the potential for using this well-grounded concept as a framework for the purpose of defining the entrepreneur in developing markets. A model for studying types of entrepreneurs is provided to direct future research efforts in these markets. To better understand the proposed model, it is necessary to examine several veins of past research. This review consists of looking at: foundational research on the PLC; current impetus in the area of international entrepreneurship in developing markets; and prior definitional studies of entrepreneurship that utilized the PLC's standard s-shaped curve.

## THE PRODUCT LIFE CYCLE

The concept of a "life cycle" within the context of business has been around for some time now. When Rogers (1962) wrote about innovation adoption, he really spoke about the demand-response side of what we call life cycles. Since that time a full literature has developed around the concept most often called the Product Life Cycle (PLC). The PLC concept has had its champions (Levitt, 1965, Buzzell, 1966, and Cox, 1967) and strong critics such as Dhalla and Yuseph (1975). Among its champions, there has been tacit admission of certain difficulties, but the discussion of these difficulties has led to even further development on the basic notion of the PLC. For example, Swan and Rink (1982) and Tellis and Crawford (1981) and others considered that the basic concept was applicable but that the cycle could take a number of different forms, dependent on the nature of the product and certain kinds of market and marketer behaviors.

Dhalla and Yuseph (1975) are definitely among the critics, even titling their paper "Forget the Product Life Cycle Concept!". They provided quite a different point of view that stressed that good strategic planning could cause PLC curves to behave very differently than they might otherwise and provided examples of product lives that seemed to defy the PLC concept.

Whether pro or con, the literature dealing with PLC has been a good literature in terms of the discussion of managerial implications. One might conclude that its main usefulness has been in that it is forward looking and purports to be anticipatory. In this view, the PLC concept is used to anticipate the necessity for change in strategic outlook over time. At the same time, the concept has also served a very useful pedagogical purpose in our business schools. It provides a very neat paradigm upon which professors of marketing can hang a fairly thorough discussion of integrative marketing programs and their change over time. In this more descriptive sense, the concept has been presented to nearly all college business students for a very long time now.

A closer look at the nature of the PLC concept might help us understand its robustness, even in the face of compelling argument and the production of counterexamples. Basically, it has a beginning and an end. It is bounded. It also has a middle that allows for a great deal of variability in the progression from beginning to end, as well as a great deal of variability in the expression of that progression. It is bounded and it is flexible as to use.

Understanding the usefulness of these properties, Tellis and Crawford (1981), as well as Dekimpe and Hanssens (1995) produced very compelling developments of the PLC concept by proposing one of the more dynamic perspectives on the use of the concept. The suggested linkage between biological phenomena and industry development phenomena definitely aids the understanding and even visualization of the concept. One important notion in the Tellis and Crawford paper is the notion of adaptability, as of an organism, of the collective activity of marketing managers and strategists.

The various discussions of the PLC, whether pro or con, have focused on what managers do. The actions of managers are seen as causing cycle phenomena, being reactions to cycle phenomena, or even postponing/avoiding cycle phenomena. In each case, the writers produced reasonable arguments for the point of view being presented. In a few cases, researchers hinted at the notion that concerns the other side of the PLC. In some cases, these writers, such as Levitt (1965) spoke of the market as the locus of the dynamics about which managers organize their efforts. Intuitively, most of us suspect that there is both a set of market phenomena and a set of

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reasoned marketing perspectives on those phenomena that have driven the argument and that underlie the reality.

The argument that looks at both sides of the PLC might look something like the following. A market exists around some need. That market is capable of a broad variety of marketplace behaviors with respect to solutions for the need. Astute business persons are able to learn or intuit that certain marketing actions can produce marketplace behaviors that can be profitable for the marketers. Different marketers choose to take different subsets of those marketing actions in the marketplace. The taking of those marketing action subsets produces some marketplace behaviors within the market. To the extent that the marketing actions are distinctly different from marketing actions taken previously, a subset of the market may coalesce around the "new" need solution. When that occurs, we would typically say that a PLC has begun. At the same time, we are also saying that a "new" market has emerged from one that was already in existence. When the new PLC begins and the new market begins to move away from the underlying market, a new set of dynamics and a coherent starting point for observing those dynamics is given to us.

The argument just presented provides a beginning for a Product Life Cycle. If the life cycle is truly new, it is because the product is truly new. While that point might produce arguments that would make us all old, what is important is we can argue for a PLC curve that focuses around this new configuration of marketing actions (typically focused in the properties of the product itself). At the same time, the PLC argument must rely on a new set of market reactions to the marketing actions. The underlying reason there are products is that there are uses (demand) for them. Products do not inhere the demand for themselves - markets do. Hence, the study of a PLC is a study not only of a set of market actions, but also, of a set of marketing actions. The PLC can be thought of as a context for managerial response to experienced and anticipated phenomena within a market. The PLC and its properties are, then, dependent on what happens or is expected to happen in some market. The market is, in turn, simply a reflection of demand for some product.

The market's demand for some product is not solely a matter of marketing actions. It is influenced also by other factors that influence the individual members of the market. For example, the emergence of some other set of marketing actions (e.g., a newer product) may well produce market actions that are far less dependent on the marketing actions of managers of the previous product. (Patton (1959), Levitt (1965, Dhalla and Yuseph (1975), and Swan and Rink (1982) spoke of prolonging the PLC through intelligent marketing actions, which might prohibit or retard the PLC of another product.) The main implication of these thoughts is that the marketing actions taken by a company or an entire industry might have a very strong influence on the actions of the market that company or industry serves. At the same time, though, the actions and reactions of the market will also have a very strong influence on the formulation and implementation of marketing actions on the part of the company and/or industry in question.

A major implication of this view of the PLC, or if you prefer, the MLC (Market Life Cycle) is that the MLC exhibits a more chaotic pattern of behaviors than does the PLC. This idea of underlying market dynamics was hinted at by Levitt as early as 1965 and was definitely implied by the work of Dekimpe and Hanssens (1995). In one way, the marketing actions taken by companies or whole industries can be viewed as a way of reducing the potential chaos exhibited in the behaviors of a market. Numerous implications of that statement could be developed. But most of those are outside the context of this paper.

One line is worthy of some development, however. The dynamics of action and reaction that are implied in the last paragraph place the company and/or industry in far more jeopardy than the market of taking a wrong action. If the market (or any given customer in the market) takes a "wrong" action, recovery is normally easily achieved. In fact, a "wrong" action may not be possible unless the market has an alternative to the product in question. On the other hand, a wrong action by a company may result in a loss of market share or even market presence.

By that logic, the company takes proactive marketing actions in the belief that it understands enough about market reaction (to the action) to make the risk worthwhile. To the extent the company takes such a proactive marketing action and the market reacts as predicted, the company has determined something about the future dynamics of that marketplace. In that sense, the company (and industry) is a part of the marketplace environment of the market and its members. The actions (and reactions) taken by the members of the market are, in turn, a major component of the context within which the company makes and implements its decisions. Again, to the extent market reactions to marketing actions of certain kinds are predictable, companies are able to effectively formulate strategic plans.

With this notion of Marketing Life Cycles (MLC) in hand, much of the dispute over the efficacy of the PLC concept can be reduced. The PLC is a good model of the future life of a product (maybe whole companies or industries) if the MLC is conformable to description in advance. To the extent the MLC is not predictable, the PLC concept will not behave well as a management tool.

Armed with a sense of the need to understand the future behavior of some market and the ability to translate that understanding into a set of marketing actions, companies should be able to move forward. The good news is that we are often able to understand how markets will react based on their history and an understanding of the other behavioral influences currently at work in the marketplace. Hence, the usefulness of the PLC concept and various derivatives of it.

If we accept the notion of some sort of underlying market phenomenology as the reason for the success or failure of marketing actions, can the same idea be applied in other ways? Put another way, can the emergence, development, evolution and demise of a market for some product be thought of as driving, or being highly correlated with, a PLC or some other marketplace phenomenon? Could one safely propose that marketing actions of any kind may work best in a give-and-take relationship with some market and the actions of its members?

## INTERNATIONAL ENTREPRENEURSHIP IN DEVELOPING MARKETS

*"All around this shrinking globe we see evidence of the entrepreneurial spirit. In tiny, developing nations we see entrepreneurship taking on the role of Prometheus and bringing fire to fuel economic growth...the Phoenix, rising reborn from its fiery nest to rekindle economic well-being." (Carland & Carland, 1996, p. 40)*

As the above quote suggests, we have seen a tremendous increase of visible entrepreneurial activity in developing markets. Unfortunately, researchers have not developed a common means of viewing the individuals responsible for this activity. As has been the case



within more developed areas of entrepreneurial activity throughout the years, researchers have chosen to focus on the process and not the "individual".

While careful examination of the collective research that has been occurring over the last several years does provide a glimpse into defining the "E", most of the studies lack a common thread. Thus, as has been the case for several decades, we continue to shoot arrows into the wall and then draw the target around the shots.

Many of the studies have focused on outcomes of self-venturing and on the internal mechanisms that have changed in these developing nations in terms of general economic development (Dana, 2000; Dilts, 2000; Wichmann, 1997; Gray, Cooley & Lutabingwa, 1997; Dana, 1997; Coleman, 1997; Tavakoli & McKiernan, 1999; Dana, 1999a, 1999b and 1999c; and Capaldo, 1997). The impetus for each of these studies is that the environment is the driver for entrepreneurial activity. By inference, changes in environment produce new entrepreneurial types.

Others have focused on previously identified entrepreneurial descriptors-those often founded in early trait research. Often these research endeavors have questionable samples and are focused on increasing governmental support for these characteristics (Dana, 2000; Morris & Zabra, 2000; Kuznetsov & Kuznetsova, 2000; Dana, 1997; Coleman, 1997; Dana, 1999a; and Brown & Coverley, 1999).

With both of the major groups above obvious progress is being made. The results, however, leave very few clues in terms of truly defining the entrepreneur.

As outlined above, many of the studies focus on the infrastructure necessary for enhanced venturing (whether small business or large). Dana (2000) suggests that in India until the mind set created by the combination of historical factors such as the caste system, British occupancy, cultural values, and government regulations are changed, then "E" spirit will be limited. Dilts (2000) gives greater credit to the external resources such as support agencies that must be in place to foster entrepreneurship. Likewise, Wichmann (1997) cites a similar requirement for self-venturing in the Pacific Rim. Kenya, according to Gray, Cooley and Lutabingwa (1997), is also limited in terms of economic advancement due to the economic environment of the country.

Others in the first group cite government policy or internal turmoil as the defining obstacle of "E" for their region (Dana, 1997 in Uruguay; Coleman, 1997 in Poland; Dana, 1999a in Greece and 1999b in Israel; Capaldo, 1997 in Southern Italy; and Ivy, 1997 in Slovakia). Little attention in any of these was given to the individual as entrepreneurs.

The second group that attempted to look at the individual involved in venture creation did so from a distance. Unfortunately, limited rigor and scope in these studies did little to increase the generalizability of their findings.

Morris & Zabra (2000) in studying black venturers in South Africa had mild support in their limited sample for intolerance to ambiguity, some propensity for risk, and an internal locus of control. Kuznetsov and Kuznetsova (2000) found that in their sample of one, the owner was ambitious, independent, motivated and innovative. Coleman (1997) found self-venturers in Poland to be older, middle-class, and better-educated, good communicators with a strong grasp of international languages. An internal locus of control was seen as important in Scottish manufacturing firms by Tavokoli and McKiernan. Innovation was seen as a major determinant of success in Greece by Dana (1999a), in India by Dana (2000) and in Argentina by Dana (1997).

While most of these studies do provide insights, they miss a tremendous opportunity to expand the understanding of the "E". If a unified means of exploring this untapped market of

new venture phenomena can be created, clearly our understanding of entrepreneurship will be enhanced.

### **SMALL BUSINESS TYPES AND LIFE-CYCLE THEORY**

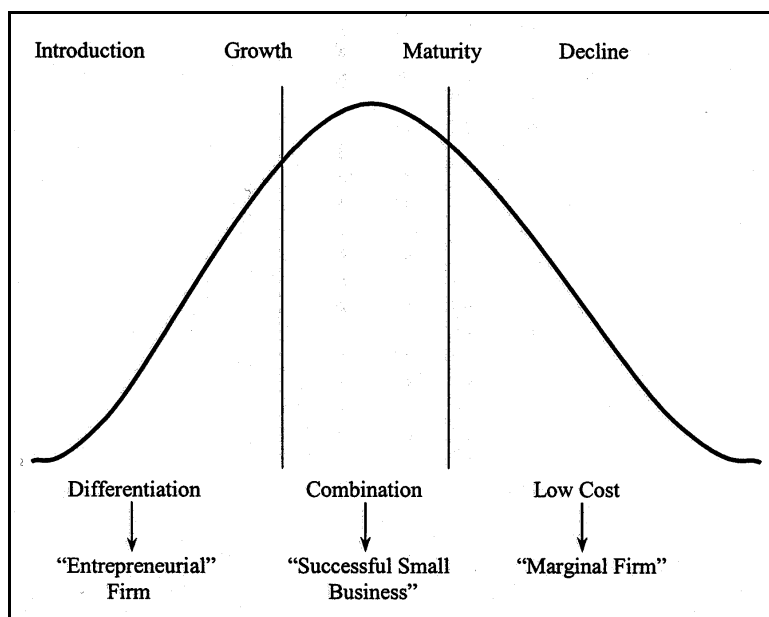
Even though entrepreneurial firms are an inherent part of the PLC as translated into organizational life cycle theory, few have drawn this conclusion. Based upon the theory, firms must transition from entrepreneurial firms to larger bureaucratic entities. In light of this fact, it is rather surprising that few have explored the possibilities.

The two most widely cited works in this area included the works of Smith and Miner (1983) and that of Robinson and Pearce (1986). While each group pursued different paths in their studies, both recognized the relevancy of the concept.

The Robinson and Pearce study chose to focus of the strategic attention small business owners would give it light of where their products were on the life cycle. While interesting the study provided little insight into the individuals involved.

Smith and Miner, on the other hand, clearly recognized that the owner's perspective varied depending upon where the firm was in their life cycle. The authors began to explore individual differences in what they termed "craftsman" versus "opportunistic" entrepreneurs. Their study, however, seemed to stop with the idea of what motivates the individual, rather than the individual themselves.

While some papers in the area of life-cycle theory have suggested the relationship of the concept to small business types, one group (Jackson, Watts & Wright, 1993) specified a direct relationship between these concepts. As seen in Figure 1 below, the elements of the PLC were directly related to three types of small businesses.



To summarize that relationship, Jackson et al suggest that three types of small business can be classified along the PLC continuum. These three types include the true entrepreneur, the successful small business owner and the mom and pop small business owners termed "marginal firms". To better understand the focus of the current research, it will be helpful to examine in detail the characteristics of each of these types.

Jackson et al described the "entrepreneur" as that small business owner that would likely search for innovation and be engaged in discontinuous growth activities. According to this model, if the entrepreneur was successful, they would either be inclined to pursue another venture or to take the existing venture into a new life cycle via new innovations-regenerating the standard s-shaped curve. A less likely but possible third alternative would be for the owner to remain with the existing venture even in the maturity stage-thus to change personally. The authors also concluded that this type correlates directly with what Michael Porter (1980) termed focus differentiation.

The next type of small business-the successful small business owner would be more content with the status quo of the life cycle (late growth and maturity). They would be more interested in minimizing variability of profits and thus ensuring long-term stable returns. They are better suited for incremental changes and would generally serve as active or inactive owners. This type, according to the model would relate to Wright's (1987) combination low-cost/differentiation niche strategy.

The final small business type would be the "marginal" small business owner. This group has elected either to enter or stay in a declining industry. Returns would typically be marginal at best due to the state of the industry. They would, as Porter (1980) suggests, enter the venture with the lowest possible investment (under capitalization), and/or keep operating expenses (salaries, rents, etc) as low as possible. Porter (1980) and Wright (1987) would refer to this type as low-cost focus/niche.

In another research effort that involved (at least visually) the separation of small business types, Carland and Carland (1997), also identified three small business types. Although Carland

and Carland did not make direct reference to the life-cycle principle, they did come to very similar conclusions about small businesses while using the s-shaped curve continuum. As is seen in Figure 2, their representation of small business types parallels in many respects the above comparison.

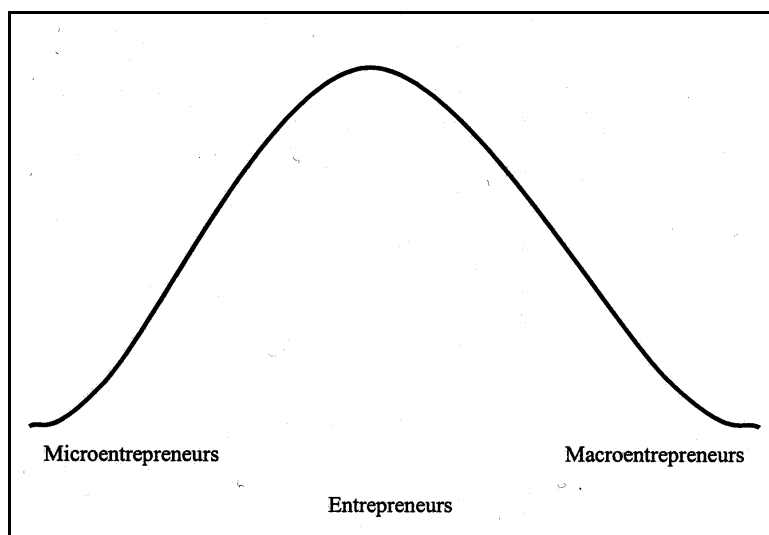
According to the Carlands, the continuum moved from the "macroentrepreneur" who was characterized by innovation and growth. The "entrepreneur" was more concerned with a steady livelihood and enhanced markets. Finally their "microentrepreneur" represented the family business owner who enjoyed the personal freedom of self-venturing.

Based upon the terminological characteristics of each small business type in these two research endeavors, the following relationships can be drawn:

<b>Table 1</b> <b>Entrepreneurs Defined</b>		
Column 1	Column 2	Column 3
PLC Stage	Jackson et al	Carland & Carland
Early	Entrepreneur	Macroentrepreneur
Mid	Successful Small Business	Entrepreneur
Late	Marginal Small Business	Microentrepreneur

In addition, it can be induced that the entrepreneur and macroentrepreneur would focus their efforts primarily in the introduction and early growth stage of the life cycle. The successful small business owner and the entrepreneur would be found in higher percentages in the late growth and maturity stage of the life cycle. The mom and pop and microentrepreneur would likely be dominant in the decline stage.

Both concepts above offer intuitively appealing implications especially in regard to our U.S. market. When applying this logic to markets in developing nations some clarification is in order.



### PROPOSED MODEL

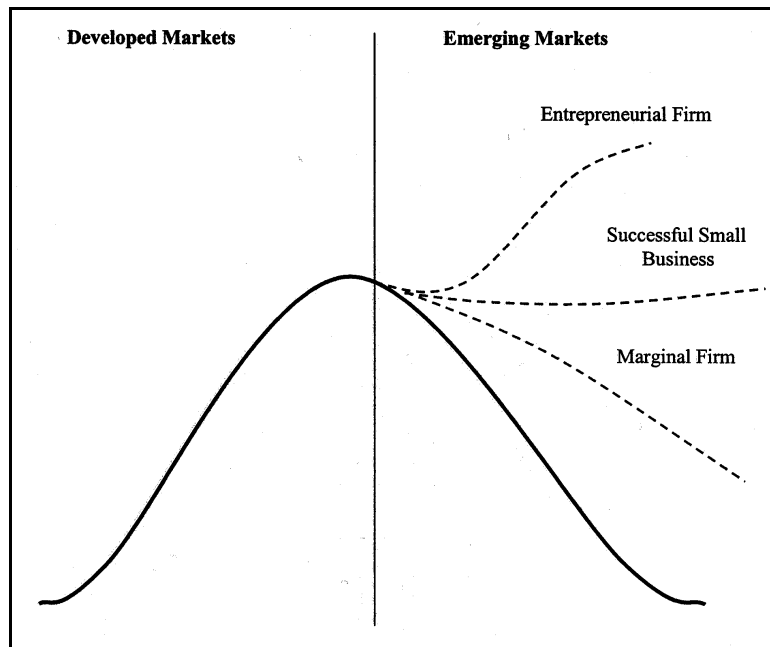
The prior model of Jackson et al provides the foundation for a framework to explore entrepreneurs within international developing markets. This original model, however, assumed normal market development, as it exists in the U.S. today. It views economies as being composed on new ventures early in their life cycles, others during periods of growth and maturity, and finally those late in their life cycle or in decline.

Based upon our earlier discussion of market life cycles it is easy to surmise that in developing markets, many venturers do not have the luxury of assuming the above normalcy. For most of these venturers, a large number of opportunities are found late in a product's life cycle. This is often due to the fact that products that have transitioned through the life cycle continuum in developing markets are just now being introduced into the developing markets. If the premise of the original Jackson et al model was applied, then most venturers would be classified as marginal "mom and pop" small business owners-thus limited a wide classification of entrepreneurial spirits. Obvious modifications are indeed warranted.

As Figure 3 suggests, the venturer in foreign developing markets can still be classified under the original framework if we look to the outcomes of their venturers. If the venturer takes the product to new heights in their own market through innovation and creativity regardless of the limited support or financial backing, they would be classified as the "entrepreneur". In addition, we need to determine if the individual is engaged in multiple ventures and thereby a serial entrepreneur (Carland & Carland, 2000).

On the other hand, if the venture is grown through a reasonable level of existing personal wealth only to milk the market and ensure a steady inflow of cash for personal financial freedom then this individual could be classified as "successful small business" owner.

Finally, if the venturer uses the firm a minimal sustenance they clearly fall under the last classification-"marginal" mom and pop small business owner.



In developing markets we should still witness all three entrepreneurial types, but their numbers will be limited in certain categories. This restriction will often occur due to the lack of support systems we have become accustomed to in the United States. Thus, the concept of "serial" entrepreneurs (Carland and Carland, 2000) will be much more difficult to substantiate. Further, again because of the limited long-term economic success of many of these regions, we would anticipate seeing fewer of the "successful small business" owners. This is not to say that there are limited numbers of entrepreneurs, but only that many have yet to surface.

Based upon the three small business types, the marginal firm will probably be the most prevalent type under first examination. Here, as described by Jackson et al, the venturer will have entered with minimal investments and attempted to maintain the lowest possible operating costs.

However, it is proposed that many entrepreneurs initially seen as the marginal firm will actually evolve (often rather quickly) into one of the other two types. As Figure 3 suggests, some entrepreneurs will develop new products, new means of delivery or simply new uses of the product and thereby engage in discontinuous growth of these ventures-thus the "entrepreneur". Or because of their drive for financial rewards and personal freedom stick with a venture for the long-term security-the successful small business owner. Only time will tell.

From this brief analysis, it is apparent that the previous model (Jackson et al) still provides an intuitive alternative to studying the entrepreneur in developing markets. First, the product being offered must be identified in terms of its position on the life cycle continuum. Next, the actual direction the individual takes the operations must be clarified.

## IMPLICATIONS

The U.S. economy is moving in a direction that will soon not allow for complete classification of all entrepreneurial types. This will occur when the "marginal" mom and pop firms, because of increased pressure even in the small business community for economies of scale, can no longer compete. Few industries today have not been touched by the economic principle of consolidation. We are already witnessing this in some communities where mega-stores such as Walmart have forced local merchants to retreat.

In light of this observation, the markets in developing nations may offer the only true picture of all three types. We cannot, as a research community, ignore this fact. Future research, whether using the proposed model above or other tools that closely examine the individual behind the venture must keep this fact in mind. If researchers elect to examine only the process and not the individual in these markets, then the potential to enhance the robustness of the discipline will be lost.

## REFERENCES

- Baldacchino, G. (1999). Small business in small islands: A case study from Fiji. *Journal of Small Business Management*, 37(4), 80-84.
- Buzzell, R. (1966). Competitive behavior and product life cycles. In *New Ideas for Successful Marketing*, John Wright and Jac Goldstucker, eds., American Marketing Association.
- Capaldo, G. Entrepreneurship in southern Italy: Empirical evidence of business creation by young founders. *Journal of Small Business Management*, 35(3), 86-92.
- Carland, J. W. Jr. & Carland, J. C. (1997). Entrepreneurship: An American dream. *Journal of Business & Entrepreneurship*, 9(1), 33-45.
- Carland, J. C., Carland, J. W. & Stewart, W. H. (2000). The indefatigable entrepreneur: A study of the dispositions of multiple venture founders. *Proceedings: Association for Small Business & Entrepreneurship*, Bill Walden (Editor), East Central University: Ada, Oklahoma, 168-180.
- Coleman, S. (1997). Profiles of Polish entrepreneurship. *Journal of Small Business Management*, 35(2), 111-117.
- Cox, W. E. (1967). Product Life Cycles as Marketing Models. *Journal of Business*, 40(4), 375-384.
- Dana, L. P. (2000). Creating entrepreneurs in India. *Journal of Small Business Management*, 38(1), 86-91.
- Dana, L. P. (1997). A contrast of Argentina and Uruguay: The effects of government policy on entrepreneurship. *Journal of Small Business Management*, 35(2), 99-104.
- Dana, L. P. (1999a). Preserving culture through small business: Government support for artisans and craftsmen in Greece. *Journal of Small Business Management*, 37(1), 90-92.
- Dana, L. P. (1999b). Small business in Israel. *Journal of Small Business Management*, 37(4), 73-79.
- Dana, L. P. (1998). Small but not independent: SMEs in Japan. *Journal of Small Business Management*, 36(4), 73-76.
- Dekimpe, M. & Hanssens, D. (1995). Empirical generalizations about market evolution and stationarity. *Marketing Science*, 14(3), G109-G121.
- Dhalla, N. & Yuseph, S. (1975). Forget the product life cycle concept! *Harvard Business Review*, 54 (Jan.-Feb.), 102-110.
- Dilts, J. C. (2000). Volunteers assisting SMEs in Russia: The citizens democracy corp. *Journal of Small Business Management*, 38(1), 108-114.
- Gray, K. R., Cooley, W. & Lutabingwa, J. (1997). Small-scale manufacturing in Kenya. *Journal of Small Business Management*, 35(1), 66-72.
- Ivy, R. L. (1997). Entrepreneurial strategies in post-communist Europe: A survey of SMEs in Slovakia. *Journal of Small Business Management*, 5(3), 93-97.
- Jackson, W. T., Watts, L. R. & Wright, P. (1993). Small businesses: An examination of strategic groups. *Journal of Business & Entrepreneurship*, 5(1), 85-96.



- 
- Kuznetsov, A., McDonald, F. & Kuznetsova, O. (2000). Entrepreneurial qualities: A case for Russia. *Journal of Small Business Management*, 38(1), 101-107.
- Levitt, T. (1965). EXPLOIT the Product Life Cycle. *Harvard Business Review*, 43 (Nov.-Dec.), 81-94.
- Morris, M. H. & Zabra, S. (2000). Adaptation of the business concept over time: The case of historically disadvantaged South African owners/managers. *Journal of Small Business Management*, 38(1), 92-100.
- Patton, A. (1959). Stretch your product's earning years. *Management Review*, (June), 9-14, 67-79.
- Robinson, R. B. & Pearce, J. A. (1986). Product life-cycle considerations and the nature of strategic activities in entrepreneurial firms. *Journal of Business Venturing*, 1, 207-224.
- Rogers, E. (1962) *Diffusion of Innovation*, Free Press.
- Smith, N. R. & Miner, J. B. (1983). Type of entrepreneur, type of firm, and managerial motivation: Implications for organizational life cycle theory. *Strategic Management Journal*, 4, 325-340.
- Swan, J. & Rink, D. (1982). Fitting market strategy to varying product life cycles. *Business Horizons*, Jan.-Feb., 72-76.
- Tavakoli, M. & McKiernan, P. (1999). SMEs strategic reaction to the 1992 single market announcement: Evidence from Scottish manufacturing firms. *Journal of Small Business Management*, 37(1), 79-89.
- Tellis, G. & Crawford, M. (1981). An evolutionary approach to product growth theory. *Journal of Marketing*, 45 (Fall), 125-132.
- Wichmann, H. Jr. (1997). Private & public trading companies within pacific rim nations. *Journal of Small Business Management*, 35(1), 62-65.

## SUBMISSION INSTRUCTIONS

There are two approaches to submitting a manuscript to the double blind, peer refereed journal review process. First, one may submit a manuscript which has never been presented or published to an Allied Academies Conference as an awards consideration paper. Please note that the Internet Division option ensures that physical attendance at a conference is not required. The second approach, which is required if a manuscript has been presented at a previous conference, is to submit a paper for direct consideration. Both approaches are described below.

### AWARDS CONSIDERATION APPROACH

The policy of the Allied Academies is to double blind, peer referee conference papers which are submitted for awards consideration. Currently, a maximum of 25% of conference papers will be selected by the referee panels for publication in one or another of the Allied *journals*.

Please note that the following instructions are not conference specific and you must look at the particular conference call page(s) for due dates and deadlines ([www.alliedacademies.org](http://www.alliedacademies.org)). Failure to follow these instructions can result in your submission not being processed properly.

**Step 1.** Submit a One Page Abstract. To submit a manuscript for consideration for presentation at the Conference, you must first submit an ABSTRACT using ONLY the on-line Abstract Submission Form. These abstracts are considered by a committee which reviews the potential value of the paper and notification of the results are returned by e-mail to the author(s) within a few days.

**Step 2.** Submit the Full Manuscript for Awards Consideration. Award winners receive a plaque and the manuscripts will be published in the appropriate *journal*. Upon receipt of an acceptance letter from the Abstract submission, a full manuscript can be submitted for award consideration. At least one author per paper must register at the time of submitting the paper for award consideration and these manuscripts must be submitted via E-mail and be formatted in accordance with our award submission guidelines.

The file should be named according to the authorship and Academy, and signify that it is an award submission (i.e. Smith-James-White-aafs-award ). The paper should be single spaced and include a title page that includes the contact information of the authors and the intended Academy. There is no page limitation on award submissions, but make sure that the file does not exceed 2 MB in size. You must include a cover page at the beginning of the document with the full names, affiliations, addresses, telephone and fax numbers, E-mail addresses of all authors, and the identity of the corresponding author.

**Step 3.** Submit the Registration and Scheduling Forms. As indicated above, registration is required before a manuscript can be considered for an award. An on-line Scheduling Form must be completed by every participant and one form for every paper. This form indicates when the presenting author intends to present the manuscript, or whether it is intended for the Internet Division. This form is required to prepare the schedule because the Allied Academies does not ASSIGN presentation times. It allows presenters to choose their own times.

**Step 4.** Submit the Proceedings Version of the manuscript. The file should be named according to the authorship and Academy, and should signify that it is a proceedings version (i.e. Smith-James-White-aafs-pro ). The paper should also be formatted according to the Publication Guidelines.

Awards submissions will be double blind, peer refereed, and ranked by the committee. The top 25% of manuscripts in each area will be selected for publication and author(s) will receive official acceptance letters at the Conference. These papers will generally appear in the next regularly scheduled issue of the appropriate journal.

### **DIRECT SUBMISSION APPROACH**

The policy of the Allied Academies is to double blind, peer referee papers which are submitted for direct journal consideration. Currently, a maximum of 25% of these papers will be selected by the referee panels for publication. This process follows the traditional approach and generally requires three to four months. Manuscript revisions are commonly required.

Manuscript submitted in this fashion may have been presented as conference papers in the past. If the manuscript was presented at an Allied Academies Conference, please so indicate in the e-mail letter accompanying the submission.

**Step 1.** Submit the article through the Direct Journal Submission process. All direct submissions should come through the Executive Director in the form of an E-mail attachment and be completed in accordance with our direct submission guidelines. These must be accompanied by the Direct Submission form. Upon receipt, the Executive Director logs in the manuscript, acknowledges receipt via e-mail, and forwards the manuscript to the appropriate Editor for referee purposes. The web page indicates the names of the Editors for each of the journals, and interested author(s) may correspond with an Editor at any time. However, the submission must flow through the Executive Director to ensure appropriate follow-up and control.

For purposes of the referee process, manuscripts do not have to be prepared in any particular format. However, they must be accompanied by completion of the Direct Submission form which will serve as our tracking form. Direct submissions must be named as the Contact Author's last name and intended Journal (i.e. Smith-aafsj). The paper should be single spaced and include a title page that includes the contact information of the author(s) and the intended Academy. There is no page limitation on direct submissions, but make sure that the file does not exceed 2 MB in size. For blind review purposes, please remove all of the authors' information (names, affiliations, and E-mail addresses) from the paper so that only a title appears on the top of the first page (the cover page should contain all of the contact information). The Executive Director will forward the manuscript to the appropriate Editor for the referee process. Editors report back to the Executive Director, who will correspond with author(s) concerning the results of the referee process.

**Step 2.** Submit Accepted Manuscripts for Journal Publication. When a manuscript has been accepted for publication, author(s) will receive official notification by e-mail in pdf format. At that time, accompanying instructions outline the process which includes the resubmission of a properly formatted document, and completion of a permission to publish (because Allied Academies does NOT take an assignment of copyright). ALL authors must sign the Permission

Form, and ALL authors must be, or must become, current members of the Academy which sponsors the journal in which the paper will appear.

### **WEBSITE INSTRUCTIONS**

More complete instructions, together with Conference information, deadlines, and other pertinent information is displayed on the Allied Academies home page: [www.alliedacademies.org](http://www.alliedacademies.org). Questions or inquiries may be directed to the Executive Director at [info@alliedacademies.org](mailto:info@alliedacademies.org).

As the foregoing indicates, the Allied Academies has moved to an entirely digital process. Correspondence to authors is accomplished by PDF attachments which are prepared as official Allied Academies' documents. This process not only results in faster, more efficient communications, it creates a cost advantage for all parties.



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## PUBLICATION GUIDELINES

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### ABSTRACT

*This document describes the preparation of manuscripts for publication in Proceedings and Journals published by the Allied Academies. To illustrate our needs, this manuscript has been prepared in the correct format. These guidelines are for publications only. We will accept manuscripts for REFEREE purposes in ANY format. Upon acceptance for publication, we will ask that you convert the manuscript to this model.*

*In following sections we will explore the various aspects of preparation for publication which will make including your manuscript in a given volume easier and faster. First, we discuss the appearance of the text, then citations, formulae, tables, figures and illustrations, and references. These sections are followed by specific guidelines for cases, including case description, synopsis and instructors' notes guidelines. The document then turns to the distinctions between proceedings and journal versions of manuscripts, and addresses length requirements. Finally, we discuss the availability of assistance for manuscript preparation through a publication service which we have arranged for authors with limited time and/or secretarial assistance.*

### INTRODUCTION

Our major problems come from authors attempting to make a manuscript visually attractive. That is a process which is handled by the publishers. We only need the content, and we need it as free from formatting as is possible. There are special problems associated with preparation in Word as it imbeds formatting commands in the text at multiple locations.

As you can see, we desire the manuscript to begin with a title which is in all caps, and followed by author(s) and affiliations. Use 12 point, Times Roman type and let all headings throughout the manuscript be capitalized. Do not use honorifics or other details in the author(s) section. Do not center any of the text.

All manuscripts should begin with an Abstract EXCEPT CASES. For cases, there are special requirements which will be discussed in a later section. Italicize the abstract and limit it to 200 words. The heading should be the word, abstract, at the left margin, in all caps, without bolding, or font changes. Do NOT italicize the heading.

### PREPARATION PROBLEMS

Many authors have explained to us that they have limited secretarial support, and simply lack the time to be able to prepare a manuscript in accordance with our guidelines. We have arranged for assistance for people in such circumstances. We can refer authors to a publishing service which will prepare manuscripts to these exact guidelines, regardless of the current appearance, word processor, or any other issue. The fee for this service varies, depending upon the complexity of the individual manuscript, but we can arrange a quote for the cost. This

service can handle an entire manuscript, or simply a single figure, table, illustration, section of formulae, etc.

If you are interested in obtaining a quote, e-mail us at [info@alliedacademies.org](mailto:info@alliedacademies.org). We will reply with instructions as to how you can obtain a bid, and handle the preparation.

## WORD PROCESSORS

For desk top publishing purposes, we utilize Word Perfect. However, we realize that many authors employ Word for preparation of their manuscripts. Converting from one format to another is NOT helpful. All manuscripts prepared in Word should be submitted in that format. We will handle the translation issues.

Macintosh word processors do present major problems. If a manuscript has been prepared by such a system, we ask that authors seek translation assistance in their universities. If that cannot be arranged, please contact the Executive Director by e-mail for more specific instructions.

In general, all versions of Word Perfect or Word are acceptable. However, other word processors are not acceptable. If you use some other software, either arrange for translation in your university or contact the Executive Director for assistance and more specific instructions.

## BODY OF THE MANUSCRIPT

After the introduction, the body of the manuscript should follow. Use single spacing throughout, and remember not to change the type face, justifications, margins, or enter any other commands into the manuscript. Make all headings in capital letters, as shown. In most cases, there should NOT be subheadings. These simply breakup the flow of the manuscript and should only be used when the complexity of the exposition is high. In most cases, further headings are the only aspects required to keep the manuscript clear and clean. If you MUST use subheadings, they should be typed at the left margin with initial caps.

Do not double space between paragraphs, and indent the first sentence in each paragraph.

As you can see from this example, you should double space around all headings. DO NOT USE A PARAGRAPH STYLE COMMAND. Indent the text with a tab. Style commands of any type remain in a document from the point of introduction, right through to the end. Since the Proceedings or Journal will be compiled into a single file, commands introduced in one manuscript affect all the others. For example, a FIRST LINE INDENT will affect every line in every new paragraph which follows, even if that paragraph begins with a TAB. Every style command functions that way. Please do not use them.

If you desire to use offset material in the text to highlight a list of items, a quote, a hypothesis, findings, or anything else, please remember that the PARAGRAPH STYLE COMMANDS should NOT be used. That means that you should NOT use bullets or automatically generated line or paragraph numbers. These stay in the document and affect all manuscripts which follow. To highlight information, just double space around it, and change its font to 10 point.

*To highlight material, double space around it;  
do not indent it;*



*drop its font to 10 point;  
you can italicize it, if you desire;  
and, we will put the material in a box to illustrate its importance.*

If you really want the highlighted material to be NUMBERED, then you MUST put the material in a TABLE. We will talk about tables in a later section. At this point, please remember that if you allow the word processor to arrange the material in your text, it accomplishes this through a format command which will affect every manuscript behind yours in the volume which the publishers are producing. Even worse, conflicting commands in various manuscripts can cause major problems.

## CITATIONS AND FOOTNOTES

We use APA style for all of our publications. The American Psychologist's Association Style Manual does not employ footnotes. Instead, a citation is handled in the body of the text (Carland & Carland, 1984), by putting the last names of the authors, followed by the year of the publication within parentheses. If there are multiple citations with a single sentence then separate the articles with a semicolon (Carland & Carland, 1984; Stewart, Carland & Carland, 1997). If the citation occurs at the end of the sentence, it should be INSIDE the period. Please note that the citations use ampersands, NOT the word, "and."

Please try NEVER to use FOOTNOTES. Word processors create footnotes according to a pattern which places them at the end of the document and counts from the first page of the document. That means that they blend between manuscripts. Since we use APA style, the only need for footnotes is more explanatory information. That can be inserted parenthetically (that is, one can insert explanatory information in a paragraph like this). If you MUST use a footnote, you MUST type in the superscript (like this <sup>1</sup>) and you MUST type the footnoted material at the END of your manuscript under the heading ENDNOTES. (It can never appear at the bottom of a page because that would interfere with footers and pagination).

## FORMULAE

One of the major problems which we face in publishing manuscripts is the appearance of mathematical formulae. Based on a new discovery and updated software, we can now use formulae created with formulae generators. Avoid using formulae in a sentence and be sure to define the variables in the formulae box along with the equation(s). You must AVOID USING SYMBOLS IN THE BODY OF THE TEXT. Refer to variables by name in the body of the text.

If you feel that you must employ symbols, then use only English letters.

## TABLES

Tables which contain only simple data are best handled if you just present the material with tabs separating it and let us create the table. Type it at the left margin, reduce its size to 10 point, and separate columnar data with tabs. DO NOT CHANGE THE TAB DEFAULT SETTING.

Table 1: Title of the Table

Column 1	Column 2	Column 3 *
Descriptive Information	Data	Data
More Descriptive Information	Data	Data
* Source of Data or Explanation of Data		

When we find material like this, we will insert it into a table and display it in an attractive mode. More complex data should be prepared as a table in Word, or in Word Perfect. If your tables are too complex to fit on a single page in portrait mode, we can drop the font size to 9 point, but if you need to go lower than that, you need to insert the material into a table and we will try to handle the adjustments. For example, consider the following tabled material.

Table 2: Title of the Table														
Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7	Column 8	Column 9	Column 10	Column 11	Column 12	Column 13	Column 14	Column 15
Descriptive Information	1.0	3.0	5.0	7.0	9.0	11.0	13.0	15.0	17.0	19.0	21.0	23.0	25.0	27.0
More Descriptive Information	2	4	6	8	10	12	14	16	18	20	22	24	26	28
Source of Data or Explanation of Data														

When we find a table like the preceding, we will convert it as follows into a more attractive mode and clearer interpretation. However, if you attempt to do the same thing, the formatting which you introduce in your efforts will make our job much more difficult.

Table 2: Title of the Table	
Column 1	