

ENTREPRENEURIAL TENDENCIES: EVIDENCE FROM CHINA AND INDIA

Barbara K. Fuller, Winthrop University
Martha C. Spears, Winthrop University
Darrell F. Parker, University of South Carolina Upstate

ABSTRACT

Discussed in this paper is the entrepreneurial intent of two cultures, China and India. The dichotomy exhibited in these two societies is vast--the history of the Chinese mores is of order and harmony with a defined hierarchy whereas the proud tradition of India exhibits a culture of pluralism, debate and dissent. Recent emerging markets have encouraged the people of both these cultures to proactively seek new opportunities, convert resources into marketable goods, and bear the risk associated with achieving profits. The risk-loving attitude of these entrepreneurs correlates with internal locus of control.

JEL: M1; M2; M3; N2

KEYWORDS: Entrepreneurship, global, economic development

INTRODUCTION

Economic activities are a factor in determining the development of any society; therefore, many countries promote entrepreneurship as a way to drive economic development (Rao, 1985). One of the central characteristics of entrepreneurship is a need for personal achievement. McClelland in 1961 was the first researcher to develop the social psychological inquiry into the predictors of entrepreneurship with his classical study of the need for achievement. The need for achievement in his Needs Theory concept links to risk-taking, individual responsibility, and entrepreneurial spirit and success. All are qualities associated with entrepreneurship. Achievement motivation is the result of using these concepts to initiate business activities for economic improvement. Subsequent studies have revealed that one concept of achievement motivation, internal locus of control, is an important characteristic of entrepreneurial tendencies (Ahmed, 1985). The concept of locus of control, developed by Julian Rotter in 1966, was devised to assess the extent to which individuals can deal with or control events that affect them (Rotter, 1966, 1990).

A type of personality analysis, locus of control refers to the way a person perceives the outcome of their efforts. A person with external control feels there is no personal control of outcomes while a person with internal control anticipates that they have control over the outcome of their efforts. According to Jungian psychological theory, different personality temperaments receive and process information differently. Personality types linked to decision-making correlate with the social dimension of market exchange as noted by Wright, Kacmar, McMahan & Deleeuw (1995). Being able to determine an individual's personality type gives some insight into how they will react in certain situations, how their temperament, character, and personality configure, and how they are predisposed to certain actions and attitudes. Individual personality determines communication practices through which individual needs are shaped and decisions made.

The Internal-External Locus of Control Scale developed by Rotter in 1966 forces choices between statements conveying internal locus of control and those conveying external locus of control. People with a strong internal locus of control believe they have a command over their environment. They see a reasonable chance of success and change is of little concern. Even if change arises because of external

causes, a person with a high internal locus of control believes they can influence the impact of change and feel confident with their coping skills. Those with a strong external locus of control, on the other hand, are more inclined to believe that success arises from luck, accident or coincidence. Psychologists expect a person's locus of control, or general outlook on life, to play a primary function in developing a person's conception of self. Locus of control and behavior patterns link in a number of different areas. Spector in 1982 developed the locus of control scale with a more economic perspective (Blau, 1993, Orpen, 1992, Spector, 1982, 1988).

In a review of more than forty years of research, over 4600 citations of locus of control have appeared in the social and psychological literature (Rotter, 1990). Clearly, the construct has drawn a great deal of research interest. The majority of literature indicates a positive relationship between internal locus of control and entrepreneurship (McClelland 1961, Durand & Shea 1974, Rao 1985, Venkatapathy 1984, Boreland 1974, Brockhaus 1975, Anderson 1976, Pandey & Tiwari 1979, Brockhaus & Nord 1979, Mescon & Montanari 1982, Cromie & John 1983, Shapero 1975, Chay, 1993). Durand and Shea (1974), Cromie, Callahan, and Jansen (1992), and Bonnet & Furharn (1991), note that those with internal locus of control are more likely to pursue entrepreneurial activities and entrepreneurs score higher than the general population in internal locus of control (Diaz & Rodriguez, 2003). Orpen (1992) suggests that internals tend to have higher levels of job involvement than externals and internals are more satisfied with a participative management style than are externals. Hammer and Vardi (1981) also suggest that internals are more active in taking charge of their own careers than externals.

Studies focused exclusively on students show positive relationships to an internal locus of control. Brockhaus (1975) found that students who have intentions to become entrepreneurs scored high on internality compared to those who had no such intentions. Boreland (1974) indicates students scoring high on internal locus of control have a higher expectancy of starting a company. Bonnett & Furnham (1991) when surveying a group of adolescents found that an internal locus of control and a strong belief in hard work were associated with an interest in entrepreneurship, whereas a need for achievement and parent nurturance are not related. While the majority of research supports a positive relationship between internal locus of control and entrepreneurship and entrepreneurial intentions, opposing viewpoints have been reported (Blanchflower & Oswald 1998).

Although it is difficult to identify the nature of entrepreneurship, research suggests that behaviors characteristic of entrepreneurs include being proactive in seeking new opportunities, finding innovation solutions to problems and opportunities, converting resources into marketable goods, striving to achieve profits, and most importantly, the willingness to bear the risk associated with these characteristics (Cromie, 2000, Cockran, 1969, Hull, Bosley & Udell, 1980, Carland, Hoy, Boulton, and Carland, 1984, Chell, Haworth, and Bearly 1991). This risk-loving attitude correlates with positive locus of control. Persons with an internal locus of control are more perceptually alert and engaged in spontaneous learning, and thus should be able to find opportunities others have overlooked (Gilad, 1982). Miller, Kets de Vries and Toulouse (1982) found internal executives employ strategies of complex product-market innovation, risk taking, environmental scanning, and planning for the future, characteristics are often associated with entrepreneurship. These relationships are strongest when the executive is associated with a small firm that he can significantly influence or when the organization operates in a dynamic environment where quick adaptation is required. In their discussion of entrepreneurial ego Kuratko and Hodgetts (2004) claim that entrepreneurs have a strong drive to control both the venture and their own destiny, often spilling over into an obsession with controlling everything. Because of this strong will to control, entrepreneurs are the first to recognize when there is an indication of control by others and often show resistance to such control unless they are involved in developing the process or structure.

This study investigates at the relationship between locus of control and entrepreneurial tendencies in China and India. The paper starts with a literature review that leads to an in-depth look at each culture.

Based on the Entrepreneurial Orientation Inventory survey instrument, the results capture the relationship of internally or externally oriented locus of control on various entrepreneurial activities. The conclusions reveal that entrepreneurial activity flourishes in both cultures, but exhibit different characteristics across the two countries.

LITERATURE REVIEW AND BACKGROUND

The Global Entrepreneurship Monitor (GEM) edited by Bosma, Jones, Autio & Levie (2007) suggests that those countries which support property rights, monetary stability, respect and enforcement of the rules of law, legal and financial transparency, market openness, and a fair competitive environment foster entrepreneurial activity. Although these activities may take many forms, each country is unique and must configure its own entrepreneurial portfolio. Research by Lee and Peterson (2000) supports the notion that in general entrepreneurial activities tend to be more compatible with the values and norms of some cultures than with others.

Khanna (2008) summarizes the dichotomy exhibited between China and India. A traditional of debate, dissent and pluralism identifies India's culture heritage whereby China's heritage developed with order, harmony and hierarchy. Indian workers tend to have a higher internal locus of control (Carment 1974) and often score at the most extreme point of internality when compared to other countries (Parsons & Schneider 1974). However, recent research indicates that sexual and religious beliefs may affect Indian internal scores (Khanna & Khanna 2001). Asians tend to score higher on control measures than Indians but lower than Americans and other Western nations (Hamid, 1994, Hui, 1982, Smith et.al. 1995). Rothbaum, Weisz & Snyder (1982) suggest that when assessing locus of control across cultural boundaries, preferences for secondary control often exhibited by Asian societies need consideration. The Asian culture defines secondary control as "changing the self to fit the external environment" rather than the normal western perception of control which is seen as "actions taken by a person to change the world." (Spector, et al 2004, pg. 41-42). Individualism versus collectivism societies may have different views of how control manifests within the business environment. When investigated from the Asian perspective, secondary control involves forceful actions focused on the ability to cultivate relationships with colleagues or attempts to influence powerful others rather than the typical Western notion of individual or personal achievement. When using instruments that are more sensitive to the Asian belief system, Spector, et al (2004) found that Asians appear as less passive avoiders of control.

CHINA

The newness of entrepreneurship activities in a transitional society such as China is likely to contribute to the importance of social psychological characteristics. Forbidden under the old communist regime, entrepreneurial activities promoted collectivism rather than individualism. As a quasi market economy has developed, former occupational paths have disappeared and one new career opportunity is to become engaged in entrepreneurial activities. Given the stability of employment and livelihood under the communist party, a high level of uncertainty is associated with entrepreneurial activities. Pals and Tuma (2004) found that social psychological attributes like locus of control affect the likelihood that individuals in transitional societies will engage in riskier behavior like entering into entrepreneurial activities. The framework and legal infrastructure for operating a private business in transitional societies tend to be underdeveloped and the risk of such a venture has a higher possibility of failure (DeMelo, Ofer, and Sandler, 1995). The risk, however, comes with rewards if the venture is successful. Starting in the mid-1990s, a gradual transition from those who relied on paid, state-run employment to entrepreneurial ventures began after China's liberalization of retail and wholesale sections. The promotion and development of small business consequently led to improving the banking system, promoting risk insurance, and easing regulatory structure, which stimulated growth opportunities in businesses in light industry and consumer goods (Yueh, 2008). Since 1999, this entrepreneurial ecosystem (Einhorn 2007)

has changed and entrepreneurs in China are in a position to find financiers willing to back their run into the economic market system.

With the institution of Deng Xiaoping's new economic policies in 1987, the Chinese Communist Party (CCP) legitimized private enterprise. However, it took until 1997 for the State to recognize the importance of private enterprise in the socialist market economy and until 2004 to allow ownership of private property (Guiheux 2006). To do business in China, most private entrepreneurs join the CCP. Still, party membership and entrepreneurial motives are often at odds with each other. Business owners join the party to access resources such as land, credit, or information that helps in serving their entrepreneurial needs. With these privileges in hand, however, they are reluctant to pressure the party for reform. Business associations, of which most private entrepreneurs are members, have been somewhat helpful; nevertheless, private enterprise walks a tight line between government policy and business reality (Nevitt 1996). Individuals within these associations tend to look for ways to do business within the confines of the state structure. China seldom rewards autonomy (Guiheux 2006). Krug (2004) stated that while western entrepreneurs focus on profit, China's entrepreneurs focus on forming alliances with those in control of resources.

This leads one to look at what motivates entrepreneurial tendencies in emerging markets such as China where the cultural roots in Confucianism seems to contradict such an orientation. Based on research by Hofstede (1984) and later Trompenaars (1994) and Lee & Peterson (2000), the Chinese exhibit collectivist tendencies with loyalties geared to the group rather than individual effort. Using his four dimensions, Hofstede (1984) describes China as a culture that has strong uncertainty avoidance (little acceptance for uncertainty or risk), large power distance (a high tolerance for unequal relationships), feminism (a focus on harmony and relationships), and collectiveness (a focus on group accomplishment). Trompenaars (1994) adds the dimensions of ascription-oriented rather than achievement, and particularism rather than universalism. All factors that tend to indicate a low level of entrepreneurial activity. This would tend to support the notion that members of the Chinese culture are alike and tend as a culture to be less entrepreneurial than other cultures (Lee & Peterson 2000).

INDIA

Over the past few decades, India's economic growth has been phenomenal. This is especially noteworthy in light of the country's inadequacies in terms of infrastructure, public services, education, and rigid labor laws. In addition, systems embedded in religious, caste and class structures, although diminishing, continue to divide Indian culture (Sekhar, Tung, & Denend 2007). Instead of dwelling on these inadequacies, however, Indian entrepreneurs tend to focus on their individual strengths and thus have created pockets of excellence in biotechnology, computer software, and other technical ventures. Lacking hard infrastructure resources, these entrepreneurs created industries that do not require resources such as roads, power plants, ports, etc., which are unquestionably underdeveloped in the country. Instead, they relied on soft infrastructure such as unbiased information, protected property rights, and the availability of risk capital (Khanna 2008). One of India's major strengths is its ability to provide domestic funding for entrepreneurs and to foster widespread activity from both venture capital and private equity sources. Entrepreneurs also profit from a small number of quality independent Indian banks that rigorously abide by established financial standards.

On the other hand, India's spirited attitude towards domestic entrepreneurial activities matches the equally strong protectionist beliefs concerning foreign capital investment. In fact, investment from foreign multinational companies is very limited. However, the high voter turnout among all sectors continues to help the local private sector to control politicians who in turn block outside development (Kumar 2007). For India to continue its growth cycle, the government needs to open its borders to more

international investment, strengthen its fiscal position, and increase spending on infrastructure and public services.

India's business climate is volatile with both individualistic and collective values depending on the situation (Kumar 2007). Its hierarchical structure combined with its indirect communication style can be confusing and frustrating in the business environment. However, Hofstede's (1984) research found significant evidence that India is more individualistic. Using his four dimensions to describe Indian culture, Hofstede depicts India as a culture that has weak uncertainty avoidance, low power distance, moderate masculinity, and moderate individualism. Trompenaars (1994) adds the dimensions of ascription-oriented rather than achievement, and particularism rather than universalism. Combined these factors portray India as a culture that displays an orientation towards entrepreneurial activity. India's entrepreneurial orientation has evolved through many stories of entrepreneurs who have created businesses that show outstanding business practices and quality products produced in a small pocket of excellence existing side-by-side with a population living in dire poverty.

Lee and Peterson (2000) suggest that countries with specific cultural tendencies experience more entrepreneurial competitiveness. The India culture consists of characteristics that project a strong entrepreneurial orientation including weak uncertainty avoidance, small power distance, masculine, and individualism. These characteristics provide favorable conditions that aid in the establishment of entrepreneurial activity. The Chinese culture, which exhibits the opposite characteristics on each of these dimensions, a strong uncertainty avoidance, large power distance, feminine, and collectivism are less likely to support entrepreneurial activity. This would tend to support the notion that within a culture, whether Chinese or Indian, there are cultural characteristic that dominate and influence behavior including entrepreneurial behavior.

On the other hand, research by McGrath, MacMillian, & Scheinberg (1992) supports the perspective that entrepreneurs have a persistent and characteristic value orientation, irrespective of the values of their base culture. Furthermore, these values appear to align along the four dimensions first identified by Hofstede (1984) in his *Culture's Consequences*. All entrepreneurs exhibit characteristics of high individualism, high power distance, low uncertainty avoidance, and high masculinity (McGrath, MacMillian, & Scheinberg 1992, pg. 133). This would tend to support the belief that entrepreneurs as a group are alike regardless of their cultural background. Based on this perspective all cultures have individuals who have entrepreneurial traits differentiate them from non-entrepreneurs. In other word, entrepreneurial traits are more important in distinguishing differences in the business climate than cultural differences.

METHODOLOGY

Based on Rotter's Internal-External Locus of Control Scale (1966), the Entrepreneurial Orientation Inventory survey instrument developed by Rao (1985) captured the relationship of internally or externally oriented locus of control on various entrepreneurial activities. Rao's instrument, designed to help respondents assess their own locus of control and compares entrepreneurial tendencies across cultures. Designed as a paired-item inventory, the Rao's original questionnaire asked respondents to spread a limited number of points between two opposing views. In a sample test, it was determined that these instructions were confusing to international subjects. The test was redesigned uncoupling the paired opposite questions using a 1-5 Likert Scale, with 1 being strongly disagree and 5 being strong agreed. First-year university students in India and China took the newly reconfigured survey (Appendix A).

In line with the original study, students scored the survey early in their academic career before theoretical input or discussions could influence participant responses. In this study, 215 students participated at two universities, 45 Indian and 170 Chinese. All participants were in the first semester of college in their home countries and could make the decision not to participate. The original survey, designed as a self-

help device, gathered little demographic information. In this sample, participants were predominately female (63.2% %) which included 79 males and 136 females with 90.6 % between the ages of 17 and 22. In addition, 66 % of the students planned to open a business sometime in the future and 78.8 % had an immediate family member or relative who owned a business. Although the sample provided significant results, the relatively modest size of the two populations limited the ability to generalize the results and perform full demographic analysis of subsets. As a result, one cannot over generalize the results. The preference is to consider this a pilot study using this approach.

RESULTS

The analysis focused on comparing the mean responses for each item. The underlying hypothesis from the literature is that Indian students are more internally focuses than the Chinese students are. Thus, both the presence and direction of differences in response are of interest.

Table 1: Comparison of Locus of Control for China and India

China Mean	India Mean	t-statistic	Locus of Control	Item Number	Survey Item
3.6272	4.3696	-4.331***	Internal	1-2	A capable entrepreneur can always shape his or her own destiny.
3.9467	4.3111	-2.691***	Internal	4-2	Capable entrepreneurs believe in planning their activities in advance.
3.1598	2.6136	2.902***	External	5-1	Whether or not a person can become successful depends on social and economic conditions.
2.8698	3.6087	-4.202***	Internal	5-2	Real entrepreneurs can always be successful, irrespective of social and economic conditions.
3.4438	3.8222	-2.517**	Internal	8-2	Whether or not you get a business loan depends on how good your project plan is.
3.5266	3.9783	-3.114***	Internal	10-2	Whether or not you make a profit in business depends on how capable you are as an entrepreneur.
2.5976	2.9565	-2.006**	External	12-1	Whether or not you will be a successful entrepreneur depends on the social environment into which you were born.
3.5266	3.8889	-2.137**	Internal	12-2	People can become successful entrepreneurs with effort and capability irrespective of the social strata from which they originated.
3.7633	3.2391	2.769***	External	13-1	These days, people must depend at every point on the help, support, or mercy of others (governmental agencies, bureaucracies, banks, etc.)
3.8225	4.2174	-2.472**	Internal	15-1	With effort, people can determine their own destinies.
3.6686	4.087	-2.790***	Internal	16-2	Entrepreneurs are the creators of their own experiences.
3.7337	4.0652	-1.980**	Internal	17-2	The rewards one achieves depend solely on the effort one makes.
2.9586	2.3778	2.786***	External	19-1	Leaving things to chance and letting time take care of them helps a person to relax and enjoy life.
3.6213	4.1111	-3.095***	Internal	19-2	Working for things always turns out better than leaving things to chance.
3.5562	3.9783	-2.528**	Internal	20-1	The work of competent people will always be recognized.
3.6982	3.2609	2.485**	External	20-2	No matter how competent one is, it is almost impossible to get ahead in life without contacts.

*This table indicates the items with significant differences in the mean response between the two cultures. The first two columns represent the mean for each of the cultures. The third column is the t-statistic. ***, **, and * indicate significance at the 1, 5, and 10 percent levels respectively. Columns 4 and 5 show the locus of control and item number with paired items (i.e., 5-1 and 5-2) reflecting opposite perceptions on locus of control.*

The results do demonstrate some significant differences between the cultures. Furthermore the direction of those differences are consistent and reinforce the understanding in the literature that India is the more internally focused and entrepreneurial society at this time.

The instrument contained forty items that originally paired into twenty statements that reflected opposite perceptions on locus of control. As shown in the table above, sixteen of the forty items demonstrate significant differences between the cultures. These include four circumstances where both items of an original pair demonstrate differences and eight items where only one of the originally paired items came through.

An examination of the items yielding differences reveals that eleven of the sixteen items are internal locus of control-framed questions so the respondent with a greater internal locus of control will report a higher numerical score. In each of these eleven statistically significant differences, the sample from India reported a higher mean response than the sample from China. The stronger response from the India sample involved statements such as, “a capable entrepreneur can always shape his or her own destiny,” “whether or not you make a profit in business depends on how capable you are as an entrepreneur,” and “the rewards one achieves depends solely on the effort one makes.” It is not that the Chinese sample did not reflect an internal locus of control for these items. Rather the evidence suggests that the entrepreneurial locus of control is more significantly internal in India.

There was one solo item where the statement framed to score higher for an external locus of control respondent and the Chinese sample did come through exhibiting a significantly higher response. The statement was, “These days, people must depend at every point on the help, support, or mercy of others (governmental agencies, bureaucracies, banks, etc.)” That sentiment did attract a majority of the response in each sample, but the Chinese group was significantly higher. Perhaps this reflects a current perception within Chinese society that government and bureaucratic influences play a dominant role.

The items where both statements within a pair demonstrated a significant difference also supports the hypothesis that India displays a higher internal locus of control than China. The sample from India scored significantly higher on the internally framed statement, “real entrepreneurs can always be successful, irrespective of social and economic conditions.” On the other hand, the Chinese sample scored significantly higher on the matched statement, “whether or not a person can become successful depends on social and economic conditions.” Similar results were found with the internal statement, “working for things always turns out better than leaving things to chance,” and the external statement, “leaving things to chance and letting time take care of them helps a person to relax and enjoy life.” Consider the paired statements “the work of competent people will always be recognized,” and “no matter how competent one is, it is almost impossible to get ahead in life without contacts.” Again consistent with the prior examples, the initial internally framed statement scored significantly higher by the Indian sample and the latter external statement by the Chinese sample.

The significant results were not universally unambiguous. The final significant paired sample of statements showed the Indian response scoring significantly higher on both the internal and external statements. Both the external statement, “whether or not you will be a successful entrepreneur depends on the social environment into which you were born,” and the internal, “people can become successful entrepreneurs with effort and capability irrespective of the social strata from which they originate,” yielded significant agreement in India. The most important implication is a realization that within this sample the respondents did not necessarily interpret those two statements as contradictory. When using an instrument designed for entrepreneurs in the United States, it is certainly likely that some items will not translate with as clear a definition across all cultures. Often we do not recognize the nuances that are suggested when these statements pertain to other cultures. Certainly the historic caste system suggests a “social strata” that we would expect to be prominent in thinking in India. However, if the “social

environment” of the other item is not interpreted identically as “social strata” apparently conflicting results may emerge.

When looking at the various demographic variables associated with each culture, the data shows little significance for gender, past family business ownership or future intentions for business ownership. The data suggests an absence of gender effects for India and a somewhat complex picture of gender issues in China.

Table 2: Comparison of Locus of Control by Gender for China

Males Mean	Female Mean	t-statistic	Locus of Control	Item Number	Survey Item
2.4490	2.0744	2.135**	External	1-1	Your capabilities may have very little to do with your success.
3.8980	3.5041	2.230**	Internal	1-2	A capable entrepreneur can always shape his or her own destiny.
3.2857	2.7025	3.110***	Internal	5-2	Real entrepreneurs can always be successful, irrespective of social and economic conditions.
3.1020	2.7769	2.050**	External	8-1	Whether or not you get a business loan depends on how fair the bank officer you deal with is.
2.9592	2.4380	3.062***	External	12-1	Whether or not you will be a successful entrepreneur depends on the social environment into which you were born.
4.0612	3.7273	2.139**	Internal	15-1	With effort, people can determine their own destinies.
3.6531	3.9752	-2.418**	External	16-1	There are many events beyond the control of entrepreneurs.
3.3469	3.8017	-3.049***	Internal	16-2	Entrepreneurs are the creators of their own experiences.
3.7959	4.2727	-3.580***	Internal	18-1	Organizational effectiveness can be achieved by employing competent and effective people.
3.1837	3.6198	-2.547**	External	18-2	No matter how competent the employees in a company are, if socioeconomic conditions are not good, the organization will have problems.
3.3878	3.8264	-2.583**	External	20-2	No matter how competent one is, it is almost impossible to get ahead in life without contacts.

*This table indicates the items with significant differences in the mean response by gender for China. The first two columns represent the mean for each gender. The third column is the t-statistic. ***, **, and * indicate significance at the 1, 5, and 10 percent levels respectively. Columns 4 and 5 show the locus of control and item number with paired items (i.e., 1-1 and 1-2) reflecting opposite perceptions on locus of control.*

Of the forty items, eleven items show significant gender differences between Chinese males and females including five solo items and three paired items. Some of the variables suggest that Chinese males tend to believe more in destiny as exhibited in the statements, "a capable entrepreneur can always shape his or her own destiny" or "with effort, people can determine their own destinies." On the other hand, these same males felt dependent on loan officers and the social environment. Chinese females tended to focus more on creating or seeking out assistance as exhibited by the statements, "organizational effectiveness can be achieved by employing competent and effective people" "no matter how competent one is, it is almost impossible to get ahead in life without contacts" and "entrepreneurs are the creators of their own experiences." These results provide some insight into differences in locus of control between Chinese males and females, but also raise questions. Why are so few gender differences detected in Chinese entrepreneurs? Do these gender differences reflect barriers to entrepreneurship within China for women? How will these observed differences compare with other cultures where gender differences exist. Moreover, why are gender differences in India entrepreneurs practically nonexistent? This provides a rich platform for future research.

CONCLUSION

This paper has presented a comparative analysis of entrepreneurial locus of control in China and India. A sample representing each culture participated in a revised version of Rao's Entrepreneurial Orientation Survey. The results provide further evidence that India is a more entrepreneurial culture than China. With one exception, every item that was significantly different between the samples favored an internal entrepreneurial locus for the Indian sample.

The results further support the findings of Shane (1992) and Mueller & Thomas (2001) which indicate that entrepreneurial traits vary across countries and cultures. Mueller and Thomas (2001) specifically find that an internal local of control is most often found in cultures that exhibit individualistic and low uncertainty avoidance such as India, rather than in collectivistic, high uncertainty avoidance cultures such as China.

A review of the two countries involved in this study reveals that entrepreneurial activity flourishes in both, but each country exhibits differences in terms of access to information, privacy rights, and the role of the state. The Chinese economy has stunned the world with its rapid growth, but at the same time, the central government continues to resist the adoption of privatization policies that favor entrepreneurial activity. This has resulted in the co-existence of two systems: "the command economy of the past and the free-market economy of the future" (Tan & Tan 2005, p. 146). Indian business owners on the other hand thrive independently, rarely interacting with a government bogged down with bureaucratic confusion. Kumar (2007) has described India as a "severely hierarchical society" based on a caste system that dictates status with very little social mobility. However, it is governed by a democratic system that fosters entrepreneurial activity and conflict resolution that tend be decided in favor of private rights (Khanna 2008). Unable to cultivate industries requiring factories and transportation, India has made significant strides in information technology, which has allowed its young educated population to move into positions based on their technical ability rather than family status, connections, or wealth. India's strong entrepreneurial position is further reinforced by the Global Entrepreneurship Monitor (GEM) report of non-entrepreneurial adults, in which the Indian population exhibits higher perceived entrepreneurial opportunities and capabilities resulting in higher entrepreneurial intentions and eventually higher potential entrepreneurial activity than the Chinese (Bosma, Jones, Auito and Levie 2007).

This study, however, should be interpreted cautiously. It suggests a strong menu of future research that can explore entrepreneurial differences across countries. The samples drawn were relatively small; however, they form a useful base to pilot the comparative use of this instrument. Broader samples could more effectively evaluate cross effects including demographic differences within each country. In one case, the responses of a paired set of questions suggested a stronger Indian response to both the external and internal item. This serves as a reminder that cross-cultural research must be very cautious in applying an instrument of this type. An interesting extension of this work would be to attempt to use the same instrument and measure the extent of framing differences between each culture relative to the United States sample.

APPENDIX

Appendix A: The Entrepreneurial Orientation Inventory

Instructions: How successful an entrepreneur will be depends on a number of factors. Please indicate how strongly do you agree or disagree with the following statements by circling the appropriate number

5 – strongly agree 4 – agree 3 – neither 2 – disagree 1 – strongly disagree

	strongly agree				strongly disagree
1. Whether or not you make a profit in business depends on how capable you are as an entrepreneur.	5	4	3	2	1
2. Whether or not you get a business loan depends on how fair the bank officer you deal with is	5	4	3	2	1
3. A capable entrepreneur can always shape his or her own destiny.	5	4	3	2	1

4. Whether or not a salesperson will be able to sell his or her product depends on how effective the competitors are. 5 4 3 2 1
5. There is no need for advance planning, because no matter how enterprising one is, there always will be chance factors that influence success. 5 4 3 2 1
6. Whether or not you make a profit in business depends on how lucky you are. 5 4 3 2 1
7. No matter how competent the employees in a company are, if socioeconomic conditions are not good, the organization will have problems. 5 4 3 2 1
8. Some types of people can never be successful as entrepreneurs. 5 4 3 2 1
9. With effort, people can determine their own destinies. 5 4 3 2 1
10. Whether or not you get a business loan depends on how good your project plan is. 5 4 3 2 1
11. No matter how good the competitors are, an effective salesperson always will be able to sell his or her product. 5 4 3 2 1
12. Entrepreneurs are often victims of forces that they can neither understand nor control. 5 4 3 2 1
13. The market situation today is very unpredictable. Even perceptive entrepreneurs falter quite often. 5 4 3 2 1
14. Entrepreneurs fail because of their own lack of ability and perceptiveness. 5 4 3 2 1
15. It is possible to generate one's own income without depending too much on bureaucracy. What is required is a knack in dealing with people. 5 4 3 2 1
16. Whether or not you will be a successful entrepreneur depends on the social environment into which you were born. 5 4 3 2 1
17. Entrepreneurs are the creators of their own experiences. 5 4 3 2 1
18. The work of competent people always will be recognized. 5 4 3 2 1
19. People can become successful entrepreneurs with effort and capability irrespective of the social strata from which they originated. 5 4 3 2 1
20. Working for things always turns out better than leaving things to chance. 5 4 3 2 1
21. Real entrepreneurs always can be successful, irrespective of social and economic conditions. 5 4 3 2 1
22. Your capabilities may have very little to do with your success. 5 4 3 2 1
23. Entrepreneurs are bound to fail at least half the time, because success or failure depends on a number of factors beyond their control. 5 4 3 2 1
24. When an entrepreneur's prediction of the market situation is wrong, that person can blame only himself or herself for failing to read the market correctly. 5 4 3 2 1
25. When purchasing raw materials or any other goods, it is wise to collect as much information as possible from various sources and then to make a final choice. 5 4 3 2 1
26. Organizational effectiveness can be achieved by employing competent and effective people. 5 4 3 2 1
27. Leaving things to chance and letting time take care of them helps a person to relax and enjoy life. 5 4 3 2 1
28. Whether or not a person can become successful, irrespective of social and economic conditions. 5 4 3 2 1
29. There is no point in spending time planning or doing things to change one's destiny. What is going to happen will happen. 5 4 3 2 1
30. It is possible for people to learn to become more enterprising even if they do not start out that way. 5 4 3 2 1
31. The rewards one achieves depends solely on the effort one makes. 5 4 3 2 1
32. Entrepreneurs are born, not made. 5 4 3 2 1
33. Capable entrepreneurs believe in planning their activities in advance. 5 4 3 2 1
34. By taking an active part in economic, social, and political affairs, entrepreneurs can control events that affect their businesses. 5 4 3 2 1
35. There is no point in collecting a lot of information; in the long run, the more you pay, the better the product is. 5 4 3 2 1
36. It is possible to develop entrepreneurial ability in different types of people. 5 4 3 2 1
37. These days, people must depend at every point on the help, support, or mercy of others (governmental agencies, bureaucracies, banks, etc.). 5 4 3 2 1
38. There are many events beyond the control of entrepreneurs. 5 4 3 2 1
39. No matter how hard a person works, he or she will achieve only what is destined. 5 4 3 2 1
40. No matter how competent one is, it is almost impossible to get ahead in life without contacts. 5 4 3 2 1
41. Age: _____ 17-22 years _____ 23-30 _____ 31-45 _____ over 45
42. Gender: _____ male _____ female
43. Nationality: _____
44. Do you plan to open your own business?
 _____ yes within 5 years
 _____ yes within 10 years
 _____ yes before you retire
 _____ no
45. Does anyone in your family own a business? (Check all that apply)
 _____ parents _____ aunts or uncles
 _____ grandparents _____ other relative
 _____ brothers/sisters

REFERENCES

Ahmed, S.U., (1985). nAch, risk-taking propensity, locus of control and entrepreneurship. *Personality and Individual Differences*, 6 (6), 781-782.

Anderson, C. R. (1976). The relationship between the locus of control, decision behaviors, and performance in a stress setting: A longitudinal study. *Proceedings of the Academy of Management*, 65-69.

Blanchflower, D., & Oswald, A. (1998, January). What Makes an Entrepreneur? *Journal of Labor Economics*, 16(1), 26.

Blau, G. (1993). Testing the relationship of locus of control to different performance dimensions. *Journal of Occupational and Organizational Psychology*, 66 (2), 125(14).

Bonnett, C., and Furnham, A. (1991). Who wants to be an entrepreneur? A study of adolescents interested in a young enterprise scheme. *Journal of Economic Psychology*, 12, 465-78.

Borland, C. (1974). *Locus of Control, Need for Achievement and Entrepreneurship*. Doctoral Dissertation, University of Texas.

Bosma, N., Jones, K., Autio, E., & Levie, J. (2007). *Global entrepreneurship monitor 2007 executive report*. Retrieved July 28, 2008, http://www.gemconsortium.org/download/1221579662096/GEM_2007_Executive_Report.pdf, 1-52.

Brockhaus, R. H. (1975). I-E Locus of control scores as predictors of entrepreneurial intentions. *Academy of Management Proceedings*, 433-435.

Brockhaus, R. H., & Nord, W. R. (1979). An exploration of factors affecting the entrepreneurial decision: Personal characteristics versus environmental calculations. *Proceeding of the Academy of Management*.

Carland, J. W., Hoy, F., Boulton, W. R., & Carland, J. A. C. (1984). Differentiating entrepreneurs from small business owners: A conceptualization. *Academy of Management Review*, 9, 354-359.

Carment, D. W., (1974). Internal versus external control in India and Canada. *International Journal of Psychology*, 9, 45-50.

Chay, Y. W. (1993). Social support, individual differences and well-being: A study of small business entrepreneurs and employees. *Journal of Occupational and Organizational Psychology*, 66, 285-302.

Chell, E., Haorth, J. M., & Bearley, S. A. (1991). *The entrepreneurial personality: Concepts, cases and categories*. London: Routledge.

Cochran, T. C. (1969). Entrepreneurship. In D. L. Sills (Ed.), *International encyclopedia of the social sciences*. New York: Macmillan/Free Press.

Cromie, S. & John, S. (1983). Irish entrepreneurs: Some personal characteristics, *Journal of Occupational Behavior*, 4, 317-324.

Cromie, S. (2000). Assessing entrepreneurial inclinations: some approaches and empirical evidence. *European Journal of Work and Organizational Psychology*, 9 (1), 7-30.

Cromie, S., Callaghan, I., & Jansen, M. (1992, March). The Entrepreneurial Tendencies of Managers: a Research Note. *British Journal of Management*, 3(1), 1-5.

DeMelo, M., Ofer, G., & Sandler, O. (1995). Pioneers for profit: St. Petersburg entrepreneurs in services. *World Bank Economic Review*, 9, 425-450.

Diaz, F., & Rodriguez, A. (2003). Locus of control, nAch and values of community entrepreneurs. *Social Behavior & Personality: An International Journal*, 31(8), 739-748.

Durand, D., & Shea, D. (1974). Entrepreneurial activity as a function of achievement motivation and reinforcement control. *Journal of Psychology*, 88, 57-63.

Einhorn, B. (2007, November 19). Good Times for Asia's Young Entrepreneurs. *Business Week Online*, Retrieved September 16, 2008, from Business Source Premier Database.

Gilad, B. (1982). On encouraging entrepreneurship: An interdisciplinary analysis. *Journal of Behavioral Economics*, 11, 132-163.

Guiheux, G. (Spring 2006). The Political Participation of Entrepreneurs: Challenge or Opportunity for the Chinese Communist Party? *Social Research*, 73(1), 219-244.

Hamid, P.N. (1994). Self-monitoring, locus of control, and social encounters of Chinese and New Zealand students. *Journal of Cross-Cultural Psychology*, 25, 353-368.

Hammer, T. & Vardi, Y. (1981). Locus of control and career self-management among nonsupervisory employees in industrial settings. *Journal of Vocational Behavior*, 1, 13-29.

Hofstede, G. (1984). *Culture's consequences: International differences in work-related values*. Newberry Park, California: Sage Publications, Inc.

Hui, C. H. (1982). Locus of control: A review of cross-cultural research. *International Journal of Intercultural Relations*, 6, 301-323.

Hull, D. L., Bosley, J. J., & Udell, G. G. (1980 January). Reviewing the hunt for the heffalump: indentifying potential entrepreneurs by personality characteristics. *Journal of Small Business Management*, 18(1), 11-18.

Khanna, T. (2008). *Billions of entrepreneurs: How China and India are reshaping their future – and yours*. Boston, Massachusetts: Harvard Business School Press.

Khanna, P., & Khanna, J. L. (1979). Locus of control in India: A cross-cultural perspective. *International Journal of Psychology*, 14, 207-214.

Krug, B. (2004). ed. *China's rational entrepreneurs: The development of the new private business sector*. London: RoutledgeCurzon.

Kumar, R. (2007, May). Doing business in India: Caveat venditor. *Ivey Business Journal*, 71(5), 1. Retrieved July 29, 2008, from Business Source Premier Database.

Kuratko, D. & Hodgetts, R. (2004). *Entrepreneurship: Theory, Process, and Practice*, 6th Edition, Mason, Ohio: Southwestern.

Lee, S., & Peterson, S. (2000, Winter). Culture, Entrepreneurial Orientation, and Global Competitiveness. *Journal of World Business*, 35(4), 401.

- McClelland, D. C. (1961). *The achieving society*, Princeton: D. Van Nostrand.
- 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, 115-135.
- Mescon, T. S. and Motanari, J. R. (1982). The Personalities of Independent and franchise entrepreneurs: An empirical analysis of concepts. *Proceedings of the Academy of Management*, 413-417.
- Miller, D., Kets de Vries, M. F. R. & Toulouse, J. (1982). Top executive locus of control and its relationship to strategy-making, structure, and environment. *Academy of Management Journal*, 25(2), 237-253.
- Mueller, S. & Thomas, A. (2001). Culture and entrepreneurial potential: A nine-country study of locus of control and innovativeness. *Journal of Business Venturing*, 16, 51-75.
- Nevitt, C. (July 1996). Private business associations in china: Evidence of civil society or local state power? *The China journal* 36, 25-43.
- Orpen, C. (1992). The work locus of control scale as a predictor of employee attitudes and behavior: a validity study, *Psychology: a Journal of Human Behavior*, 29, 35-37.
- Pals, H., & Tuma, N. B. (2004). Entrepreneurial activities in post-Soviet societies: Impact of social psychological characteristics. *International Journal of Sociology*, 34(2), 11-38.
- Pandey, J., & Tewary, N. B. (1979). Locus of control and achievement values of entrepreneurs. *Journal of Occupational Psychology*, 52, 107-111.
- Parsons, O. A., & Schneider, J. M. (1974). Locus of control in university students from eastern and western societies. *Journal of Consulting and Clinical Psychology*, 42, 456-461.
- Rao, T. V. (1985). The entrepreneurial orientation inventory: measuring the locus of control. *The 1985 Annual: Developing Human Resources*, 129-135.
- Rothbaum, F., Weisz, J. R., & Snyder, S. S. (1982). Changing the world and changing the self: A two-process model of perceived control. *Journal of Personality and Social Psychology*, 42(1), 5-37.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied*, 80(1), 1-28.
- Rotter, J. (1990). Internal versus external control of reinforcement: A case history of a variable. *American Psychologist*, 45, 489-493.
- Sekhar, A., Tung, J. & Denend, L. (2007). *The competitive advantage of India*. Boston, Massachusetts: Harvard Business School Press.
- Shane, S. A. (1992). Why do some societies invent more than others? *Journal of Business Venturing*, 7, 29-46.

Smith, T. B., Trompenaars, F., Dugan, S. (1995). The rotter locus of control scale in 43 countries: A test of cultural relativity. *International Journal of Psychology*, 30, 377-400.

Shapero, A. (1975). Entrepreneurship and economic development in J. Komives and T. Schneier (Eds.) *Entrepreneurship and Enterprise Development: A world wide perspective*, Milwaukee: Center for Venture Management.

Spector, P. (1982, May). Behavior in organizations as a function of employee's locus of control. *Psychological Bulletin*, 91(3), 482-497.

Spector, P. (1988). Development of the work locus of control scale, *Journal of Applied Psychology*, 77, 251-260.

Spector, P., Sanchez, J., Oi Ling Siu, J., Salgado, J., & Jianhong Ma, J. (2004, January). Eastern versus Western Control Beliefs at Work: An Investigation of Secondary Control, Socioinstrumental Control, and Work Locus of Control in China and the US. *Applied Psychology: An International Review*, 53(1), 38-60.

Tan, J. & Tan, D. (2005). Environment-strategy co-evolution and co-alignment: A staged model of Chinese SOEs under transition. *Strategic Management Journal*, 26, 141-157.

Trompenaar, F. (1994). *Riding the waves of culture: Understanding diversity in global business*, Burr Ridge, Illinois: Irwin.

Venkatapathy, R. (1984). Locus of control among entrepreneurs: a review. *Psychological Studies*, 29 (1), 97-100.

Wright, P. M., Kacmar, K. M., McMahan, G. C. & Deleeuw, K. (1995). P-F(M x A): Cognitive ability as a moderator of the relationship between personality and job performance. *Journal of Management*, 21: 1129-1139.

Yueh, L., (2008). The Chinese entrepreneur. *Business Strategy Review*, 61-64.

BIOGRAPHY

Dr. Barbara K. Fuller is an associate professor of Marketing at Winthrop University. She can be contacted at: College of Business, Winthrop University, 701Oakland Avenue, Rock Hill, SC 29733, USA. Email: fullerb@winthrop.edu

Dr. Martha C. Spears is associate dean and professor of Management at Winthrop University. She can be contacted at: College of Business, Winthrop University, 701Oakland Avenue, Rock Hill, SC 29733, USA. Email: spearsm@winthrop.edu

Dr. Darrell F. Parker is dean and professor of Economics at University of South Carolina Upstate. He can be contacted at 800 University Way, USC Upstate, Spartanburg, SC 29303, USA. Email: dparker@USCUpstate.edu.