

SOCIAL AND CULTURAL INFLUENCES AMONG MEXICAN BORDER ENTREPRENEURS^{1,2}

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Summary.—Social and cultural conditions (including U.S. border and inland influence, role models within the family, and educational background) which affect locus of control and achievement motivation among Mexican entrepreneurs were explored among 64 selected entrepreneurs in two Mexican towns, one on the Mexico-U.S. border, the other located inland. Analyses showed that the border subsample scored higher on External locus of control; however, in both subsamples the father was an important element in the locus of control variable and the entrepreneur status. No statistically significant mean difference was noted for achievement motivation. Practical applications and limitations are discussed.

Relationships of certain characteristics with entrepreneurial behaviour have been extensively studied (Muller & Gappisch, 2005; Zhao & Seibert, 2006), especially locus of control and achievement motivation (Lee & Tsang, 2001; Diaz & Rodriguez, 2003). Several studies have shown that need for achievement, defined by Murray in 1938, is essential for entrepreneurs and so they typically obtain scores higher than the population mean (Ahmed, 1985; Sagie & Elizur, 1999; Collins, Hanges & Locke, 2004). However, Murray's theory has been criticised as it considers need for achievement to be an attribute learned during the initial stages of human development, without taking into account other social and cultural factors (Sutherland & Veroff, 1985). Moreover, research suggests that certain aspects of achievement motivation can be developed, especially with a combination of training techniques (Aronoff & Litwin, 1971; Duran, 1983; Hansemark, 1998).

Another variable relevant to business behaviour is locus of control (Rotter, 1966). Studies have shown entrepreneurs score as more internal than comparative groups (Perry, 1990; Kaufman, Welsh, & Bushmarin,

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1996; Schiller & Crewson, 1997; Stewart & Roth, 2007). Although Rotter considered the construct to represent both learned and stable characteristics, some authors have more recently come to view locus of control as something that can be developed depending on social context (Smith, Trompenaars, & Dugan, 1995; Kaufman, *et al.*, 1996; Mueller & Thomas, 2000; Santiago & Tarantino, 2002; Hansemark, 2003).

One social variable studied among entrepreneurs is family influence, especially parents who are entrepreneurs (Jacobowitz & Vidler, 1982; Shapero & Sokol, 1982; Scherer, Brodzinski, & Wiebe, 1991). Social learning theory as applied to career decision making (Krumboltz, Mitchell, & Jones, 1976) describes how parental influence can affect the development of behaviour patterns. In addition, stronger family ties may influence children's decisions about professional careers (Muller, 2001). This has been observed in entrepreneurs, for whom there is evidence of the influence of parental entrepreneurship on entrepreneurial decision making (Scherer, *et al.*, 1991; Schiller & Crewson, 1997). It was therefore hypothesized that having role models within the family will influence entrepreneurial behaviour: those with an entrepreneurial family background will score higher on internal locus of control and on higher achievement motivation.

Education of entrepreneurs has been studied, although the focus has been demographic and descriptive rather than education as a process of socialisation and acquisition of values. Research indicates that entrepreneurs tend to be more highly educated than the general population (Jacobowitz & Vidler, 1982; Robinson & Sexton, 1994; Carr, 1996). However, it is not known whether this education has influenced psychological processes which lead to the development of entrepreneurial behaviour (Carter, 2003). Education may lead to greater self-confidence in one's capacities and resources, so perceptions of the events may be more internal, producing greater motivation to accomplish goals. It was therefore expected that more highly educated entrepreneurs will score higher on internal locus of control and higher on achievement motivation.

Not only personal traits of entrepreneurs will be influenced by variables from the immediate environment (family, education) but other cultural variables may favour entrepreneurship in specific societies or scenarios. Conditioning from the local culture and society in which the entrepreneurs reside may influence cognitive and decisional mechanisms (Mueller & Thomas, 2000; Hayton, George, & Zahara, 2002; Rotefoss & Kolveried, 2005). Social scientists tend to agree that in the United States, society is less collectivistic and more economically and socially independent than in Latin American societies, including Mexico (Hofstede, 1980; Marin & Triandis, 1985; Triandis, McCusker, & Hui, 1990). Wu (2007) found using data collected through Global Entrepreneurship Monitor using Hofstede's

four dimensions of national culture that individualism and total entrepreneurial activity were negatively related. Moreover, entrepreneurial activity was lower in former British Empire countries (U.S. included) than in Latin American countries (Reynolds, Bygrave, Autio, & Hay, 2002; Carraher, 2005). In the case of Mexico, the close proximity and influence of the U.S. culture might create a situation where the psychological variables need of achievement and locus of control associated with entrepreneurs from border towns would be different from those of entrepreneurs from other Mexican towns. Entrepreneurs from inland towns were expected to score higher on internal locus of control and achievement motivation.

METHOD

Participants

For the study, a sample of entrepreneurs was selected from two Mexican towns, one on the border (Nuevo Laredo) and one located inland (Ciudad Victoria), both situated in the State of Tamaulipas. For the sample entrepreneurs, company listing from the Mexican National Chamber of Processing Industries (CANACITRA) were used. Only those with at least three years' longevity in business were selected, since this is regarded as a criterion of success (Brockhaus, 1980; Schiller & Crewson, 1997). Only one entrepreneur per company was interviewed.

A total of 64 valid questionnaires were gathered, 77% from men and 23% from women. The average age was 45.7 yr. and the average business experience 13.2 yr.

Measures

To test these hypotheses, a questionnaire including various scales was prepared.

Locus of control.—The I-E Scale (Rotter, 1966), with 29 items was used. The test has excellent psychometric properties (Lange & Tiggemann, 1981; Mueller & Thomas, 2000), as well as good test-retest reliability (Lange & Tiggemann, 1981; Hansemark, 2003). For the study, the Spanish version (Pérez, 1984) was applied with forced-choice answers. Reference scores were those obtained for the Mexican population (Smith, *et al.*, 1995).

Achievement motivation.—Entrepreneurs and nonentrepreneurs have been reported to have statistically different scores (Ahmed, 1985; Perry, McArthur, Meredith, & Cunnington, 1986) on the Lynn Achievement Motivation Questionnaire (Lynn, 1969), which consists of seven forced-choice questions with good psychometric characteristics (Fineman, 1977; Collins, *et al.*, 2004). The test was translated from English into Spanish and then back into English before finally comparing the original version with an English back-translation (Merenda, 2006). The translators were Mexican experts in the English language. The mean score ($M=6.8$) obtained by

Lynn (1969) for his subsample of entrepreneurs served as reference in the present study.

Socio-family scale.— Five categorized questions about parent's level of education (1: Elementary, 2: Middle School, 3: High School, 4: University); family background ("Are there any entrepreneurs in your family?" 1: Father, 2: Mother, 3: Others), and support ("Did your family support you when setting up your business?" 1: Yes, 2: No) was prepared. Also, diverse demographic data (place of residence, sex, age, education, marital status, and number of children) were gathered from participating entrepreneurs.

Procedure

Personal interviews were conducted at the companies' premises. Local interviewers were chosen to minimise rejection by those interviewed. The interviewers had previously been trained in the use of the questionnaires.

The selected companies received a letter from CANACITRA informing them that a study was to be carried out and requesting their collaboration. The data were gathered during the second half of 2002 and analysed using SPSS, Version 14.0.

RESULTS

Analyses

On the Locus of Control questionnaire, Cronbach alpha reliability was .71, indicating minimum acceptability of internal consistency in this sample. The Achievement Motivation and the Socio-family scales produced a lower reliabilities (.61 and .67, respectively), below the usual accepted level. Scores were calculated for role models in the family (i.e., business background in the family), entrepreneur's level of education at the time of setting up the business, and place of residence categorised as a border town or inland town. Intercorrelations (Kendall τ) among variables are presented in Table 1.

TABLE 1
INTERCORRELATIONS (KENDALL τ) OF STUDY VARIABLES ($N=64$)

Variable	2	3	4	5	6
1. Residence	.46†	-.08	-.33†	.32†	-.31*
2. Years of education		.03	-.28†	.37†	-.22
3. Need of achievement			.09	-.01	-.00
4. Locus of control				-.27*	.24
5. Entrepreneurs in family					.01
6. Family member entrepreneur					

* $p < .05$. † $p < .01$.

Significant correlations were observed among locus of control and residence, education, and family background in business. No correlations were observed between any of the social variables and achievement motivation. There was a significant correlation between locus of control and the existence of entrepreneurs in the family. Those entrepreneurs whose fathers were entrepreneurs scored more Internal than those entrepreneurs without a business background within the immediate family. Differences between the correlations obtained from groups with or without business-related family backgrounds were significant ($t=2.18$, $p<.05$; Welch test), which shows the influence of socialisation variables in supporting the hypothesis.

TABLE 2
SIGNIFICANT GROUP DIFFERENCES IN LOCUS OF CONTROL

Variable		<i>M</i>	<i>SD</i>	<i>t</i>	<i>p</i>
Entrepreneurs in family	Yes	6.73	2.94	2.18*	.03
	No	8.65	3.26		
Family support	Yes	6.62	3.40	5.56†	.00
	No	8.17	2.50		
Years of education	Higher education	6.31	3.24	-2.72†	.01
	Obligatory	8.48	2.71		
Town	Laredo	8.03	3.07	2.98†	.00
	Victoria	5.56	2.59		

* $p<.05$. † $p<.01$.

The relationship of entrepreneur's sex (man or woman) and entrepreneurship background (father or mother) show the importance of sex differences in socialisation patterns. Analysis of variance (ANOVA) showed that if there was an entrepreneur in the immediate family, the father was the most commonly cited ($F=2.94$, $p<.05$). Moreover, as the degree of kinship diminished from parents to other relatives, the entrepreneurs' locus of control scores were more External ($M=7.77$ and 8.17 , respectively). Family influence was an important factor. Locus of control scores and perceived family support were related ($F=5.56$ $p<.01$). Thus, family influence was related to the cognitive traits necessary to set up a business. For other family variables, an ANOVA including family background, family support, marital status and children indicated a significant relationship only for family support ($F=3.66$ $p<.05$). No significant interaction was observed for the rest of family-related factors.

Education was another of the variables analyzed. Scores showed that there was a significant negative correlation between the scores on External attribution and education. A slight majority of the sample had studied at a university (53.4%): Locus of control differed between this group and those less educated (see Table 2). No differences were observed in the achievement motivation variable; however, there was a significant correlation be-

tween the father's education and locus of control scores; when father's education was categorized as obligatory and higher education, a significant difference between the groups was observed. However, the mother's education did not correlate significantly with either locus of control or achievement motivation, although there were significant positive correlations between entrepreneur's education and that of their fathers and mothers.

A third environmental variable of interest was the cultural influence of the town where the entrepreneur had set up his or her business. Entrepreneurs in the inland Mexican town scored as more Internal. Significant differences were obtained between the two groups (see Table 2). A possible explanation for the differences found in the "town" variable may lie in the heteroscedasticity of the two subsamples. A Levene test showed that subsamples had similar variances ($F=0.545$ and 1.165 , for locus of control and achievement motivation, respectively), since there was a positive correlation between entrepreneur's education and town. Analysis of variance showed no interaction: the effect of the town (inland/border) was stronger than education ($F=4.40$; $p<.05$). For achievement motivation, there was no appreciable difference in the scores obtained between the samples of entrepreneurs from Nuevo Laredo and Ciudad Victoria.

DISCUSSION

Family seems to be an important influence on entrepreneurship, above all parental entrepreneurs who act as role models, perhaps influencing attitude towards setting up a business, but also attributional processes supporting entrepreneurial behaviour, such as locus of control. There seemed to be sex differences, with the most common role model being the father. As observed, education of the parents was related to the children's education, but only father's education was related to entrepreneurial status (Halaby, 2003). These findings could change with larger samples.

Importantly, there were significant differences between entrepreneurs from the border town and those from the inland town, especially on locus of control. Entrepreneurs from border towns had more External scores. Research has shown that the self-employment rates of Hispanics tend to be higher in U.S. cities near Mexico than in the U.S. inland (Mora & Davila, 2006), which coincides with the current results. It has been observed that ethnic entrepreneurs represent one of the more entrepreneurial groups in the U.S. (Butler & Herring, 1991; Fairlie, 2004; Portes & Shafer, 2007). The border entrepreneurs (Nuevo Laredo) had fewer family members who were entrepreneurs, and thus were less exposed to less vicarious learning than those from the inland (Victoria). In Mexican border towns, a proportion of the population has moved there as a result of internal migratory flows: many people who have moved from other parts of Mexico and have

found it impossible to set up residence in the U.S. eventually settle in border towns far from their families.

In regards to achievement motivation, the results generally did not corroborate the hypotheses. The Lynn Achievement Motivation Questionnaire had low reliability. Another possible explanation is that this variable is not significant in entrepreneurial behaviour in Mexican samples. The average score from each town was substantially lower than that obtained by Lynn.

Limitations must be considered when interpreting the results. First, the sample employed only includes Mexican entrepreneurs, and therefore the results can only be compared to other national samples. Caution is needed when making such comparisons. It would be very useful to extend the study to other towns, especially on the border, and with larger samples; border areas are of great interest, as they allow observation of the influences of different cultures.

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