# **University Grant Program** Research Report

A COMPARATIVE STUDY OF THE VALUES AND NEEDS OF FRENCH-SPEAKING AND ENGLISH-SPEAKING M.B.A. STUDENTS

by

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Faculty of Management Sciences University of Ottawa August, 1973.

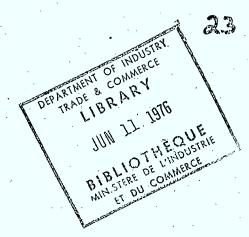
Rapport de recherche sur le Programme de subventions aux universités



Industry, Trade and Commerce

Industrie et Commerce

Office of Science Direction des sciences and Technology et de la technologie Ottawa, Canada Ottawa, Canada



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The views and opinions expressed in this report are those of the authors and are not necessarily endorsed by the Department of Industry, Trade and Commerce.

#### A COMPARATIVE STUDY OF THE VALUES AND NEEDS

OF FRENCH-SPEAKING AND ENGLISH-SPEAKING

M.B.A. STUDENTS

by

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#### STATEMENT OF THE PROBLEM

Over the past few years, an attempt has been made to establish a psycho-social theory of entrepreneurship and management. Several authors have tried to show the existence of characteristics peculiar to these two types of economic agents, some writers (McClelland, 1969; Taylor, 1961) even relating the economic activity and development of a particular society to the frequency with which these characteristics occur among the members of that society.

We shall first of all describe the psychological needs and values which, according to these studies, characterize the entrepreneur and the manager. Since 1966, the French-speaking universitites in Quebec have been offering an M.B.A. programme similar to the programmes already offered for a number of years by the English-speaking universitites; since this type of programme is likely to produce the administrators and entrepreneurs that a society needs, we thought it would be interesting to compare the psychological profile of the French and English-speaking M.B.A. students. If the profiles suggested by previous research have a predictive value, then we may be able to determine with greater accuracy the type of economic agent who will probably emerge

from these M.B.A. programmes.

#### Entrepreneurs

Studies on entrepreneurship have given us a better understanding of the various elements of this form of activity. Thus, McClelland (1965) showed that entrepreneurs have a strong need for achievement no matter in which sector they work. These studies also tend to show that people who have a high need for achievement prefer situations involving moderate risks and in which they are able to see the tangible results of their efforts.

Atkinson (1957), Kogan & Wallach (1964), and Litwin & Ciarlo (1959) have all studied the relationship between risk-taking behaviour, the need for achievement and the self concept. They conclude that a strong need for achievement and a positive self concept is usually correlated to the taking of calculated risks. This relationshop between a positive self concept and entrepreneurial behaviour was also found by Caroll (1965) in his work on the Filipino manufacturing entrepreneur.

Furthermore, studies by Davids (1963), Stepanek (1960) and Collins & Moore (1970) concluded that entrepreneurs were characterized by a high need for autonomy, a desire to act on their own

<sup>(1)</sup> Previous studies in several countries (Alexander, 1967);
McClellandet al., 1953; McClelland & Winter, 1969; Sayigh, 1962) show
a significant relationship between the economic growth of a particular
group and the same group's need for achievement.

and avoid situations in which they were dependent on other people.

If this need for achievement is to be translated into an activity in the economic sector, the individual must perceive this type of activity as desirable, likely to satisfy this need for achievement and provide him with tangible proof of his accomplishments. Such a person must therefore have strong economic values if he is to direct his energies into this sector. The studies of McClelland et al. (1954) in fact indicate that economic activity is often seen by the entrepreneur as a convenient means of satisfying his need for achievement.

#### Managers

Numerous empirical studies have tried to identify the characteristics distinguishing the successful manager. Thus, studies by Baurnal (1968) and Cleeton & Mason (1964) show that managers are concerned with stability, that they are persevering in their undertakings, and that they have great ability for organizing and planning their work. Research described in <a href="Pre-dic ting Managerial Success">Pre-dic ting Managerial Success</a> (1968) shows that managers are motivated by political and economic values. Livingston (1971), moreover, suggests that managers have a strong need to influence others and exert authority, while at the same time being capable of empathy.

Because of the very nature of their administrative functions, managers should be sociably-minded, and able to maintain

harmonious relations with other people (Wald & Doty, 1965).

After considerable empirical studies, Ghiselli (1971) concludes that managers have four basic traits or characteristics:

(1) they are capable of influencing others, (2) they show an original and effective use of their intellectual capacities,

(3) they are self-confident, and (4) they are motivated to get to the top of the organizational pyramid.

The international studies of Haire, Ghiselli & Porter (1966) also show that managers in all the countries studied preferred to influence rather than compel their collaborators and that a strong need for autonomy and self-actualization was to be found among them.

#### Conclusions

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All these studies seem to indicate that managers and entrepreneurs have basic characteristics, specific psychological traits and particular values. Table 1 shows the characteristics that are most frequently mentioned.

The aim of this research is to measure particular psychological characteristics of French-speaking and English-speaking M.B.A. students, and identify significant differences between their profiles.

TABLE I

# BASIC CHARACTERISTICS OF MANAGERS AND ENTREPRENEURS

## ACCORDING TO PREVIOUS STUDIES

## Entrepreneurs Achievement motivation Order-perseverance (Baurnal; Cleeton & Mason) (McClelland, Atkinson, Sayigh, Alexander) . Economic and political Self-confidence (Caroll) values (Foundation for research on human behaviour, Livingston) Self-confidence and positive Individualism, autonomy self-concept (Harrell; Wald & Doty; Smoley & Slivinski) Affiliation (Wald & Doty) Economic values and empathy (Livingston)

Dominance, power, aggressivity. (Livingston, Ghiselli)

Managers

. Autonomy, independence (Haire et al.)

#### METHODOLOGY P. 5

# Measuring instruments

The measuring instruments used in this research were selected according to the following criteria: (1) the instruments must give an adequate measure of the constructs mentioned by previous studies concerning entrepreneurs and managers (see Table 1); (2) their validity and reliability must have been established in both French and English. The following tests met these requirements and were therefore used: the Edwards Personal Preference Schedule

(French version prepared by G. Gauthier); (2) AVS Questionnaire on values (the Allport & Vernon Questionnaire adapted into French by R. Shevenell; (3) the Tennessee Self Concept Scale (French version adapted by J.M. Toulouse).

The Edwards Personal Preference Schedule permits the measurement of fifteen preferences or manifest needs: order, achievement, perseverance, change, dominance (power), deference, benevolence, extrospection, affiliation (sociability), heterosexuality, individualim, inferiority, dependence, aggressivity, and exhibitionism. This test has been widely studied in its English version by Edwards, while Gauthier (1964) has tested the psychometric characteristics of the French version.

As regards values, we have used the AVS test, devised by Allport and Vernon, and adapted into French by Shevenell (1962). This test measures six types of values: theoretical, economic, aesthetic, social, political and religious.

A measure of self-esteem was obtained by the Tennessee Self Concept Scale. The English version of this instrument was tested by Fitts and the French version prepared by Toulouse (1972). This scale provides measures of various aspects of the Self Concept, but for this study only a global measure of self-esteem was retained.

#### Subjects

These three tests were administered to 99 students of the French-speaking group at the beginning of their M.B.A. programme at the H.E.C. (13), at Laval (26) and at the University of Sherbrooke (60). The students were tested in groups (testing time was between 60 and 120 minutes) during the period of January to May, 1972. For the English-speaking students, we obtained the collaboration of teachers in various universities who distributed the questionnaires to their M.B.A. students, asking them to complete and return them to us in the stamped, addressed envelopes provided. A sample of 81 English-speaking students was thus obtained.

#### RESULTS

The analysis of results of the questionnaires has been divided into two sections: (1) What is the overall psychological profile of French and English-speaking M.B.A. students? (2) Are there any significant differences between the profile of French-speaking students and that of their English counterparts?

# What is the psychological profile of M.B.A. students?

Table 2 presents the mean results (and their position on a percentile scale) of each of the groups for the 22 variables used in this study. Generally speaking, both French-speaking and English-speaking M.B.A. students are high on dominance and

TABLE 2
Results of M.B.A. students' Personal Preference Schedule", and "Self Concept" scales.

		·	**************************************	
	Fre	nch-speaking	English	-speaking
riable	Mean	Percentile * equivalent	Mean	Percentile * equivalent
Order	11.56	30	10.39	22
Achievement	15.76	63	<b>17.</b> 89	80
Perseverance	13.45	26	13.32	25
Change	17.45	79	16.48	73
Dominance (Power)	17.28	7 <b>L</b>	18.25	76
Deference	10.96	25	9.51	15
Benevolence	14.49	43	12.74	31
Introspection	15.56	65	14.10	54
Affiliation (Soc.)	17.31	77	13.65	45
Heterosexuality	13.75	65	16.85	75
Individualism	16.98	77	<b>1</b> 4.99	62
Inferiority	6.56	8	10.23	23
Dependence	10.01	50	9.35	44
Agressivity	15.61	70	12.72	51
Exhibitionism	12.62	53	14.10	67
Theoretical	43.45	49	42.11	40
Economic	43.52	57	42.05	48
Aesthetic	42.79	81	40.31	73
Social	41.68	<b>7</b> 4	37.95	55
Political	45.66	68	41.37	43
Religious	26.47	10	32.28	36
Self -esteem	359.59	65	341.3	40
	Order Achievement Perseverance Change Dominance(Power) Deference Benevolence Introspection Affiliation (Soc.) Heterosexuality Individualism Inferiority Dependence Agressivity Exhibitionism Theoretical Economic Aesthetic Social Political Religious	Order 11.56 Achievement 15.76 Perseverance 13.45 Change 17.45 Dominance(Power) 17.28 Deference 10.96 Benevolence 14.49 Introspection 15.56 Affiliation (Soc.) 17.31 Heterosexuality 13.75 Individualism 16.98 Inferiority 6.56 Dependence 10.01 Agressivity 15.61 Exhibitionism 12.62 Theoretical 43.45 Economic 43.52 Aesthetic 42.79 Social 41.68 Political 45.66 Religious 26.47	Order 11.56 30 Achievement 15.76 63 Perseverance 13.45 26 Change 17.45 79 Dominance(Power) 17.28 71 Deference 10.96 25 Benevolence 14.49 43 Introspection 15.56 65 Affiliation (Soc.) 17.31 77 Heterosexuality 13.75 65 Individualism 16.98 77 Inferiority 6.56 8 Dependence 10.01 50 Agressivity 15.61 70 Exhibitionism 12.62 53 Theoretical 43.45 49 Economic 43.52 57 Aesthetic 42.79 81 Social 41.68 74 Political 45.66 68 Religious 26.47 10	riable         Mean         Percentile * equivalent         Mean equivalent           Order         11.56         30         10.39           Achievement         15.76         63         17.89           Perseverance         13.45         26         13.32           Change         17.45         79         16.48           Dominance (Fower)         17.28         71         18.25           Deference         10.96         25         9.51           Benevolence         14.49         43         12.74           Introspection         15.56         65         14.10           Affiliation (Soc.)         17.31         77         13.65           Heterosexuality         13.75         65         16.85           Individualism         16.98         77         14.99           Inferiority         6.56         8         10.23           Dependence         10.01         50         9.35           Agressivity         15.61         70         12.72           Exhibitionism         12.62         53         14.10           Theoretical         43.45         49         42.11           Economic         43.52         57

\* According to norms for adult American males (for the EPPS and Self Concept tests) and the norms of American university students for the AVS (variables 16 to 21).

and individualism, with a moderate need to achieve and are adaptable to change. Surprisingly enough, the only value for which both groups of students show a high score is aesthetism.

The French group, however, seems to show high needs for affiliation and aggressivity and a more positive self esteem than the English group, as well as more pronounced social and political values.

The English-speaking group, on the other hand, shows a greater need for achievement and stronger religious values than the French-speaking group. Given the type of studies undertaken by these students, it is interesting to note that their economic values are not very strong.

# Are there significant differences between these two groups of students?

Certain differences between the two groups of students were noted in the previous section. We shall now see whether the profiles as a whole differ significantly and if so, which variables are responsible for these differences.

The profiles of the two groups have been compared by multivariate profile analysis (Morrison, 1967) according to a program devised by Allaire, Silk & Tsang (1973). This analysis permits the testing of two hypotheses related to multivariate profiles: (1) are the profiles of the K groups (measured on

n commensurable variables) parallel? (2) Are the profiles of the same height? Hypothesis (1) is tested by the distribution of the largest characteristic value, using Heck's theta statistic, described by Morrison (1967) . Hypothesis (2) is evaluated by a simple analysis of variance using the F test as criterion. the profiles differ significantly, the program caluclates a simultaneous test and a univariate test on each variable to indicate where the significant differences in the profiles are to be found. This analysis has thus been carried out for the fifteen variables of the Personal Preference Schedule (EPPS), and separately for the six value-measuring variables (AVS, variables 16 to 21 in Table 2). Tables 3 and 4 show the results of these analyses. For the EPPS, the profiles are of the same height but are not parallel. The variables mainly responsible for this significant difference are as follows: inferiority, affiliation, aggressivity, heterosexuality, achievement and From Table 3, it is seen that the Frenchindividualism. speaking students appear to be higher on affiliation, individualism and aggressivity, whereas the English-speaking group has a greater tendency to feel inferior and shows a greater need for achievement and heterosexuality.

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As far as the values of Table 4 are concerned, the pro-

<sup>(1)</sup> However, where K - 2 (i.e. only two groups are compared), the theta statistic becomes an F statistic (see Morrison, 1967, p. 167).

files are parallel but not of the same height (i.e. the average results of the French-speaking students are higher for all the variables, except for the religious value). The most important differences between the two groups concern political, religious, social and, to a lesser extent, aesthetic values. On the whole, the political, social and aesthetic values of the French-speaking students are more pronounced, and their religious values weaker, than those of their English colleagues.

#### TABLE 3

Comparison of the profiles of the two groups as regards the "Personal Preferences" variables (EPPS)

#### A) Test for profile parallelism

F = 9.25 with 14 and 172 degrees of freedom Critical value of F (for p = .01)  $\simeq$  2.20

## B) Test for profile heights

F = 2.423 with 1 and 185 degrees of freedom Critical value of F (for p = .01)  $^{\checkmark}$  6.74

# C) Simultaneous and univariate test on each variable Variables Confidence interval

	<u><b>U</b>p</u>	er limit	Lower limit	F (univariate)
1.	Order	4.64	-2.13	. 3.07
2.	Achievement	1.10	-5.33	11.79**
3.	Perseverance	4.33	-4.06	0.03
4.	Change	4.96	<b>-2.</b> 46	3.08
5.	Dominance (Power)	3.04	-4.97	1.58
6.	Deference	4.38	-1.47	6.73
7.	Benevolence	5.74	-2.23	5.27
8.	Extrospection	4.88	<b>-1.</b> 96	4.97
9.	Affiliation (Soc.)	6.98	0.35	33.17**
10.	Heterosexuality	1.10	-7.29	14.79**
11.	Individualism	5.10	-1.10	11.31**
12.	Inferiority	42	-6.90	34.62**
13.	Dependence	4.43	-3.12	0.82
14.	Agressiv	5.74	-0.85	14.96**
15.	Exhibitionism	2.15	-5.10	4.50

<sup>\*</sup> The confidence intervals as calculated here constitutes a very conservative test for identifying the significant differences between groups (see Hummel & Sligo, 1971). In this case, the test indicates that the affiliation and inferiority variables are significantly different. The univariate test is much less conservative. A reasonable solution, in our opinion, was to consider as significant the variables showing a significant F test at a level of confidence of .99.

<sup>\*\*</sup> indicates that this variable shows a significant F test at the level of confidence of .99, for 1 and 185 degrees of freedom.

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# TABLE 4

Comparison of the profiles of the two groups as regards the six values (AVS)

# A) Test for profile parallelism

F = 0.19 with 5 and 181 degrees of freedom Critical value of F (for p = .01) = 3.10

# B) Test for profile heights

F = 71.30 with 1 and 185 degrees of freedom Critical value of F (for p = .01) = 6.74

# c) Simultaneous and univariate test on each variable

#### Confidence intervals

<u>Variables</u>	Upper limit.	Lower limit	F (univariate)
1. Theoretical	5.06	-2.37	3.26
2. Economic	6.22	-3.27	2.42
3. Aesthetic	6.99	-2.05	7.45**
4. Social	7,50	-0.03	24.56**
5. Political	7.41.	1.16*	47.05**
6. Religious	-1.20	-10.42*	39.69**

<sup>\*</sup> indicates a significant difference according to the simultaneous test.

<sup>\*\*</sup> indicates a significant F test at the level of confidence of .99 for 1 and 185 degrees of freedom.

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#### UNIVERSITY GRANT PROGRAM RESEARCH REPORTS

#### RAPPORT DE RECHERCHE SUR LE PROGRAMME DE SUBVENTIONS AUX UNIVERSITES

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20. I.A. Litvak C.J. Maule Department of Economics, Climate for Entrepreneurs: A Carleton University. Comparative Study, January, 1974.

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#### REPORT TITLE/TITRE DE L'OUVRAGE

Factors of Success and Weakness Affecting Small and Medium-Sized Manufacturing Businesses in Quebec, Particularly those Businesses using Advanced Production Techniques, December, 1973.

Facteurs de Succes et Faiblesses des Petites et Moyennes Entreprises Manufacturieres au Québec, Specialement des Entreprises Utilisant des Techniques de Production Avancees, decembre, 1973.

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