## A COMPARATIVE STUDY OF QUEBEC VS. FRENCH UNIVERSITY STUDENTS: AN EXPLORATORY ANALYSIS OF WORK AND LIFE VALUES OF FUTURE MANAGERS

Travail -Famille: Etude comparative des valeurs des futurs gestionnaires Française et Québécoise

Shimon L. Dolan<sup>1</sup>, Miriam Díez Piñol<sup>2</sup>, Jean Luc Cerdin<sup>3</sup>, Eric Gosselin<sup>4</sup>

.....

#### Abstract

The aim of the present paper is to present the results of an exploratory study that analyses a sample of business and industrial relations students from two French speaking countries and test the underlying structure of their respective work and life values, and to also test if different subcultures can be detected. Measures of culture (defined by a set of Work and Life values) were constructed, and data were obtained from 459 Business major and Industrial Relations students in two distinct zones: 287 from Paris (France) and 172 from Ottawa-Hull (Quebec-Canada). A structure of 4 work values factors and 3 life values factors were detected. Using a series of ANOVAs analyses, results suggest that Quebec students have systematically higher scores across all value scales. Results also suggests that values are associated with gender, age and work experience, although differences are not maintained when country is controlled for. The paper explores the implications for possible management practices and research

#### INTRODUCTION

Traditionally researchers in the OB/HRM field have attempted to explain the contribution of sound management process and human resources practices to organizational performance (Ferris *et al.*, 1998). Over the years, many studies have

<sup>1</sup> INSTITUTO DE ESTUDIOS LABORALES - ESADE Business School, Barcelona, Espagne. Courriel: dolan@esade.edu

<sup>2.</sup> INSTITUTO DE ESTUDIOS LABORALES - ESADE Business School, Barcelona, Espagne

<sup>3</sup> ESSEC-Paris

<sup>4</sup> Université du Québec à Hull, Canada

emphasized the importance of human competencies such as knowledge, skills and attitudes in explaining work related performance. Thus, individual attitudes referred to in these studies have often been suggested as the key to understanding the behavioural predispositions. Attitudes in turn depend on values, and for this reason scholars are attempting to better understand the structure, concept and importance of values within the context of organisational competitiveness (Dolan & Garcia, 2002).

In a rapidly-changing, unpredictable modern world, forecasting how people will behave at work is often a risky affair. The field of organizational behaviour is no exception in this respect. From the early days of theories on organizational behaviour (taylorism, fordism), the various schools of thought have increasingly focused on the importance of the human factor (Maslow, 1963; Mayo, 1975). More recent conceptual approaches have centred on social and cultural components regarding organizations and people in attempting to explain organizational behaviour and differences. An elaborate definition of culture has been recently proposed by Gooderham and Nordhaug (2003): "The system of meaning - values, beliefs, expectations and goals, shared by members of a particular group of people and that distinguish them from members of other group (p. 131)". National culture has been used to explain a wide range of differences between countries, including individual and group values (Hofstede, 1980). These differences can lead to substantive differences in how organizations operate in different regions of the world. However, little attention has been paid to the study of the differences within one country, and particularly, studies of culture via life and work values vary markedly in terms of concepts, methodology and level of analysis. The latter is important hence if culture can be clustered to pinpoint regional similarities that significantly surpass national similarities it may be viable to adjust standard management practices.

The objective of this exploratory study is to empirically test the existence or absence of stereotypical national life and work values amongst business and industrial relations major students in two distinct countries. The common cultural denominator for these countries is the use of the French language. Our study, thus, has been inspired by turning around the Hofstede theoretical framework based on constructs such as values, attitudes and culture.

- This paper contributes to understanding of the management of human resources, as employee behaviors often originate in their respective values and belief systems (Dolan, Gosselin, & Belout, 2000; Schuler, 1990; Schuler & Jackson, 1987a, 1987b;). The study also relates to the search for relationships between work and life values of future managers. Consequently, the effective strategy of human resource

management can be derived from the aforementioned arguments and be addressed to develop a congruency with these employee value systems (Begley & Boyd, 2000; O'Reilly, Chatman & Caldwell, 1991;). This represents the fundamental argument in the theory of contingency in managing human resources (Baird & Meshoulam, 1988).

#### THEORETICAL FRAMEWORK

#### Values Revisited: A brief Review

In the literature, values have been approached via different perspectives. For example, as normative standards to choose amongst various behaviors (Becker & McClintock, 1967; Kluckhon & Strodbeck, 1961; Schwartz, 1992); as basic components of cognitive maps which guides motivation and behavior (Hackman, Lawler & Porter, 1977); or a sub-group of attitudes (Levy, 1990).

In the 1940s, Antoine De Saint-Exupery wrote: "if you wish to build a ship, don't start looking for wood, cutting tables or begin allocating tasks; what you should do first is, find men with a desire to sail on the wide ocean" (cited in Garcia & Dolan, 1997 p xxi). The question is whether this desire is universal in nature or whether it depends on socio-cultural factors that stem from the models adopted by each society. Though the words for our values may reflect relatively simple thought structures, they carry an important conceptual load, acting as long-term behavior predictors.

Schwartz *et al.* (1999, pp: 24-25) states that values represent the concepts of what is really desirable and guide social actors in their selection of behaviors, are used to assess other people and explain people's responses in general. One of the central aspects that defines values is its preferential character, in that a value is primarily an activity or preferential process of singling out a given behavior. The preferential character of values also acts simultaneously in setting up an order or a hierarchical structure of respective values. Secondly, given that espoused values represent a sort of preference, it is obvious that, implicitly or explicitly, some kind of order is established. The totality of this order represents the value matrix/system of the person.

On the basis of this discussion, a number of questions can be raised with reference to the distinct values in each culture, organization or job setting. Are they universal or are they unique? Is cultural variation manifested only in its form or also in its content? Other relevant aspects seem to be the relationships between the value system and the predisposition to behave in distinct cultures. All the above topics enable researchers to render operational the concept of values.

Thus, values guide daily actions, bind groups, help resolve conflicts and stimulate development. All cultures contain more-or-less explicit value systems that determine behaviour (Dunkel & Mayrhofer, 2001, Garcia & Dolan, 1997; Schein, 1985).

Other scholars classify values into three types according to their nature: instrumental, affective and cognitive (Elizur & Kolowsky, 1996; Zarhi & Elizur, 1996). In organizational behavior, instrumental values include relationship with others such as colleagues and superiors; affective values are responsibility, influence, feedback, the importance of work, etc; and cognitive ones include status and contribution to society. This initial classification of values has been termed "Work Outcomes" (Elizur, 1984). The same author also described a second classification based on system contingencies and the behavior of individuals with regard to an organization's need to pull things together to work effectively and to motivate its staff. Job security is one of the work values that is currently given the greatest importance in the present system of values.

In his definition of culture, Hofstede (1991), make reference to cultural differences as they are manifested through symbols, heroes, rituals and values, and he established different cultural levels: national, regional/ethnic, religious, organizational, or those based on gender or social class. Hofstede's work has been criticized for downplaying the importance of sub-cultures and individual differences within the same culture/nation. He considers a nation as a political unit and distinct from the concept of society. If one considers a nation, one can quickly appreciate that it contains groups and minorities (the Basque region being a case in point). For example, in Cultures and Organizations (Hofstede, 1991) he emphasized the cultural differences that can be found at the national level. According to Hofstede, one can study individual differences only at this level. In particular, he focused on significant individual differences according to gender, age and social class in each of the four dimensions he used to explain culture. However, according to him, one could not study these groups or minorities as if they represented sub-cultures.

According to this author, values must be studied from an aggregate perspective, not an individual one. He defines individual values as sentiments, which in many cases are unconscious, implicit ones. Such sentiments are difficult to change, most of them being acquired before the individual reaches the age of ten. They cannot be discussed or directly observed. They can only be inferred from the way in which people act under certain circumstances. However, even this is ambiguous because people's questionnaire responses as to how they would act in given situations are often not what they do in practice.

Moving from general values to work values, scholars such as Elizur (1991) and Elizur & Sagie (1994) conclude that the latter have been studied from different conceptual angles. They have been defined as vocational orientation (Pryor, 1981;

Super, 1995); predisposition to behave in a work setting (England, 1967; Ravlin & Meglino, 1989); and importance in terms of work accomplishments (Elizur, 1984; Levy & Guttman, 1976; MOW, 1987). These definitions represent a refinement of necessities that emerge through socialization (Lofquist & Dawis, 1969; Super, 1995), or as ideologies or philosophies that enable us to understand individual behavior at work (England, 1967).

The impact of culture on behavior has been postulated for many years and its impact continues to be demonstrated. For example, 103 human resource professionals at major US-based organizations were asked to identify the most important factors influencing the management development programs in their organizations (The Conference Board, 2001). Four factors were mentioned by over two-thirds of the respondents: The CEO's vision and values, the organization's strategic plan, the operating needs of the line managers, and the organization's culture. Thus, the potential impact of individual's values on culture is a topic that is receiving increased interest as change, and change management, have emerged as important activities of the new human resource management roles (Schuler, Dolan & Jackson, 2001) and in management in general (Dolan, Garcia and Auerbach, 2003)..

The effects of socio-demographic variables such as age, education, gender, and seniority upon the culture and values have also been reported. The most studied of these variables is gender. According to the literature, men tend to place greater value on issues concerning socio-economic status, prestige and power (Dolan *et al.*, 2002; Elizur & Sagie, 1994). By contrast, women are more concerned with socio-affective issues such as work climate, safety at work, and relationships with their colleagues. However, some authors (Elizur & Kolowsky, 1996; Kolowsky & Staskevsky, 2000) have emphasized that socio-demographic issues (such as gender) should not be divorced from the cultural characteristics of a given society or context.

According to Hofstede, the world is full of conflicts between individuals, groups, and nations that feel and act differently. Nevertheless, all these cultures face common problems that require co-operation for their solution. He argues that despite differences in forms of expression, there is a common structure that permits "universal" understanding. Hofstede describes these common problems in a homogeneous fashion for all countries, arguing that there is a common structure. He seeks the integration of cultures. We disagree with this idea, believing that both practices and structures are different. Accordingly, we would be in closer agreement with a research perspective based on differentiation rather than on integration. Other scholars defend the idea that the same basic structure applies to different cultural settings (Schwartz, 1992; Zarhi & Elizur, 1996). Nevertheless, these authors also stress that the importance of values depends on the context (Elizur & Kolowsky, 1996).

There are numerous studies on values related to various ambits affecting the individual, most of them of a multi-dimensional nature. Thus one can find studies on work (Zarhi & Elizur, 1996) as well as ones on values linked to the personal sphere and life issues. However there are fewer studies that set out to analyze the relationship between both value structures – work and life. Among these, one should mention the work carried out by Elizur, *et al.* (1996), who focused on life and work value structures in Israel, Hungary, India, Brazil and Japan.

An examination of the literature on the methodologies used to measure work values and life values reveals the use of different measurements. Cook et al. (1993) drew up a list of the 29 most important and frequently used measurement tools appearing in the literature on organizational culture, and identified two broad categories of tools. The first concerns those aimed at measuring organizational commitment toward staff. The second covers scales that measure individual needs, linked with self-fulfillment and development. There are also other tools that do not form a clear category. These include the "Work Values Inventory" (Super, 1970), which is particularly relevant to the present study. According to Super, the tool provides 15 indexes on work values, both intrinsic and extrinsic, related to motivation. It also analyzes the satisfaction systems values that are directly linked to and derive from jobs. The process cannot be based on the supposition that society already knows and accepts a framework of common, shared values.

A paper by Dunkel and Mayrhofer (2001) criticizes Hofstede's position, calling it ethno-centric and universalist, failing to take account of the context. Nevertheless, Hofstede (1991) stated that while he was no disciple of ethno-centrism, he did take a relativist stance on culture. Dunkel proposed a "cultural standard," arguing that culture was too complex a system to be measured by over-abstract dimensions. "Cultural standards" would be the interpretations that people make of a specific context. Such interpretations can be revealed through interviews. Cultural standards would allow one to identify differences between pairs of national cultures. The fact that culture provides the reference framework implies a subjective view of the phenomenon. Cultural standards are not visible but become apparent in behavior in inter-cultural situations involving different countries.

After 20 years of research, there remain several stereotyped notions about individualism and collectivism and as yet no one has proposed a theoretical model with sound consistency. An exception to that is the work of Triandis (1972, 1994) and his colleagues (Tapp *et al.* 1974) .

Hofstede initially proposed an individualism index, a one-dimensional view of human values, with individualism and collectivism conceived of as the extremes of a continuum. National cultures were defined as adhering to one or the other of those extremes (or positions between them). The impact of Hofstede's work is still relevant today because; in many studies, a person's nationality is regarded as an

indication of his or her individualistic or collectivistic tendencies. The influence of Hofstede's model is still evident at the level of individual analysis.

#### This Study's Assumptions and Proposition

The following premises are proposed as the framework for this study:

Levels of analysis of culture: Our study assumes that a country is synonymous with national culture; Although there may well be more than one culture in a country, by and large, the most single denominator of a country is an approximation of its culture and respective value system. It is also possible that a culture can be shared among different countries (Dunkel & Mayrhofer, 2001; Harvey, 1997; Spector *et al.*, 2002) especially when the citizens of it use the same language. Common language is commonly used to denote similar culture (i.e. Anglo-Saxon, Latin, etc.). It is for this reason that we have decided to compare two regions in two countries having controlled for the language.

Relationship between different mental constructs: attitudes, values and culture: We agree with those researchers (such as Hofstede, 1998) who establish conceptual differences between these terms. Nevertheless, we contend that there is a relationship between these constructs and each provides an indirect indicator, at the very least, of the others.

Thus, based on the socio-cultural. historical and political links between Quebec and France, we can hypothesize that we will find closer proximity of values albeit the country difference. However, given the North. American proximity, we expect to find higher means on values connected to work efficiency and pragmatism in Quebec, and by contrast, higher means on values connected with family and life facets (Joie de vivre) in France. Furthermore, we hypothesize that due to these marked expected country differences, an underlying work and life structure will most likely be found with stakeholders in the distinct countries appreciating it differentially.

#### METHODS AND PROCEDURES

#### Sample and Instruments

The population in this exploratory study is university students at Faculties of Business and Industrial relations in two countries (Paris-France, and Ottawa-Hull Quebec - Canada). Of the total sample of 459 students, 287 studied Business at

ESSEC (Paris) in France and 172 at a public university at the Ottawa-Hull region in Canada. All students were doing their undergraduate study.

To measure the importance given by students to a set of values related to work, personal and family life a structured questionnaire was used. It included two Likert-type scales comprising 17 Work Value and 16 Life Values (see the original appendix in French). Students were asked to grade the importance of each component on a scale of 1 to 5 (1=not important at all; 5=fundamental or very important).

The tools employed in measuring work values was inspired by the "Work Values Inventory" (Super, 1970) although this tool has been criticized as having some limitations (it is suitable only for full-time workers) (see: Super, 1995), nevertheless, its use is well-established (Neville & Super, 1986). Because of this limitation the tool was completed incorporating two new values from Dolan & Garcia (2002). fln respect to the life values, the instrument was inspired by a combination of the Dolan & García (2002) instrument and Rokeach's (1973) work. the following social demographic variables were also ascertained through the questionnaire and were used as a control variables: age, gender, seniority at the university, work/no work status, residency with/without family, and educational level of the parents. The final version of the instrument has resulted from a Delphi process undertaken by five researchers involved in similar study applied to Spain (Dolan et al, 2004). Convergence was sought and content validation produced satisfactory results. Validation of the French version of the questionnaire was done through consensus of the 4 researchers involved in this study.

#### RESULTS

To unveil the underlying structure of work values and life values, an exploratory factor analysis was undertaken. The final outcome was a more parsimonious structure of work values. The principal components method was used and the factors were obtained by employing the standard criterion of the latent root and rotation Varimax with Kaiser Normalization. Only items with factor loading greater than .5 were included in the construction of the new factors. The only exception: to this general rule was used in the case of 2 values in work scale (Work climate .410 and Team work .486) and 1 value in life scale (Trust, .487); the reason for the non exclusion had to do with logic of external validity and coefficients very close to .5. Thus, with regard to work values, 14 of the 17 original values/items were employed in subsequent analyses. The factor analysis produced four factors that explain 48.15% of the total variance found and is presented in Table 1.

To create the new variables, we summed the score of each factor and divided by the number of items. The four new factors were labeled "Work Context & Equity Values", "Social-Economic Work Status Values", "Intrinsic Work Values and Commitment" and "Autonomy and Creativity Values".

FACTOR I: Work Context & Equity Values. This sub-scale comprises 6 items ( $\alpha$  = .69). These refer to the aspects or characteristics that are external to the person. Respondents who scored high in this section consider the following work aspects, altruism, intellectual stimulation, job security, work climate, issue of work and equity.

FACTOR II: Social-economic work status. This is factor is oriented toward success, purchasing power, and social power. Respondents scoring high on this scale considered work value to reside in climbing the social ladder or making more money within the context of work. Alpha reliability coefficient was .66.

FACTOR III: Intrinsic work values & Commitment. This factor considers the values associated with work that concern how tasks are organized and coordinated: commitment, job variety, flexibility, work climate and friendship at work. These values concern social aspects that are not strictly rational in connection with the work organization. Respondents scoring high on this sub-scale tend to be people who commit themselves and actively participate in the work. Alpha reliability coefficient was .62.

FACTOR IV: **Autonomy and Cretivity Values.** These aspects are directly related to the characteristics of the work or task to be carried out. A high score on this sub-scale indicates that the person places a high value on the opportunities for personal and/or professional development and growth in the job. Alpha reliability coefficient was .58.

Note that "Flexibility" (N06) and "Work climate" (N11) reported relatively high loadings on two distinct factors and consequently had been used respectively in the construction of the scales. They also seem to be very reasonable for external validation purposes of the scales and thus were retained. For example, in the case of flexibility, one sense is flexibility as a organizational policy and practice, and the other sense is flexibility in the description of the own work. In the case of work climate, one sense is learning climate of the work to stimulate own capabilities and skills, and other is the social and relational dimension of work.

Table 1: Results of the factorial analysis applied to work values

e promoto de activo de compositorio de contrato de contrato de contrato de contrato de contrato de contrato de	COMMUNA	FACTOR	FACTOR_	FACTOR	FACTOR
	-LITIES	1		3	A company of the comp
Altruism	,494	,561	-,252	,098	,325
Aesthetic	,503	-,044	-,085	-,236	,662
Creativity	577ء	,175	,216	,249	,661
Intellectual	,471	,504	,409	,209	,073
stimulation	7471	,JU <del>x</del>	7=07	,207	,073
Achievement	,350	,370	,143	,395	,191
Flexibility	,578	,007	,205	,531	,504
Prestige	,634	,085	,785	,034	,097
Power	,614	-,152	,765	-,072	-,018
Economic performance	,526	,288	,641	,169	,062
Job security	,622	,655	,350	-,051	-,260
Work climate	,450	,527	,041	,410	,049
Team work	,307	,486	-,032	,261	-,035
Job variety	,453	,007	,220	,634	,054
Frienship work	,365	,177	-,058	,527	-,227
Commitment	,546	,235	-,148	,681	,069
Efficacy	,182	,336	,180	,094	,166
Equity	,516	,717	-,017	,026	-,016
Percentage of the	ne Total Variano	e Explained	= 48,15%		

Worth noting that in spite of the fact that this summation is a standard procedure in social science research, in our case, it has been a bit more problematic given the relatively low Chronbach alpha's coefficients reported for some of the summated factors (see Tables 2 and 4). This is due, in part, to the way the factor scores are estimated. Factor analysts draw a distinction between factor scores and "factor score estimates." Factor scores fulfil several stipulations of the common factor model (for example, they have unit variance and are perfectly orthogonal when the factors are orthogonal) and are not encountered in practice. Rather, researchers routinely compute and report factor score estimates, which are imperfect approximations of the factors. Factor score estimates will not typically have unit variance, and they will often be intercorrelated even when the factors in the analysis are orthogonal. Moreover, in order to maximize the construct or factor "validity" the factor score estimates are as highly determinate as possible for the first order factor, and gradually diminishes the validity in order to meet the univocal for orthogonal in the subsequent factors (Heermann, 1963). Thus, for

the analysis are orthogonal. Moreover, in order to maximize the construct or factor "validity" the factor score estimates are as highly determinate as possible for the first order factor, and gradually diminishes the validity in order to meet the univocal for orthogonal in the subsequent factors (Heermann, 1963). Thus, for reducing factor score estimates potential contamination with variance from other orthogonal factors, the correlation preserving rules for the other order factors diminishes (for more information on this see Berge *et al*, 1999).

Ray (1973) in an in depth analysis of "factor analysis and attitude scales" paper concludes that although ideally scales should be constructed by incorporating the high loadings of the factor estimates, for conceptual reasons, other items that best measure a construct can be used in the scale construction even if the alphas reliability coefficients are moderate.

In the same manner, we have undertaken an exploratory factorial analysis pertaining to the life values instrument. With the exception of the Trust item (.487), all loadings higher than .5 were retained for the subsequent scale construction Table 2 displays the varimax solution of life values. The factorial analysis resulted in four factors that explain 46.27 % of the total variance found.

We have created new scales labeled "Ego and social values", "Order and family life", "Universal Happiness" and "Social-economic status in life". Because of its very low alphas reliability and few items, the 4th factor has not been constructed and was omitted in subsequent analyses. (Cronbach's alpha= .2958).

FACTOR I **Self Esteem and Accomplishments Values**. This factor refers to values that are mainly linked to social and personal factors. A high score on this sub-scale indicates that the person places a high value on meeting personal goals. These people are committed, sociable, and dedicated to helping others and satisfying their needs. Alpha reliability coefficient was .58.

FACTOR II Inner Peace and Altruism. Respondents who scored high in this section are conditioned by the respect for the others in general and they are sensitive to achieving balance in their lives and in reconciling their professional and personal roles. Alpha reliability coefficient was .54.

FACTOR III **Order and Life Status** Respondents scoring high on this sub-scale are committed to preserving social order and balance. Alpha reliability coefficient was .45.

Table 2.

Results of the factorial analysis to life values

	COMMUN- ALITIES	FACTOR 1	FACTOR 2	FACTOR 3	FACTOR 4
Life satisfaction	,599	,754	,024	,170	,038
Mutual support	,203	,312	,208	-,242	,062
Frienship	,596	,737	-,136	-,182	-,028
Materialism	,552	175,	-,174	,606	,351
Self- achievement	,415	,582	,251	,114	,013
Status demostration	,497	,036	-,032	,703	,031
Responsability	,519	,678	,097	,220	,029
Respect	,498	,287	,638	-,072	,062
Order	,401	-,015	,185	,603	-,057
Health life	,583	,126	,655	,363	-,082
Trust	,420	,487	,347	-,149	,200
Initiative	,421	,235	,048	,001	,603
Happiness	,339	-,089	-,105	,046	,564
Liberty	,534	,020	,324	,033	,654
Pace	,504	-,022	,698	-,074	,108
Family	,320	,030	,367	,312	-,295
I	Percentage of th	e Total Varian	ce Explained =	46,27%	

We then performed an analysis of variance (ANOVA) to determine if there was any difference between the vectors of means and the scores of the work and life values by country. This latter condition constitutes the independent variable, and all the values are dependent variables. The results are shown in tables 3 and 4.

The results based on Table 3, suggest that there are significant differences in all work/life values shown by Canadian students versus their French counterparts. Furthermore, additional ANOVAs were employed to examine differences according to gender, work status and age group. The results are displayed in Table 4,5, and 6. Worth noting is that by and large, the country differences are not maintained when controlling for gender, work status and age group.

Table 3: ANOVA comparison of values: Canada and France Descriptives statistics for all value factors (wirk and life)

		N	Mean	Std. Deviato	Std. Error	95 % Confiance Interval fir mean		Minimu m	Maximu m
				,		Lower Bound	Upper Bound		
WCE	Fran	283	3.6673	.56902	.03382	3.6007	3.7338	1.50	5.00
	Queb ec	180	4.4167	.38416	.02863	4.3602	4.4732	2.67	5.00
	Total	436	3,9586	.62334	.02897	3.9017	4.0155	1.50	5.00
ocial Economic Status at vork	Fran ce	284	3.5915	.76217	.04523	3.5025	3.6806	1.67	5.00
	Queb ec	180	3.8870	.62253	0.4640	3.7955	3.9786	2.00	5.00
	Total	464	3.7062	.72503	.03366	3.6400	3.7723	1.67	5.00
ntrinsic vork values & commitment	Fran ce	285	4.0204	.56220	0.3333 0	3.9548	4.0859	1.00	5.00
	Queb ec	177	4.2113	.41105	.03090	4.1503	4.2723	3.20	5.00
	Total	462	4.0935	.51755	.02408	4.0462	4.1408	1.00	5.00
AC	Fran ce	284	4,2183	.71448	.04240	4.1349	4.3018	1.00	5.00
	Queb ec	182	4.5192	.48276	0.3578	4.4486	4.5898	3.00	5.00
	Total	466	4.3358	.65038	.03013	4.2766	4.3950	1.00	5.00
Self Esteem & Accomplish-	Fran ce	280	4.0143	.55242	.03301	3.9493	4.0793	1.60	5.00
ments	Queb ec	179	4.1140	.46104	.03446	4.0460	4. 1820	2.40	5.00
	Total	459	4.0532	.52046	.02429	4.0054	4.1009	1.60	5.00
nner Peace ind Altruism	Fran ce	284	3.8568	.69763	.04140	3.7753	3.9383	1.33	5.00
	Queb ec	181	4.2689	.56777	0.4220	4.1856	4.3522	2.33	5.00
	Total	465	4.0172	.67996	.03153	3.9552	4.0792	1.33	5.00
Order & Life Status	Fran ce	284	2.9566	.78316	.04647	2.8651	3.0480	1.00	5.00
	Queb ec	180	3.2481	.70126	.05227	3.1450	3.3513	1.00	5.00
	Total	464	3.0697	.76501	.03551	2.9999	3.1395	1.00	5.00

## Table 4a and 4b: ANOVA comparison of values based on Gender

#### ANOVA

		Sum of				
		Squares	df	Mean Square	F	Sìg.
WCE	Between Groups	5,690	1	5,690	15,059	,000
	Within Groups	173,806	460	378،	Ann.	
	Total	179,496	461			
Social Economic Status	Between Groups	13,468	1	13,468	27,062	,000
at Work	Within Groups	229,919	462	,498	***************************************	
	Total	243,387	463		WIII	
Intrinsic work values &	Between Groups	,228	1	,228	,850	,357
commitment	Within Groups	123,253	460	,268		
	Total	123,481	461		4	
AC	Between Groups	10,191	1	10,191	25,304	,000
	Within Groups	186,473	463	,403		
	Total	196,665	464			
Self Esteem &	Between Groups	1,630	1	1,630	6,073	,014
Accomplishments	Within Groups	122,411	456	,268		
	Total	124,041	457			
Inner Peace and Altruism	Between Groups	2,199	1	2,199	4,788	,029
	Within Groups	212,207	462	,459		
	Total	214,406	463	****		
Order & Life Status	Between Groups	4,536	1	4,536	7,875	,005
	Within Groups	265,565	461	,576		
	Total	270,102	462	-		

Tables 5a and 5b: ANOVA comparison of values based on Age group

# Descriptives

N         Mean         Std. Deviation         Std. Error         Lower Bound         Upper Bound         Minimum           ile         295         4,0424         ,03813         3,9673         4,1174         1,67           462         3,8114         ,53603         ,04148         3,7295         3,8933         1,50           ile         298         3,8333         ,68398         ,02903         3,7296         3,8113         2,00           ile         298         3,4779         ,74254         ,05763         3,5641         3,5917         1,67           ile         298         4,101         ,48113         ,02903         3,5640         3,7723         1,67           ile         296         4,101         ,48113         ,02797         4,0457         4,1462         1,00           ile         296         4,0935         ,51756         ,02408         4,0462         4,1408         1,00           ile         298         4,0935         ,51756         ,02408         4,0462         4,1408         1,00           ile         293         4,0935         ,51756         ,02408         4,0462         2,1408         1,00           ile         293 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th>95% Confiden</th><th>95% Confidence Interval for Mean</th><th></th><th></th></t<>							95% Confiden	95% Confidence Interval for Mean		
Female			Z	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
Mate         167         3,8114         5,53603         ,04148         3,7295         3,8933           Total         462         3,9589         ,62399         ,02903         3,9018         4,0169           Mate         66         3,4779         7,7254         ,05763         3,5641         3,5917           Total         464         3,7062         7,7254         ,05763         3,6400         3,7723           Rale         66         3,4779         7,7254         ,05763         3,6400         3,7723           Rale         296         4,1101         48113         ,02797         4,0551         4,1652           Male         166         4,0639         ,5776         ,02408         4,0462         3,9744           Female         298         4,4463         ,5776         ,02408         4,0462         4,1628           Male         167         4,1377         76178         ,02408         4,0462         4,1628           Ints         Male         165         4,3355         ,65103         ,02408         4,0462         4,1628           Ints         Male         165         4,3355         ,65103         ,02408         4,0462         4,1628	WCE	Female	295	4,0424	,65494	,03813	3,9673	4,1174	1,67	2,00
Total   462 3,9589		Male	167	3,8114	,53603	,04148	3,7295	3,8933	1,50	5,00
lic Status         Female         298         3,8333         ,68398         ,03962         3,7554         3,9113         2,9113           Male         166         3,4779         7,72503         ,03766         3,6400         3,7723           ralues & Female         296         4,1101         ,48113         ,02797         4,0551         4,1652           Male         166         4,0639         ,57716         ,02480         3,9754         4,1652           Female         296         4,1101         ,48113         ,02797         4,0551         4,1652           Male         166         4,0639         ,57716         ,02408         4,0462         4,1408           Female         298         4,4463         ,57756         ,02408         4,0462         4,1408           Male         167         4,1377         ,76178         ,05895         4,0247         4,1408           nts         Male         165         4,3355         ,65103         ,03193         4,0521         4,1652           nd Altruism         Female         293         4,0528         ,65103         ,02434         4,0427         4,1658           nd Altruism         Female         297         4,0528<		Total	462	3,9589	,62399	,02903	3,9018	4,0159	1,50	5,00
Male         166         3,4779         7,74254         ,05763         3,3641         3,5917           Total         464         3,7062         ,72503         ,03366         3,6400         3,7723           Amale         296         4,1101         ,48113         ,02797         4,0551         4,1652           Total         462         4,0639         ,57716         ,04480         3,9754         4,1652           Male         62         4,0639         ,57716         ,04480         3,9754         4,1652           Male         62         4,0639         ,57716         ,02408         4,0462         4,1408           Male         65         4,4463         ,55091         ,03191         4,3835         4,1408           Male         167         4,3355         ,65103         ,03191         4,2762         4,1526           Male         165         3,973         ,55091         ,04544         3,8336         4,0631           Altriusm         Female         297         4,0528         ,52098         ,02434         4,0463         4,1057           Amale         167         3,9261         ,6956         ,05382         3,954         4,037	Social Economic Status	Female	298	3,8333	86839'	,03962	3,7554	3,9113	2,00	5,00
Total   464 3,7062 ,72503 ,03366 3,6400 3,7723     Allues & Female   296 4,1101 ,48113 ,02797 4,0551 4,1652     Male   166 4,0639 ,57716 ,04480 3,9754 4,1523     Total   462 4,0835 ,57716 ,02408 4,0462 4,1408     Female   298 4,4463 ,55091 ,03191 4,3835 4,5091     Total   465 4,3355 ,65103 ,03019 4,2762 4,3948     Total   465 4,3355 ,65103 ,03019 4,2762 4,3948     Total   465 3,9733 ,58374 ,04544 3,8836 4,0631     Total   458 4,0528 ,52098 ,02434 4,0050 4,1007     Total   464 4,0180 ,66753 ,03873 3,9954 4,1458     Total   464 4,0180 ,68050 ,03159 3,9559 4,0800     Italis   Female   295 3,1424 ,75046 ,04369 3,0564 3,284     Total   463 3,1424 ,75046 ,04369 3,0564 3,375     Total   463 3,0677 76461 0,3553 2,9978 3,1375     Total   463 3,0677 76461 0,3563 2,9978 3,1375     Total   463 3,0677 76461 0,3553 2,9978 3,1375     Total   463 3,0677 76461 0,3563 2,9978 3,1375     Total   464 3,0670 76461 0,3565 2,9978 2,9978 2,9978 2,9978 2,9978 2,9978 2,9978 2,9978 2,9978 2,9978 2,9978 2,99	at Work	Male	166	3,4779	,74254	,05763	3,3641	3,5917	1,67	5,00
Male   296   4,1101   ,48113   ,02797   4,0551   4,1652   4,1652   4,0639   ,57716   ,04480   3,9754   4,1653   4,1653   4,0618		Total	464	3,7062	,72503	,03366	3,6400	3,7723	1,67	5,00
Male         166         4,0639         ,57716         ,04480         3,9754         4,1523           Total         462         4,0835         ,51755         ,02408         4,0462         4,1408           Female         298         4,4463         ,55091         ,03191         4,3835         4,5091           Intotal         Hale         167         4,1377         ,76178         ,05895         4,0213         4,2541           Ints         Female         293         4,0876         ,47732         ,02789         4,0427         4,1525           Ints         Male         165         3,9733         ,58374         0,0454         3,8836         4,0631           Altruism         Female         297         4,0628         ,52098         ,02434         4,0107           Altruism         Female         297         4,0696         ,66753         ,03873         3,9934         4,1458           Male         167         3,9261         ,68050         ,05382         3,8934         4,0324           Altruism         Female         295         3,0564         3,2284         3,2284           Intra-         Intra-         168         17378         0,05970	Intrinsic work values &	Female	296	4,1101	,48113	,02797	4,0551	4,1652	1,80	5,00
Female         462         4,0935         ,51755         ,02408         4,0462         4,1408           Female         298         4,4463         ,55091         ,03191         4,3835         4,5091           Male         167         4,1377         ,76178         ,05895         4,0213         4,2541           Total         465         4,3355         ,65103         ,03019         4,2762         4,3948           Ints         Male         165         3,9733         ,58374         ,0427         4,1525         2           Ints         Male         165         3,9733         ,58374         0,0434         3,8836         4,0631           Ints         Male         165         3,9261         ,66753         ,02434         4,0107         4,1458           Ints         Male         167         3,9261         ,69556         ,05382         3,8199         4,0324           Ints         Female         295         3,4424         ,75046         ,04369         3,9559         4,0800           Ints         Female         295         3,4424         ,75046         ,04369         3,0564         3,0564           Ints         Female         168         2	commitment	Male	166	4,0639	,57716	,04480	3,9754	4,1523	1,00	2,00
Female         298         4,4463         ,55091         ,03191         4,3835         4,5091           Male         167         4,1377         ,76178         ,05895         4,0213         4,2541           Total         465         4,3355         ,65103         ,03019         4,2762         4,3948           Ints         Male         165         3,973         ,65103         ,02789         4,0427         4,1525           Ints         Male         165         3,973         ,58374         ,04544         3,8836         4,0631           Ints         Male         4,0528         ,52098         ,02434         4,0050         4,1007           Intervent         Female         297         4,0696         ,66753         ,03873         3,9934         4,1458           Male         167         3,9261         ,69556         ,05382         3,8199         4,0324           Retural         295         3,1424         ,75046         ,04369         3,9559         4,0800           Ratus         Female         295         3,1424         ,75046         ,04369         3,0564         3,0544           Intervent         Female         168         2,3365         7,73		Total	462	4,0935	,51755	,02408	4,0462	4,1408	1,00	5,00
Male         167         4,1377         7,6178         ,05895         4,0213         4,2541           Total         465         4,3355         ,65103         ,03019         4,2762         4,3948           Female         293         4,0976         ,47732         ,02789         4,0427         4,1525         2           nts         Male         165         3,9733         ,58374         ,04544         3,8836         4,0631         2           nd Altruism Female         297         4,0528         ,52098         ,02434         4,0050         4,1007           Male         167         3,9261         ,66753         ,03873         3,9934         4,1458           Total         464         4,0180         ,68050         ,05382         3,8199         4,0324           Male         295         3,1424         ,75046         ,04369         3,0564         3,2284           Male         168         2,9365         ,77378         ,05970         2,8186         3,0544           164         463         776461         ,03453         2,9378         3,1375	AC	Female	298	4,4463	,55091	,03191	4,3835	4,5091	1,00	5,00
Total         465         4,3355         ,65103         ,03019         4,2762         4,3948           Female         293         4,0976         ,47732         ,02789         4,0427         4,1525         2           nts         Male         165         3,9733         ,52098         ,02434         3,8836         4,0631         2,1007           nd Altruism Female         297         4,0628         ,66753         ,03873         3,9934         4,1458           nd Altruism Female         167         3,9261         ,68756         ,05382         3,8199         4,0324           nd Altruism Female         295         3,1424         ,75046         ,04369         3,9559         4,0800           atus         Female         295         3,1424         ,75046         ,04369         3,0564         3,2284           Atus         168         2,9365         ,77378         ,05970         2,8186         3,0544           Atus         168         2,9365         ,77378         ,05970         2,8186         3,0544		Male	167	4,1377	,76178	,05895	4,0213	4,2541	1,00	5,00
Female         293         4,0976         ,47732         ,02789         4,0427         4,1525         2,1529           Infs         Male         165         3,9733         ,58374         ,04544         3,8836         4,0631         4,0631           Ind Altruism         Female         297         4,0696         ,66753         ,03873         3,9934         4,1458           Ind Altruism         Female         167         3,9261         ,69556         ,05382         3,8199         4,0324           Indust         Female         295         3,1424         ,75046         ,04369         3,0564         3,2284           Indust         168         2,9365         ,77378         ,05970         2,8186         3,0544           Indust         168         2,9365         ,77378         ,05970         2,8186         3,0544		Total	465	4,3355	,65103	,03019	4,2762	4,3948	1,00	5,00
Male         165         3,9733         ,58374         ,04544         3,8836         4,0631           Total         458         4,0528         ,52098         ,02434         4,0050         4,1007           Male         167         3,9261         ,66753         ,03873         3,9934         4,1458           Total         464         4,0180         ,68756         ,05382         3,8199         4,0324           Female         295         3,1424         ,75046         ,04369         3,0564         3,2284           Male         168         2,9365         ,77378         ,05970         2,8186         3,0544           Total         463         3,0677         78461         ,03653         2,9378         3,1375	Self Esteem &	Female	293	4,0976	,47732	,02789	4,0427	4,1525	2,00	5,00
Total         458         4,0528         ,52098         ,02434         4,0050         4,1007           Iruism Female         297         4,0696         ,66753         ,03873         3,9934         4,1458           Male         167         3,9261         ,69556         ,05382         3,8199         4,0324           Fernale         295         3,1424         ,75046         ,04369         3,9559         4,0800           Male         168         2,9365         ,77378         ,05970         2,8186         3,0544           Total         463         3,0677         78461         03653         2,9378         3,1375	Accomplishments	Male	165	3,9733	,58374	,04544	3,8836	4,0631	1,60	5,00
ruism Female         297         4,0696         ,66753         ,03873         3,9934         4,1458           Male         167         3,9261         ,69556         ,05382         3,8199         4,0324           Total         464         4,0180         ,68050         ,03159         3,9559         4,0800           Female         295         3,1424         ,75046         ,04369         3,0564         3,2284           Male         168         2,9365         ,77378         ,05970         2,8186         3,0544           Total         463         3,0577         78461         03653         2,9978         3,1375		Total	458	4,0528	,52098	,02434	4,0050	4,1007	1,60	5,00
Male         167         3,9261         ,69556         ,05382         3,8199         4,0324           Total         464         4,0180         ,68050         ,03159         3,9559         4,0800           Fernale         295         3,1424         ,75046         ,04369         3,0564         3,2284           Male         168         2,9365         ,77378         ,05970         2,8186         3,0544           Total         463         3,0677         78461         03653         2,9978         3,1375	Inner Peace and Altruism	Female	297	4,0696	,66753	67860,	3,9934	4,1458	1,67	5,00
Total         464         4,0180         ,68050         ,03159         3,9559         4,0800           Female         295         3,1424         ,75046         ,04369         3,0564         3,2284           Male         168         2,9365         ,77378         ,05970         2,8186         3,0544           Total         463         3,0677         76461         03563         2,9978         3,1375		Male	167	3,9261	,69556	,05382	3,8199	4,0324	1,33	2,00
Fermale         295         3,424         ,75046         ,04369         3,0564         3,2284           Male         168         2,9365         ,77378         ,05970         2,8186         3,0544           Total         463         3,0677         76461         03653         2,9978         3,1375		Total	464	4,0180	,68050	,03159	3,9559	4,0800	1,33	5,00
168 2,9365 ,77378 ,05970 2,8186 3,0544	Order & Life Status	Female	295	3,1424	,75046	,04369	3,0564	3,2284	1,00	5,00
463 3.0677 76461 03553 2.9978 3.1375		Male	168	2,9365	,77378	,05970	2,8186	3,0544	1,00	5,00
2000		Total	463	3,0677	,76461	,03553	2,9978	3,1375	1,00	5,00

**418** 

1						95% Confidence Interval for Mean	e interval for			
		z	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum	ε
WCE Very young	61	367	3,8588	,62321	,03253	3,7948	3,9227	1,50	φ	5,00
Young (25-30)	-30)	43	4,2984	,53025	.08086	4,1353	4,4616	3,17	e7 	5,00
Older (31 or	'n	46	4,3587	,39592	,05837	4,2411	4,4763	3,67	ري	5.00
		456	3,9507	99239"	,02921	3,8933	4,0081	1,50	(v)	5,00
Social Economic Status Very young at Work (18-24)	61	368	3,6286	73517	,03832	3,5533	3,7040	1,67		9,0
	-30)	43	4,0930	,59239	,09034	3,9107	4,2753	2,00		2,00
Older (35 or older)	ō	46	3,9493	,62050	.09149	3,7650	4,1335	2,67		9,00
Total		457	3,7046	,72817	,03406	3,6377	3,7715	1,67	4)	5,00
Intrinsic work values & Very young commitment (18-24)	Ď.	368	4,0571	,53018	,02764	4,0027	4,1114	1,00		2,00
	-30)	42	4,2619	,40361	.06228	4,1361	4,3877	3,00		200
Older (31 or	Į,	46	4,2000	,48259	.07115	4,0557	4,3433	3,20		2,00
Total		456	4,0904	,51891	,02430	4,0426	4,1381	1,00	W7	5.00
AC Very young	Ō;	370	4,2919	89089'	,03554	4,2220	4,3618	1,00		5,00
Young (25-30)	-30)	\$4	4,6279	,43770	,06675	4,4932	4,7626	3,50		5,00
Older (31 or	ō	46	4,4239	,47102	,06945	4,2840	4,5638	3,50		5,00
Total		459	4,3366	,65292	,03048	4,2767	4,3965	1,00	4)	5,00
Self Esteem & Very young Accomplishments (18:24)	Ē,	365	4,0438	,53148	,02782	3,9891	4,0985	1,60		5,00
	-30)	₫.	4,0651	,55329	,08438	3,8948	4,2354	2,80		5,00
Older (31 or	žo	44	4,1318	.34760	,05240	4,0261	4,2375	3,40		5,00
		452	4,0544	,51836	,02438	4,0065	4,1023	1,60	37	5,00
Inner Peace and Altruism Very young (18-24)	ģ.	368	3,9529	,68826	,03588	3,8823	4,0235	1,33		9,00
Young (25-30)	-30)	44	4,2197	,58818	78880,	4,0409	4,3985	3,00		5,00
Older (31 or	or	46	4,2609	.59592	08786	4,0839	4,4378	3,00		5,00
Total		458	4,0095	70679,	,03173	3,9471	4,0718	1,33	4)	5,00
Order & Life Status Very young (18-24)	61	368	3,0236	73877,	04029	2,9437	3,1034	1,00		5,00
Young (25-30)	-30)	43	3,3721	.66750	,10179	3,1667	3,5775	2,00		4,67
Older (31 or	ō	46	3,1087	0569,	,10312	2,9010	3,3164	1,00		4,00
fotal		457	3,0649	,76658	98550'	2,9944	3,1354	1,00		5,00

Descriptives

## Tables 6a and 6b: ANOVA comparison of values based on Working Status

#### ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
WCE	Between Groups	3,563	1	3,563	9,201	,003
	Within Groups	168,837	436	,387		
	Total	172,400	437			
Social Economic Status	Between Groups	1,235	1	1,235	2,310	,129
at Work	Within Groups	233,162	436	,535		
	Total	234,398	437			
Intrinsic work values &	Between Groups	,113	1	,113	,409	,523
commitment	Within Groups	119,436	434	,275		
	Total	119,549	435			
AC	Between Groups	1,072	1	1,072	2,532	,112
	Within Groups	185,559	438	,424		
	Total	186,631	439			
Self Esteem &	Between Groups	1,756	1	1,756	6,578	,011
Accomplishments	Within Groups	114,760	430	,267		
	Total	116,515	431	1		
Inner Peace and Altruism	Between Groups	2,035	1	2,035	4,393	,037
	Within Groups	201,987	436	,463		
	Total	204,023	437			
Order & Life Status	Between Groups	4,238	1	4,238	7,168	,008
	Within Groups	257,765	436	,591		
	Total	262,002	437			

Descriptives

						95% Confidence Interval for	ce Interval for		
	•					Me	Mean		
		z	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
WCE	Yes	6/.	4,1561	,56257	,06329	4,0301	4,2821	2,67	2,00
Ź	2	329	3,9215	,63455	,03349	3,8557	3,9874	1,50	5,00
¥ .	Total	438	3,9639	,62810	,03001	3,9049	4,0228	1,50	5,00
Social Economic Status Ye	Yes	88	3,8125	96089'	,07613	3,6610	3,9640	2,00	5,00
at Work No	e S	358	3,6750	,74196	,03921	3,5979	3,7522	1,67	2,00
ř	Total	438	3,7002	,73238	,03499	3,6314	3,7689	1,67	5,00
Intrinsic work values & Ye	Yes	79	4,1291	,42852	,04821	4,0331	4,2251	2,60	5,00
commitment No	ŝ	357	4,0874	,54338	,02876	4,0308	4,1440	1,8	2,00
F	Totai	436	4,0950	,52424	,02511	4,0456	4,1443	8,	5,00
AC Y <sub>6</sub>	Yes	79	4,4430	,62011	72690,	4,3041	4,5819	2,00	2,00
Ž	e S	361	4,3144	,65736	,03460	4,2464	4,3824	1,00	2,00
Ĕ	Total	440	4,3375	,65202	,03108	4,2764	4,3986	1,00	5,00
Self Esteem & Ye	Yes	79	4,1949	,38294	,04308	4,1092	4,2807	3,20	90'9
Accomplishments Ne	e S	353	4,0300	,54178	,02884	3,9733	4,0867	1,60	5,00
Ĭ	Total	432	4,0602	,51994	,02502	4,0110	4,1094	1,60	5,00
Inner Peace and Altruism Ye	Yes	88	4,1708	,68332	,07640	4,0188	4,3229	2,33	5,00
Ź	<sub>S</sub>	358	3,9944	90089,	,03594	3,9237	4,0651	1,33	5,00
ř	Total	438	4,0266	,68328	,03265	3,9625	4,0908	1,33	5,00
Order & Life Status Ye	Yes	9/	3,2763	,68505	,07858	3,1198	3,4329	1,33	4,33
Ž	S.	362	3,0166	,78519	,04127	2,9354	3,0977	1,00	5,00
F	Total	438	3,0616	,77430	,03700	2,9889	3,1344	1,00	5,00

Table 4 shows that significant gender differences in work and life values are also found. Female students attributed more importance to extrinsic and intrinsic work values than male students; they also placed higher importance on life values such as order and family life. By contrast, the males manifested higher motivation to achieve social economic status at work and in life.

There are also significant differences in age . It seems that very young students have not develop yet a clear values structure. The older group (31 or older) consider that work context is important. Instead, for young students (between 25 and 30) the social economic status, intrinsic work values or autonomy, creativity are more important. They exhibit the highest scores on these factors.

#### DISCUSSION AND CONCLUSION

The first question that comes to mind is "why do Canadian students manifest systematically (and significantly) higher scores on all values than the French students?" There might be two alternative answers to this question, one that is conceptually supported and the other one that is psychometrically supported.

As to the psychometric debate, a fundamental, unresolved issue with multinational research is whether similarities or differences are in fact real (Barksdale & McTier-Anderson 1982). Standardized instruments such must provide equivalent (invariant) measurement across national cultures (equal true scores) if comparative statements across cultures are to have substantive import. Without equivalent measures, observed scores from different cultures are on "different scales" and, therefore, are not directly comparable (Drasgow & Kanfer 1985).

Smith, Kendall, and Hulin (1969) suggest that the frame of reference an individual brings to bear in evaluating an application will be shaped by the unique life experiences of the respondents. Measurement nonequivalence may result from these differing frames of reference. Zmud et al. (1994) argue that all instruments can be viewed as located on a continuum reflecting the extent to which the construct is linked with an experientially based context. The stronger a construct's linkage is to an experientially based context, the greater the concern is that the construct and the context may interact. If significant construct-context interaction is present, item-factor loadings or structural weights (in second-order measurement models) may vary between subgroups or contexts. Thus, the cultural context may, in part, influence the construct's meaning or how it is scaled.

Note that the question of cross-cultural measurement invariance is not whether national culture affects mean scores, but rather whether it affects the trait (true scores) in the scale's items. Differences in true scores (e.g., item-factor loadings) between cultures mean that the observations are in difference context and

therefore not comparable. Without knowledge of whether the value instrument used provides equivalent measurement across cultures, it is not possible to determine whether observed differences in user evaluations are due to culture or represent a cultural bias in the instrument.

Thus, one way to interpret the results is that the culture specific of the Canadian students is to use the Likert type scale in a more liberal form that their French counterparts. Consequently, the mere means represent an art affect of the scale use within a cultural context and nothing more.

By Contrast, Hofstede (1983) argues that national cultures represent fundamental differences in the way people perceive and interpret the world. National cultures are frames of reference that are grounded in the lifetime experiences - family, friends, school, etc. - of individuals as they grow and interact with others who share basic values. By influencing the individual user's view of looking at the world, culture can introduce a bias in user evaluations of any scale measured including a value scale. Albeit the fact that Hofstede using another instrument and refers to other dimensions in his work, the question is: to what extent the results reported herewith support Hofstede view? We have seen significant differences between Canada and France, but not within each country when the latter is controlled for.

But, Quebec and France are have one strong common language denominator, and people from both culture claim to share common values. For example, in an official Quebec government document we can find reference to the French influence of Quebec traced to architecture, music, food and religion. Furthermore, a special issue of "Ethnologies" (2003) explores the interrelated themes of language and culture, and particularly how language and culture contribute to self-definition in local, regional, national and global contexts. The contributors approach these themes from the perspectives of ethnomusicology, Canadian studies, cultural anthropology, and linguistics. The authors use ethnographic, ethnohistorical and archival methods to obtain their data, and exegetical analysis of key texts and cultural performances to derive insights into patterns of language use and identity formation. They contextualize these patterns within particular communities, make comparisons with other communities and use theoretical frameworks which are broadly sociolinguistic and postmodern.

Thus, if we assume the postulate advances by Hofestede *et al.*, we, should expect to find significant differences between France and Quebec- French Canada. Indeed, the results indicate that when the country is controlled for, the individual differences do not play a significant role. Should we consider that as a sign of homogeneous culture in Canada and also in France?

The objective of the study was to identify the principal work values and life values among business and IR students in two distinct countries and to find out if

significant differences prevail. A number of control variables such as gender, zone of living and social-cultural background of the family, were also studied.

Results confirmed that albeit the common French language, there seems to be a distinct subculture characterized by significant values and preferences; all value dimensions studied shows these significant differences. The findings may have potential implications to organizations and management practices. According to Cray & Mallory (1998) the important aspects of cross-cultural understanding exist outside organizational structure and thus "human preferences and decisions which are shaped by the values within society are refracted through individual personalities." Therefore, the organization and the behavior of those associated with it must reflect the characteristics of the surrounding culture.

In a study which is a partial replication of Hofstede's (1980a) work, Punnet and Withane (reported in Cray, 1998) develop a series of hypotheses on the general expectation that the Anglophone scores would be the same as those of the Canadians in the original study and the francophones scores would be closer to the French scores. The results of our study do not confirm these assertions. Nor were we able to confirm the hypothesis made earlier in our study that the French Canadian population will have higher scores on values pertaining to individualistic and materialistic dimensions, due to the proximity o the American pragmatic values system, while French students will have higher score on none materialistic and more humanistic values. Our results showed that French Canadians have higher score on all values (both materialistic individuals and family/humanistic values).

Studies on values carried out in other European countries have produced results that do not support entirely our findings. For example, a study on work values among French youngsters (Wach, 1996) revealed that the most important values were related to earning money, job security and personal development. According to this French study, the structure of work values in other European countries is similar, thereby considering an "European model" and the development of corresponding universal human resource management policies and practices. While we are in agreement with some authors asserting that there are some values of a more trans-national character (a point with which Hofstede also agrees), nevertheless, we consider that this "universality" should be limited to those countries that have similar socio-political and economic models. This is explained through the cognitive dimension of the institutional mechanisms, that explain the differences because of the different institutional contexts (Dijck and Schruijer, 1994). In this way, the European model on human resource management would be explained for countries that share common institutional structures: regulatory, normative and cognitive (Gooderham et al., 1999; Nagelkerke, 1994). This is a novelty in the management field where we borrow sociological theoretical frameworks, namely the institutional theory that focuses on the impact of institutions on organizational and individual values.

The results also indicated that men and women show differences regarding their respective systems of work and life values. These differences should be related to cultural factors and not simply to individual ones. In a study on women managers, Pallarés (1993) emphasized that most of the women had to make big sacrifices regarding their family lives in taking up senior positions in their organizations. This situation does not occur so frequently among men. This might explain why the satisfaction systems of men and women respond to different scales of values. In our study, women placed greater value on self-realization and the working climate than did the men, who preferred to achieve greater status and/or power.

#### LIMITATIONS AND FUTURE LINES OF RESEARCH

From the results presented above we can conclude that the main contribution of the paper rests on the study of the presence of cultural stereotypes within a country. From the exploratory results of our analysis we conclude that the differences found in our study make the concept of values based on a national stereotype appropriate in the Quebec and French context. Future investigations should analyze and compare this evidence with the results from larger study that focus on other countries and other more heterogeneous samples. This will enable us to integrate this study into a future larger cross national and cross cultural design, as planned with the introduction of more countries. The value system depends to a large extent on the special cultural characteristics of the geographical location of the institutions studied. In spite of the fact that we did not use Hofstede's methodology and dimensions, we may conclude that his "super" theory of national stereotypical culture does hold true in our context; geographical dispersion and individual differences explain some of the variance in values but some common "national" denominators play a major role. However, this conclusion must be taken with caution given the methodological and conceptual limitations of our research design. Moreover, the findings of the study cannot be generalized because of the homogeneity of the sample. However the results reported here are relevant because they support evidence of the existence of differences, and different cultures, even when homogeneous samples are chosen. Future lines of research should overcome this limitation focusing on the selection of a nationally representative sample, and expanding the result to other European young people and therefore future managers.

In future research it would be worthwhile to contrast the significance currently attributed to the work values employed in this study with those proposed by Super (1970) in his "Work Values Inventory." Super proposed a definition for each of the 15 work values he identified. However, the preliminary results obtained in our study suggest that each population conceptualizes the same work values in a

different way. Furthermore, these differences cannot solely be explained on the basis of individual differences. If we understand values to be one of the elements making up a given culture of work, we can infer that there are no universal work values (Hofstede, 1980, 1991, 2002) but rather that these depend directly on the socio-economic setting involved.

#### REFERENCES

Arciniega, L.; González, L. (2002). Valores individuales y valores corporativos percibidos: una aproximación empírica. *Revista de Psicología Social Aplicada*. 12, 1.

Baird, LL.; Meshoulam, I. (1988). "Managing two fits of strategic human resource management". Academy of Management Review, vol. 13(1): 116-128.

Barksdale, H.C., and McTier-Anderson, L. (1982) Comparative marketing: a review of the literature. *Journal of Macromarketing*, 2, 1: 57-62.

Becker, G.M.; McClintock, G.C. (1967). Value-Behavioral Decision Theory. Annual Review of Psychology, 18: 239-286.

Begley, T.M.; Boyd, D.P.. (2000). "Articulating corporate values through human resource policies". Business Horizons; Vol. 43 (4): 8-12.

Berge, J., Krijnen, W., Wansbeek, T., & Shapiro, A. (1999). Some new results on correlation-preserving factor scores prediction methods. Linear Algebra and its Applications, 289, 311-318

**Cook J.D.**; **Hepworth S.J.**; **Wall T.D.**; **Warr P.B.** (1993). The experience of work. A compendium and review of 249 measures and their use. London: Academic Press.

Cummings, L. L., Harnett, D. L. & Stevens, O. J. (1971). Risk, fate, conciliation, and trust: an international study of attitudinal differences among executives. *Academy of Management Journal*, 14, 285-304

Cray, D.; Mallory, G. (1998). Making sense of Managing culture. International Thomson Business Press

Dijck, J.; Schruijer, S. (1994). "Unity and diversity in human resource policies". En J.J.J. Van Dijck; Groenewegen (Eds.). Changing Business Systems in Europe. An institutional approach. Vub Press.

**Dolan**, S.; Fernández, M.; Martín, A.; Martínez, S.; Díez, M. (2002). Life/work values and national stereotyping vs. Individual differences: implications for studying universal culture in organizations.. *Proceedings of the 8th International conference on Work Values and Behaviour* (pp. 89-96). Warsaw, Poland: The International Society for the Study of Work and Organizational Values.

**Dolan S.L.**; Garcia S. (2002). "Managing by Values: Cultural redesign for strategic organizational change at the dawn of the 21st century". *Journal of Management Development*, Vol. 21 (2): 101-117.

**Dolan S.L.**; Garcia S., Auerbach A. (2003) "Understanding and Managing Chaos in Organizations", *International Journal of Management*, Vol 20(1): 23-36

**Dolan S.L.; Gosselin E.; Belout A.** (2000). "On-the job, Off-the job satisfaction and psychological well being: The moderating Effect of Personality Traits such as Neuroticism and Extraversion". Seventh Bi-annual Conference on the International Society for Study of

- Work and Organizational Values (ISSWOV), Koslowski M. Editor, Jerusalem, juin 2000, pp:101-108.
- **Drasgow**, F., and **Kanfer**, R. (1985) Equivalence of psychological measurement in heterogeneous populations. *Journal of Applied Psychology*, 70, 4:662-680
- **Dunkel**, A.; Mayrhofer, W. (2001). Cultural standards research an epistemological and methodological critique. Paper submitted to Session 659: Culture Standards: An alternative in Cross Cultural Management Research Beyond Hofstede. Academy of Management, Annual Meeting in Washington. D.C. August 3-8, 2001.
- Elizur, D. (1984). Facets of work values: A structural analysis of work outcomes. *Journal of Applied Psychology*, 69: 379-389.
- Elizur, D. (1991). Work and nonwork relations: the conical structure of work and home life relationship, Journal of Organizational Behavior, 12: 313-322
- Elizur, D.; Kolowsky, M. (1996). Work values and organizational commitment. *Proceedings of the 5th International conference on Work Values and Behaviour* (pp. 2-8). Canada: The International Society for the Study of Work and Organizational Values.
- Elizur, D.; Magyari-Beck, I; Singh-Sengupta, S.; Tchaichovsky, F.; Yamauchi, H. (1996). The structure of life and work values in five countries. *Proceedings of the 5<sup>th</sup> International conference on Work Values and Behaviour* (pp. 40-49). Canada: The International Society for the Study of Work and Organizational Values.
- Elizur, D.; Sagie, A. (1994). The relations between life and work values: Developing and testing a facet measure of human values. *Proceedings of the 4th International conference on Work Values and Behaviour* (pp. 94-103). Barcelona, Spain: The International Society for the Study of Work and Organizational Values.
- England, G. W. (1967). Personal managers systems of American managers. Academy of Management Journal, 10: 107-117.
- **Tableau 3** Ethnologies (2003) LANGUAGE AND CULTURE: Shifting Boundaries in a PostmodernWorld 25-2,
- Ferris, G.; Arthur, M.; Berkson, H.; Kaplan, D.; Harrell, G.; Frink, D. (1998). "Toward a social context theory of the Human Resource Management organization effectiveness relationship". Human Resource Management Review, vol.8, n°3:235-264.
- García, S.; Dolan, S.L. (1997): La dirección por valores. McGraw Hill (Spain)
- **Tableau 4 Gobernado**, **R**. (2002): "Análisis de la adscripción a valores", *Revista Internacional de Sociología*, 33, 47-66.
- **Gooderham**, P.; **Nordhaug**, O.; **Ringdal**, K. (1999). "Institutional and rational determinants of organizational practices: Human resource management in European firms". *Administrative Science Quarterly*, 44:507-531.
- **Gooderham**. **P.**, **Nordhaug O** (2003): *Internacional Management: Cross Boundary Challenges*.. London. Blackwell Publishing
- Hackman, J.R.; Lawler, E.E.; Porter L.W. (1977). Perspectives on behavior in organizations. New York: McGraw-Hill Book.
- **Harvey**. **F**. (1997). "National cultural differences in theory and practice: evaluating Hofstede's national cultural framework". Information Technology & People, vol. 10, no 2: 132-146.

**Heermann**, E. F. (1963). Univocal or orthogonal estimators of orthogonal factors. Psychometrika, 28, 161-172.

**Hofstede**, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA, SAGE;

**Hofstede**, G. (1981). Culture and Organizations. International studies of Management and Organization, 10: 15-41.

**Hofstede**, G. (1991). Cultures and Organizations, Software of the Mind. London: McGraw Hill (UK) Limited.

**Hofstede**, G.. (1998) "Attitudes, values and organizational culture: disentangling the concepts". *Organization Studies*, 19/3: 477-492.

**Hofstede**, **G**. (2002). "Commentary on "An International Study of the Psychometric Propoerties of the Hofstede Values Survey Module 1994: A comparison of individual and country/province level results". Applied Psychology: An international review, vol. 51(1): 170-179.

Kluckhohn, C.; Strodbeck L. (1961): Variations in value orientations. Evanston: Row Peterson.

**Kolowsky M.**; Staskevsky S. (Eds) (2000). Work values and organizational behaviour: towards a new millenium.\_Proceedings of the 7th International conference on Work Values and Behaviour (pp. 101-107). Jerusalem, Israel: The International Society for the Study of Work and Organizational Values.

Kornblit, A.L. (2002). Valores individuales y colectivos en una muestra de jóvenes argentinos. Instituto Gino Germani. Facultad de Ciencias Sociales, Universidad de Buenos Aires. www.fsoc.uba.ar/invest/eventos/cultura4/mesa6/6kornblit.doc

Levy, S. (1990). "Values and deeds". Applied Psychology: An international Review, 39: 379-400.

Levy, S.; Guttman, L. (1976). Values and attitudes of Israeli hig school youth. Jerusalem: The Israel Institute of Applied Social Research.

Lofquist, L. H.; Dawis, R. V. (1969). Adjustment to Work. New York, N.Y. Appleton-Century-Crofts.

Martínez Sánchez et al (1999). Sistema de valores personales en los jóvenes universitarios. Actas del II Congreso de estudiantes de sociología. "La sociología en tiempos de cambio social. Salamanca (España) del 3 al 5 de noviembre de 1999.

Maruyama, M. (1994). Esquemas mentales. Gestión en un medio multicultural. Chile: Dolmen Ediciones.

Maslow, A.H. (1963). Motivación y personalidad. Barcelona: Sagitario

Mayo, E. (1975). The Social problems of an industrial civilization: with an appendix on the political problem. London: Routledge and Kegan Paul.

Meyer, J.; Rowan, B. (1991). "Institutionalized organizations: formal structure as myth and ceremony". En W. Powell, P. DiMaggio (Eds.), The new institutionalism in organizational analysis. The University of Chicago press.

Moreno, I. (2003): Andalucía: identidad y cultura: estudios de antropología andaluza. Málaga: Librería Ágora, 1993.

MOW International Research Team (1987). The meaning of working. London, England: Academic Press Inc.

- Nagelkerke, A. (1994). "Institutional responses to changing conditions in European systems of industrial relations". En J.J.J. Van Dijck; Groenewegen (Eds.). Changing Business Systems in Europe. An institutional approach. Vub Press.
- **Nevill**, **D**., & **Super**, **D**. (1986). The Values Scale Manual: Theory, application, and research. Palo Alto, CA: Consulting Psychologists Press
- O'Connell, J.J., Prieto J.M., (1998). "Una lectura vertical de la investigación transcultural sobre la dirección de empresa: el caso español". Revista de psicología del trabajo y de la organizaciones. Vol 14:51-63. Madrid.
- O'Reilly A; Chatman, J.; Caldwell D.F. (1991). "People and organizational culture: a profile comparison approach to assessing person-organization fit". *Academy of Management Journal*. 34/3: 487-516.
- **Pallarés**, S. (1993). *La mujer en la dirección*. (Director: M.Carmen Martínez González). Bellaterra (Barcelona). Publicaciones UAB.
- **Pryor**, R. G. L. (1981). Tracting the development of the work aspect preference scale. Austrialian psychologist, 16: 241-25.
- Ravlin, E. C.; Meglino, B.M. (1989). "The transitive of work values: hierarchical preference ordering of socially desirable stimuli". Organizational Behavior & Human Decision Processes, vol. 44: 494-508.
- Ray J.J., (1973) "Factor analysis and attitude scales". The Australian and New Zealand Journal of Sciology, Vol 9, 3: 11-12.
- Rokeach, M. (1973). The nature of human values. New York: Free Press.
- Schein, E. (1985). Organizational culture and leadership. Jossey-Bass Inc., Publishers. London.
- **Schuler**, **R**. (1990). "Human resource strategy: focusing on issues and actions". *Organizational Dynamics, summer:5-19*.
- Schuler, R.; Jackson, S. (1987.a). "Linking competitive strategies with human resource Management practices". Academy Management Executive, vol.1:207-214.
- Schuler, R.S.; Jackson, S. (1987.b). "Organizational strategy and organizational level as determinant of human resource management practices". *Human Resource Planning*, vol.10:125-141.
- Schuler, R.S., Dolan S.L., Jackson S.E., (2001) "(Guest Editors Special Issue): Trends and Emerging Issues in Human Resource Management: Global and Trans Cultural Perspectives", Introduction, International Journal of Manpower, Vol. 22 (3): 195-197
- Schwartz, S. (1990). "Individualism-collectivism: Critique and proposed refinements". Journal of Crosss-cultural Psychology, 21: 139-157.
- Schwartz, S.H. (1992). "Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries". In M. Zanna (Ed.), Advances in Experimental Social Psychology, 25, 1-65.
- Schwartz, S.; Ros, M. (1993). Value priorities in West European Nations. A cross cultural perspective. In: G. Beb Shakhar and A. Lieblich (Eds). Studies in honor of Sol Kugelmas, Jerusalem: Magnes Press.

- Schwartz, S.H. et al (1999). Multimethod probes of basic human values. J. Adamopoulos, Y. Kashima (editors), Social psuchology and cultural context: Essays in Honor of Harry Triandis. Newbury Park, Ca U.S.A.: Sage.
- Smith, P. C., Kendall, L. M., & Hulin, C. L. (1969). The measurement of satisfaction in work and retirement. Chicago: Rand McNally.
- Spector P. E.; Cooper, C. L.; Sanchez, J. I.; Sparks, K.; Büssing, A.; Dewe. P. (2002). "The Pitfalls of Poor Psychometric Properties: A rejoinder to Hofstede's reply to us". Applied Psychology: An international review, vol. 52: 174-178.
- Tableau 5 Super, D.E. (1970) Work Values Inventory. Boston: Houghton Mifflin.
- Super, D.E., (1995). "Values: Their nature, assessment, and practical use". In D.E. Super and B. Sverko (Editors), Life roles, values and careers (pp. 54-61). San Francisco: Jossey Bass.
- Tapp, J. L., Kelman, H. C., Triandis, H. C., Wrightsman, L., & Coelho, G. (1974) Continuing concerns in cross-cultural ethics: A report. *International Journal of Psychology*, 9, 231-249.
- **Triandis**, H. C. (1972) The analysis of subjective culture. New York: Wiley.
- **Tableau 6 Triandis**, **H**, (1994). « Récherches récentes sur l'individualism et le colectivism ». Les cahiers interantionaux de Psychologie Sociale, 23 : 14-27.
- **Ulied**, **A**. (2003): Catalunya cap al 2020. Visions sobre el futur del territori. Generalitat de Catalunya. Pla Governamental CAT21.
- **Wach**, **M**. (1996). Work values chosen by french students. *Proceedings of the 5<sup>th</sup> International conference on Work Values and Behaviour* (pp. 589-597). Canada: The International Society for the Study of Work and Organizational Values.
- **Zarhi**, **R.** & **Elizur**, **D**. (1996). The structure of work values for religious and non-religious teachers. *Proceedings of the 5<sup>th</sup> International conference on Work Values and Behaviour* (pp. 20-28). Canada: The International Society for the Study of Work and Organizational Values.
- Zmud, R.W.; Sampson, J.P.; Reardon, R.C.; Lenz, J.G.; and Byrd, T.A. (1994) Confounding effects of construct overlap: an example from IS user satisfaction theory. *Information Technology and People*, 7, 2:, 29-45

## Appendix<sup>6</sup> Étude comparative des valeurs des futurs gestionnaires SHIMON DOLAN (Espagne), JEAN-LUC CERDIN (France), ERIC GOSSELIN (Canada)

Dans votre travail, vous	aimeriez :	(1 = pas)	du tout impo	rtant à 5 = très
important)				

	and the second s	1	2	3	4	5
1	Aider les autres					
2	Développer des compétences					
	artistiques	pmmnms				,
3	Apporter des idées et des suggestions nouvelles					
4	Mettre en pratiques les connaissances acquises					
5	Se sentir satisfait par ce qui est accompli					
6	Avoir la liberté d'action		[7]	П	П	П
7	Avoir de l'influence ou de la réputation			Ħ	Ħ	Ħ
8	Avoir de l'autorité sur les autres	Ħ	Ħ	Ħ	П	
9	Etre rémunéré de manière correcte					
10	Qu'on vous offre de la stabilité					
11	Qu'il y ait une bonne ambiance					
12	Que l'on encourage le travail d'équipe					
13	Avoir la possibilité de changer d'activité ou de poste					
14	Que vos collègues soient des amis					
15	Se sentir engagé par ce qui se fait	Ħ				
16	Que les tâches soient accomplies correctement.					
17	Que chacun soit apprécié de la même façon.					

#### Comment vous identifiez-vous par rapport aux items suivants?

	1	2	3		4			5	
pas d	u tout	peu	moyennem	ent	assez		tota	lement	t
					1	2	3	4	5
18	Je sui:	s satisfait de ma	vie						
19	Je partici <u>r</u>	oe à des activités	d'entraide.						
20	Je considè	ere que j'ai de bo	ns amis				同	П	П
21	J'essaie d'	obtenir tous les	biens qui me pla	aisent				一	П
22	Je trouve	positives les act	ions que j'accom	ıplis.				ī	百
23	Je considè	ere importante Ia	a position social	е.	П			Ī	$\vec{\Box}$
24	J'atteins n	nes objectifs per	sonnels					Ī	百
25		avoir un compo		juste					
26	Je suis un	maniaque de l'o	ordre						
27	J'essaie d'	avoir une vie sa	ine						
28	Les autres	savent que je n	e les laisserais p	as tomber.					
29	Dans mor	n environnemen	t, je propose tou	jours des idée	s 🔲				
30	Je ne mon	tre pas aux autr	es mes soucis	• • • • •					
31	•	mes actions de r							
32		he une paix inté						П	
33		ce familiale conc							
34	Vous êtes			Une femi	ne	Un h	omme		
35	Quelle est	votre nationalit	té ?	Canadier	nne	Autr	e, pécis	ez.	
36	Quel est v	otre âge ?					*		
37	En quelle	année avez-voi	us intégré votre	école/univers	ité actue	lle?			
38	Type d'ad	mission				Bacc		Cert	ificat
39	Exercez-v	ous un travail re	émunérée ?			oui		No	n
40	Vivez-vou	ıs chez vos pare	nts?			Oui	[	No	n