

# Organizational culture profile of service and manufacturing businesses in México

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## PERFIL DE LA CULTURA ORGANIZACIONAL DE EMPRESAS DE MANUFACTURA Y SERVICIOS EN MÉXICO

**RESUMEN:** Se evaluó la cultura organizacional de empresas de manufactura y servicios en la región central de México, utilizando el instrumento de evaluación de la cultura organizacional (OCAI) desarrollado por Cameron y Quinn (1999) para una muestra de 307 trabajadores. Para identificar diferencias se realizó una comparación entre los cuatro tipos de culturas: clan, adhocracia, mercado y jerarquía. Los resultados mostraron que existen diferencias significativas relacionadas con el tipo de negocio, el tamaño, el género y la posición jerárquica del trabajador.

**PALABRAS CLAVE:** empresas mexicanas, cultura organizacional, instrumento de evaluación de la cultura organizacional.

## PROFIL DE LA CULTURE ORGANISATIONNELLE D'ENTREPRISES DE MANUFACTURE ET SERVICES AU MEXIQUE

**RÉSUMÉ :** La culture organisationnelle d'entreprises de manufacture et services dans la région centrale du Mexique a été évaluée au moyen de l'instrument d'évaluation de la culture organisationnelle (OCAI) développé par Cameron et Quinn (1999) sur un échantillon de 307 travailleurs. Quatre types de cultures ont été comparées pour identifier les différences: le clan, l'adhocratie, le marché et la hiérarchie. Les résultats ont montré qu'il existe des différences significatives en rapport avec le type d'affaire, la grandeur, le genre et la position hiérarchique du travailleur.

**MOTS-CLEFS :** entreprises mexicaines, culture organisationnelle, instrument d'évaluation de la culture organisationnelle.

## PERFIL DA CULTURA ORGANIZACIONAL DE EMPRESAS DE MANUFATURA E SERVIÇOS NO MÉXICO

**RESUMO:** Avaliou-se a cultura organizacional de empresas de manufatura e serviços na região central do México, utilizando-se o instrumento de avaliação da cultura organizacional (OCAI) desenvolvido por Cameron e Quinn (1999) para uma mostra de 307 trabalhadores. Para identificar diferenças realizou-se uma comparação entre os quatro tipos de culturas: clã, adhocracia, mercado e hierarquia. Os resultados mostraram que existem diferenças significativas relacionadas com o tipo de negócio, o tamanho, o gênero e a posição hierárquica do trabalhador.

**PALAVRAS CHAVE:** Empresas mexicanas, cultura organizacional, instrumento de avaliação da cultura organizacional

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**ABSTRACT:** The organizational cultures of service and manufacturing firms in the central area of Mexico were assessed using the Cameron & Quinn (1999) Organizational Culture Assessment Instrument (OCAI) for sample of 307 workers. To identify differences, a comparison was made between the four organizational cultures: clan, adhocracy, market and hierarchical. Results show significant differences related to the business, its size, and the gender and the hierarchical position of the worker.

**KEYWORDS:** Mexican business, organizational culture, organizational culture assessment instrument.

## Introduction

To understand the Mexican organizational culture at work, it is necessary to understand the history of the country, as well as economic and political aspects that characterize the behavior of Mexican workers. Other Latin American countries may share similar traits with the Mexican culture but each country has its own profile formed by its unique background. Researchers have attempted to establish a global understanding of cultures (Hofstede, 1984; Inglehart et al., 1998; House et al., 2004), but there remain unanswered questions about organizational culture. Due to the importance of manufacturing and service industries in Mexico, in terms of employee welfare and contributions to the national economy, the main objective of this paper is to characterize the organizational cultures of these businesses.

Researchers have found significant differences in organizational cultures between companies in manufacturing and service industries in other countries, such as the U.S. (Cameron & Quinn, 1999). This phenomenon is replicated within Mexican businesses.

Mexico is experiencing rapid changes from increased globalization, political and economical aspects, and social struggles. As a result, researchers

(Peterson et al., 2003; Gordon, 2010) have found that Mexican organizational culture is also changing in areas such as gender differences at work, the relationship between subordinates and superiors, and the generational gap of workers. Thus, it is important to analyze essential characteristics of the Mexican organizational culture related to the most important business to identify characteristics that could help businesses perform better in the future.

### Theories and hypotheses

The concept of organizational culture has been developed over the years based on theories from the fields of sociology, anthropology and psychology. For example, Mayo (1945) and Barnard (1938) stressed the importance of work-group norms, sentiments, values, and emergent interactions in the workplace. Other scholars, such as Selznick (1957), stated that organizational practices become institutionalized and acquire a value that is symbolic and normative in nature to organizational members and are, thus, more than a collection of rules and procedures. The concept of organizational culture became popular after studies by Ouchi (1981) and Peters & Waterman (1982) were presented. At present, the concept is widely used in organizational studies from two different perspectives: the positivistic approach and the phenomenological approach.

In the positivistic approach, organizational culture is assessed via a questionnaire that was developed to measure different aspects in an organization's culture (e.g., Allen & Dyer, 1980; Harris & Moran, 1984; Woodcock, 1989). The responses of different levels of employees in the organization are used in a statistical model to characterize general aspects that are important to that particular organization. For example, the quantitative model developed by Ashkanasy, Broadfoot & Falkus (2000) evaluated the dimensions of leadership, structure, innovation, job performance, planning, communication, environment, humanistic workplace, development of the individual, and socialization of entry. While an organization could measure higher on some aspects and lower on others, dimensions that we do not consider in the model remain unknown.

In the phenomenological approach used by Geertz (1973) for constructing an interpretative theory of culture based on ethnographic studies, a researcher has three routes for assessing organizational culture: a) infiltration, in which the participant observer portrays a true insider; b) a formal research role, agreed to by the insiders; and c) a formal clinical role, in which the insiders ask the outsider to come into the organization as a consultant (Schein, 2000). Results of this type of study provide an organizational culture profile that includes dimensions such as values, feelings,

symbols, traditions, and rituals. While this approach gives a description of the organization and its participants, it is time consuming and expensive. It is not surprising that few businesses are interested in developing an evaluation using this methodology.

Thus, organizational culture is generally a consequence of all the activities that members of an organization carry out; it represents a "behavior frame" that contains the assumptions and values for all members of the organization. Schein (1999), credited for identifying this phenomenon, posits that organizational culture is developed over time, when the people within an organization learn to successfully face and adapt to problematic situations both within and outside the organization. According to Schein (1985), organizational culture is defined as:

A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way you perceive, think, and feel in relation to those problems. (p. 9)

Organizational culture is a characteristic of all business; it reflects the history of the company by the use of language, symbols, customs, or traditions. This concept has been universally accepted, and Mexican organizations are no exception. According to Kotter & Heskett (1992) and Cameron & Quinn (1999), organizational culture is related to the results of the business in terms of effectiveness. Thus, the intention of this study is to profile the organizational culture of Mexican firms in the central area of the country. Latin American researchers such as Calderón-Moncloa & Viardot (2009), Hojman & Pérez (2005), and Ogliastri et al. (1999) have done studies to categorize the Latin American culture at work using both positivistic and phenomenological approaches. In general, they conclude that concepts as a "Latin-American Culture" do not exist. They posit that Latin American countries have diverse cultures with common arenas.

### History of business in Mexico

Mexico became independent from Spanish rule in 1810. This independence was brought about by the "criollos", people born from the joining of two cultures—native Mexicans and Spanish. The "criollos" are the predominant racial group in Mexico, and in terms of behavior, Mexican culture is a mixture of traditions between native Mexican or pre-Hispanic people (i.e., Aztecs, Mayan) and Spanish traditions. After independence, Mexican history was violent, characterized by wars and revolutions. The last revolution



took place in 1910 when the Republic was proclaimed. Since then, a relatively stable peace has predominated in the country.

True economic development of Mexico began in 1940, when a state policy to protect business development in Mexico created a well-established industry that fulfilled the needs of the Mexican market. However, President Salinas (1988-1994) signed the North American Free Trade Agreement (NAFTA) and the globalization of Mexico began. This has brought many changes in Mexican business practices where competitiveness became one of the major concerns. Also during this period, many of the state-owned enterprises such as telephone, agriculture, and transportation were sold. The only companies that are currently government-owned are the petroleum business Pemex, and the electricity network Comisión Federal de Electricidad. Foreign direct investment in Mexico became especially important after the NAFTA agreement was signed, and the manufacturing and service sectors saw a rapid increase in global companies establishing themselves in sectors such as auto parts, food, aerospace, banking, and insurance.

Business plays an important role in Mexican economic activity. According to the Institute of Geography and Statistics of Mexico (INEGI), in 1999 Mexico had 2,726,366

economic units of manufacturing, trade and services that employed 12,777,545 people. Most Mexican businesses are located in specific areas of the country such as Mexico City, Guadalajara, Monterrey, Puebla, and Querétaro. Along the northern border with the U.S. are the "maquiladora" industries that hire labor. The maquiladora program is supported by the Mexican Government to encourage foreign direct investment. Because of this unbalanced geographic development, the northern part of Mexico is becoming well developed while the southern areas have remained underdeveloped. For example, in Mexico City and Monterrey, the average annual income per capita is \$23,000 US, whereas in Oaxaca it is \$4,600 (INEGI, 2008). This situation has caused social unrest and other problems between the marginalized groups and the Federal Government.

A study of 36 of the most important manufacturing businesses in Mexico by Sobrino (2003) highlights the following:

- Businesses were in constant change in the pursuit of productivity during the last five years.
- R&D was conducted by 94 percent of the enterprises, 89 percent had adopted technological innovations, and 83 percent were engaged in reengineering programs.

- The three main objectives for considering technological initiatives were increasing product quality (48%), decreasing the cost of production (35%), and generating new projects (25%).
- Reengineering processes were introduced to increase productivity (40%) and to restructure the management process (30%), as well as in other areas such as logistics and design (30%).
- The focus of technological innovation and reengineering was to attain cost leadership.
- ISO or QS certification was held by 61 percent of the businesses.

Like in other countries, Mexican businesses now face the challenge of competing strategically with Chinese and Indian companies to gain foreign direct investment. For example, Krups, the German manufacturer of home appliances, had a plant in Guanajuato State, but recently moved those operations from Mexico to China. The empty Mexican plant now has two options—to either change the product and define another target market or sell the plant to another company. Mexican companies have also faced similar situations in other manufacturing segments such as the toy and furniture industries and even local craft industries. Therefore, it is particularly important for Mexican business to develop an organizational culture that is oriented to results while at the same time preserving its own unique spirit.

### Characteristics of Mexican culture at work

Hofstede identifies culture as “the collective programming of the mind that distinguishes the members of one group or category of people from another” (1991, p. 9). According to Hofstede (2001), national culture is a mental program that every individual possesses that remains stable over time so that people tend to behave in the same way under similar situations. Shared values result from universally held values whereas individual values arise from both religious and family background or

because of life experience. We can define culture therefore as the way a human group thinks, feels, or reacts. It manifests itself in festivities, ways of raising children, laws of behavior, and ways of doing business, and constitutes the distinctive features of a group of humans in terms of nations, communities or business.

Hofstede (1984) measured four dimensions of culture in a large, comprehensive study in more than 40 countries; his results have been a fundamental basis for understanding cross-cultural differences. Other researchers, such as House et al. (2004), have developed similar studies to compare with Hofstede’s study results. While Hofstede has been one of the most cited authors in the social sciences, he has also received criticism (e.g., Jabri, 2005; Graen, 2006) that his dimensions are too simple to characterize a national culture.

Briefly, the four original dimensions identified by Hofstede are *Power distance*, it is, how human societies differ in handling human inequality. In job settings, this dimension has been used to understand differences between superiors and subordinates. *Uncertainty avoidance* is the measurement of tolerance to ambiguity. *Individualism-collectivism* describes the relationship between an individual and the collectivity that prevails in a society. *Masculinity-femininity* describes the implications of the biological differences between the sexes and their effects in a society.

According to Hofstede’s (2001) study, Mexico ranks high in power distance, medium-high in uncertainty avoidance, medium-low in individualism and high in masculinity. Table 1 provides examples of how the four dimensions relate to Mexican culture (Hofstede, 2001).

However, in an ethnographic study on founding and managing a company in the Yucatán area of southern Mexico, Gordon (2010) concluded that:

To a great extent, posits that the convergence hypothesis that Hofstede predicted would never occur is, in fact, happening. The study confirms that the dimensions of power distance and collectivist society are strong tendencies in Mexico, although, as will be described, the power

TABLE 1. Characteristics of the Mexican culture at work based on Hofstede’s dimensions

| Power distance high  | Uncertainty avoidance medium high   | Individualism medium low  | Masculinity high  |
|--|---|---|---|
| <ul style="list-style-type: none"> <li>• Subordinate-superior relations polarized, often emotional</li> <li>• No defense against power abuse by superior</li> <li>• Innovation needs good support from hierarchy</li> <li>• White-collar jobs valued more than blue-collar jobs</li> </ul> | <ul style="list-style-type: none"> <li>• Medium high work stress</li> <li>• Most employees express emotions at work</li> <li>• Tendency to stay with same employer</li> <li>• More resistant to change</li> </ul> | <ul style="list-style-type: none"> <li>• Most people in the society are born into extended families or clans that protect them in exchange for loyalty</li> <li>• Most personal identity is based in the social system</li> <li>• A tendency for survival</li> <li>• A propensity of making specific friendships</li> </ul> | <ul style="list-style-type: none"> <li>• Large gender culture gap</li> <li>• Less equal opportunity</li> <li>• Career ambitions are compulsory for men, optional for women</li> <li>• Job applicants oversell themselves</li> </ul> |

Source: Hofstede (2001).

distance tendency is diminishing. Strong power distance is anathema to modern leadership and empowerment principles. The collectivist society tendencies remain strong and managerial strategies to foment a feeling of family within the company were employed to leverage this tendency to the benefit of the organization. Finally, this study does not find that Mexicans exhibit uncertainty avoidance to the extent that Hofstede would have predicted in the workplace. (p. 6)

Earlier, the Mexican researcher Alducín (1999) identified the following features of Mexican culture:

- Forty-six percent of Mexicans agree the country has made progress and are satisfied. Respondents with higher incomes and higher levels of education were less likely to agree, and younger respondents were also less satisfied. It is interesting to note that women were overall more satisfied than men are.
- Mexicans like to have their own identity as a country; they concur with the saying "Let Mexico be Mexico." Other country models that Mexicans would like to imitate are the United States, Japan, Spain and Canada.
- The values that Mexicans appreciate most, in order of importance, are honesty, respect, dignity, goodness, patience, humility, solidarity, peace, truth, pride, stoicism, tolerance, resignation and conformity.
- Most Mexicans think that their main objective in life is to provide better opportunities for their children and be self-fulfilled at work.
- Friendship is the basis for doing business, and an important part of the work environment.
- Twenty-four percent of Mexicans think that customs and traditions have changed, and have been substituted by others that work better. Thirty-one percent think that customs and traditions are in crisis, and 29 percent say that traditions should not change because they are the country's most important legacy.
- Mexicans place great importance on personal relationships. Mexicans value friendship, leisure and social relationships. Paz (1950) described Mexican culture in terms of its traditions where social relationships take place. The work place is not the exception; co-workers usually socialize.
- Courtesy and shows of respect are highly valued. Being polite and talking to people properly is a sign of respect. In Mexico, the use of the pronoun "usted" is different from that of the pronoun "Tú". "Usted" is used as a sign of respect for the other person. This distinction does not exist in many other languages, including English, because the pronoun "you" is used for everyone.
- Sensitiveness to criticism. Polite language is used in personal and work situations, and criticizing people in front of others would be viewed as a lack of respect. Mexicans do not like to face an uncomfortable truth of a situation, especially if a subordinate reveals it. However, Kras (1994) argues that once confidence and trust are established between superiors and subordinates, sensitivity to criticism diminishes.
- Mexican supervisors and subordinates maintain a greater social and professional distance than their counterparts in the United States do. These differences are based on a system institutionalized in Mexican society. Most managers and upper-level supervisors come from a "higher" class than those they supervise. The World Economic Forum (2007) has noted that this situation is generalized in all Latin America.
- There is a generally elastic concept of time and a more tolerant attitude toward meeting absolute deadlines in Mexico. The concept of time is flexible and often a bargain can be struck regarding deadlines. For example, there is always a "tolerance time" for the start of meetings and for papers to be delivered.

Earlier still, Martínez & Dorfman (1998) identified the following cultural patterns of Mexicans in their working relationship with Mexican managers. Primarily, Mexicans value their families highly. The primary concern of Mexicans is the family, and this is more important than work or social relations. This model is extended to business where relationships between co-workers are strong (Peterson, Puia & Suess, 2003).

Martínez & Dorfman (1998), Alducín (1999), Hofstede (2001) and Gannon (2001) had similar findings in their studies. Gordon (2010) disagrees to some extent, and Harrison & Hubbard (1998) identified slightly differing of characteristics of the Mexican work force, such as: more feminine than masculine workers who are less collectivistic, have an increasing sense of willing justice, and are in search of self-satisfaction. Overall, however, one can conclude that Mexican culture is one where family is important, superiors must be respected and, for the most part, authority goes unchallenged.

## The organizational culture assessment instrument

Based on the positivistic approach for assessing organizational culture, Cameron & Quinn (1999) developed the Organizational Culture Assessment Instrument (OCAI). This instrument is based on competing values framework that identifies four organizational cultures differentiated on two dimensions of organizational effectiveness: flexibility/discretion versus stability/control, and internal focus/integration versus external focus/differentiation. The model measures four organizational cultures: clan, adhocracy, market, and hierarchy.

The *clan* culture is a family organization where teamwork, employee involvement programs, and corporate commitment to employees are encouraged. It is called clan because of its similarity to a family organization, where cohesion and morale are the glue that holds the business together. The *adhocracy* culture is grounded on the innovation and entrepreneurship a business has. This culture is based on the ad hoc concept, meaning that it is temporary, specialized and dynamic. It is common in industries such as software development, aerospace, and filmmaking. The major challenge of an adhocracy culture is to produce innovative products and services.

The *market* culture is oriented toward the external environment rather than internal affairs. Its major focus is on results, profitability, and the customer; its major concern is transactions (exchanges, sales, contracts). It is driven by customer focus, premium returns on assets, and improved corporate competitiveness. The *hierarchy* culture relies on rules, specialization, meritocracy, hierarchy, separate ownership, impersonality, and accountability as Weber proposed in 1947. In this culture, procedures govern what people do. An example of these organizations is fast-food restaurants where smooth-running, long-term concern, stability, predictability, and efficiency are important

According to Cameron & Quinn (1999), the culture within an organization will depend on the characteristics of the business, but the question remains—Does national culture play an important role in helping design and define organizational culture? That question fuels our objective in this paper to profile Mexican business culture according to the OCAI typology and to find a relationship, if any, with Mexican culture.

Given the above discussion about how Mexican culture has changed toward globalization, we can argue that Mexican manufacturing and service businesses are more oriented toward a market-based culture for fulfilling the demands of the market, and that national culture, based on dimensions

such as collectivism and high power distance will play a secondary role.

The following hypothesis is therefore proposed:

**H1:** *A market orientation is predominant in Mexican manufacturing and service industries; the dimensions related to hierarchical and clan culture play a secondary role.*

## Differences in hierarchy, Gender and generational gap in Mexican workers

Because Mexican society has evolved over the last few years as people search for democracy, we should consider social justice and education, cultural differences such as the position held in an organization, gender, and generational gap as they affect Mexican workers. For example, Hope & Xin (2000) and Peterson, Puia & Sues (2003) found some similarities between Mexican and American workers. Based on the results of their study they conclude that the role of supervision in work settings is important in the behavior of the Mexican worker. In addition, demographic factors could contribute to understanding Mexican culture at work given the rapid changes that Mexican society has experienced.

The organizational gap in a collective society is important and is related to power distance (Hofstede, 2001). The term “empresario” is commonly used in Mexico and combines the concepts expressed in English by “manager” and “entrepreneur.” In Mexican Spanish, the highest position in an organization is called “el patrón.” The status of an empresario or el patron is highly respected in Mexico due to the contributions of these individuals to the economy (Martínez & Dorfman, 1998).

Traditionally, holding a high rank or position in a Mexican business implies power, prestige and success. The rest of the workers view the most high-ranking executive in an organization as a leader to be followed unquestionably. This individual is also seen as a “parent” who must be respected and deserves loyalty from subordinates. Nevertheless, this model of loyalty and obedience has been changing as employees within their respective organizations become more participative. Moreover, to improve competitiveness, many Mexican businesses have implemented quality assurance programs such as ISO or QS. Many businesses have also implemented reengineering initiatives and empowered employees to give clients improved service. Young executives, especially, who are more qualified than their older counterparts are introducing new ways of working, and people are becoming more participative as collaborative models of

working are becoming popular as a way of managing human resources. Given the above, we can hypothesize that:

**H2:** *Top managers of a Mexican service and manufacturing business present a clan culture based on the national culture, and hierarchical lower level employees present a market-oriented culture.*

Generational differences among Mexican workers can relate to experiences that older individuals had to face during critical economic situations within the nation. Workers who are 35 years of age or older experienced the two major economic crises in Mexico where many citizens lost their job or patrimony. The first began in 1982, when Mexico announced that it was incapable of paying the debt acquired through international banks, and resulted in the devaluation of the Mexican peso and the loss of acquisitive power for owner families. The second big economic crisis was in 1994, known as the "tequila crisis," when the peso devalued 14 percent, caused by a combination of political and economic factors. At the time, Mexico was developing smoothly to become more competitive and establishing long-term economic relations with Canada and the United States by signing the NAFTA (North America Free Trade Agreement.) However, violence and a power struggle within the party marked the presidential succession from Carlos Salinas to Ernesto Zedillo and affected the country's economic situation. Thus, Mexican workers aged over 35 could be more conservative and lean towards stability, while individuals younger than 35 who have worked in relative stability in the country are likely to be willing to experiment with new challenges. This discussion leads to the next hypothesis:

**H3:** *Young Mexican workers would be more oriented towards a market and adhocracy-based culture in an organization whereas older workers would be oriented towards a clan or hierarchical-based culture.*

The role that Mexican women have played over the years in a traditional society has been a conservative one as a mother and homemaker. This role had changed dramatically as women have become more educated and women are now playing an active place in society, science, and politics. Currently, an important number of Mexican women are heads of the family. The economic situation of families has meant that Mexican women have to play an active role in society working in factories and even as entrepreneurs. The Mexican government has established specific programs to encourage women to start businesses by giving credit to entrepreneurial activities at preferential rates. Peterson, Puia & Success (2003) found

gender differences in organizational commitment where Mexican women are more committed to their work than men did. This leads to the following hypothesis:

**H4:** *Mexican women in manufacturing and service businesses will be more oriented toward a clan culture in the organization while men will be more oriented toward a market culture.*

## Methodology

### Sample

A sample of 547 workers was collected from a wide variety of industries. The questionnaire was distributed to masters' degree students working in local firms and the parents of undergraduate students at private and public universities in Mexico City, Guanajuato, and Querétaro State. The questionnaire was also distributed to local firms in the three geographic settings. A sample of 307 workers was obtained from manufacturing and service industries that were valid for the purpose of this study; the remaining 240 questionnaires were not considered in the study because came from other businesses such as agriculture and government.

The questionnaire gathered demographic information on gender, hierarchical level in the organization, business, and industry size. We used a diagram with four levels to assess the hierarchical level. Level one was the highest in the organization while level four was the lowest in the organization. The interviewee was asked to mark the hierarchical position that corresponded to his/her position in the organization.

### The organizational culture assessment instrument

The remaining data was collected using the Organizational Culture Assessment Instrument (OCAI) developed by Cameron & Quinn (1999). A professional translator translated the instrument from English into Spanish and then a different specialized translator back translated it. This common practice is used to ensure the meaning of the questions was clear. Yeung, Brockbank, & Ulrich (1991) applied the instrument to 10,300 executives from 1,064 businesses. Reliability coefficients obtained were 0.79 for the clan culture, 0.80 for the adhocracy culture, 0.77 for the market culture, and 0.76 for the hierarchy culture. The scale used in the questionnaire was a Likert one that ranged from 1 to 9, where 1 represented "strongly agree" and 9 represented "strongly disagree." For this study, a factor analysis was

conducted for each culture. The loading factors for clan culture items varied from 0.63 to 0.85 with a scale reliability (Cronbach alpha) of 0.868. For the adhocracy culture, items varied from 0.70 to 0.80 with an alpha of 0.814; for the market culture they varied from 0.64 to 0.81 with an alpha of 0.844; and for the hierarchy culture, they varied from 0.54 to 0.78 with an alpha of 0.752.

## Results

The correlations of different cultures according to industry, size, gender, hierarchical position, and age are presented in Table 2. An ANOVA was used to test differences among the four cultures for all the samples, and no significant differences were found. According to Cameron & Quinn (1999), a business should have a strong culture to help ensure homogeneity of effort, clear focus, and high performance. Results from the present study showed that Mexican businesses' average response was approximately a 4 on the scale, a response of "moderately agree." Next, a *t*-test was conducted to evaluate whether differences existed between manufacturing businesses and those in service industries. Differences were found in clan cultures ( $p = 0.029$ ) and in hierarchical cultures ( $p = 0.085$ ) and moderate in the market culture ( $p = 0.064$ ). The service industries scored lower in the clan culture, and the manufacturing industry scored lower in both the market culture and hierarchical culture. Statistical results are shown in Table 3.

An ANOVA was also used to test the influence of the size of the business. A significant difference ( $F = 2.245$ ,  $p = 0.083$ ) was found in the market culture for businesses with 1,000 or more employees. Hypothesis 1 was not supported because no clear definition of a profile for at least one of the culture in the Mexican manufacturing and service industries. However, market and hierarchical cultures are important for manufacturing industries, and the market

culture is particularly important for large manufacturing companies. The adhocracy culture showed no significant differences in size or in industry, a finding that supports what is going on in the country in terms of development in technology and innovation, according to the competitive index reported by the World Economic Forum.

To test Hypothesis 2, an ANOVA was conducted to identify significant differences among the four cultures. The clan culture presented significant differences ( $F = 3.84$ ,  $p = 0.019$ ) to the hierarchical level, and post hoc analysis showed differences between levels one and two, and between levels three and four. This could mean that at higher hierarchical levels in Mexican manufacturing and service businesses, the culture perceived by top managers is more oriented to empowerment, teambuilding, employee involvement, human resource development and open communication. The adhocracy culture also presented significant differences ( $F = 2.10$ ,  $p = 0.10$ ) among hierarchical levels, being more important for high-level employees. With respect to the market culture, no significant differences were found. Thus, Hypothesis 2 is partially supported; the clan culture is important for top-level managers as expected in a collective national culture but lower level employees seem to be indifferent to a market-oriented culture ( $\mu = 4$ ).

For testing Hypothesis 3—differences in age—the sample was divided into two segments: people under 35 years old and people aged 35 and older. It is important to note that of the total sample, 75 percent of the workers were under 35 years old. This interesting phenomenon is occurring among working people in Mexico as companies are replacing older workers with younger people. By doing so, a company does not have to pay bonuses and other expenses related to retirement as its workforce ages. Besides, the number of young people demanding employment is increasing while offers of employment do not increase, so

TABLE 2. Correlations of variables

| Variables                | 1      | 2      | 3      | 4      | 5       | 6      | 7     | 8       |
|--------------------------|--------|--------|--------|--------|---------|--------|-------|---------|
| 1. Clan culture          |        |        |        |        |         |        |       |         |
| 2. Adhocracy culture     | .770** |        |        |        |         |        |       |         |
| 3. Market culture        | .548** | .706** |        |        |         |        |       |         |
| 4. Hierarchy culture     | .681** | .658** | .729** |        |         |        |       |         |
| 5. Age                   | .048   | -.019  | -.045  | -.030  |         |        |       |         |
| 6. Gender                | .068   | .139*  | .205** | .187** | -.174** |        |       |         |
| 7. Hierarchical position | .163** | .100   | .094   | .108   | -.073   | .093   |       |         |
| 8. Business size         | .105   | .026   | -.103  | -.082  | .170**  | -.128* | .128* |         |
| 9. Industry              | -.125* | -.060  | .106   | .099   | -.102   | .205** | -.103 | -.349** |

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

Source: The authors.



**TABLE 3. Statistics for four organizational cultures**

| Culture type                                    | Clan |      | Adhocracy |      | Market |      | Hierarchy |      |
|---|------|------|-----------|------|--------|------|-----------|------|
|   | Mean | Sd   | Mean      | Sd   | Mean   | Sd   | Mean      | Sd   |
| Manufacturing and service industries<br>N = 307 | 3.96 | 1.70 | 3.89      | 1.58 | 3.89   | 1.58 | 3.98      | 1.41 |
| Manufacturing industries<br>N = 177             | 4.14 | 1.71 | 4.07      | 1.54 | 3.74   | 1.55 | 3.86      | 1.41 |
| Service industries<br>N = 130                   | 3.72 | 1.66 | 3.89      | 1.46 | 4.08   | 1.61 | 4.14      | 1.39 |
| Respondent age, <35<br>N = 226                  | 3.98 | 1.64 | 4.06      | 1.5  | 3.92   | 1.60 | 4.02      | 1.46 |
| Respondent age >35<br>N = 75                    | 3.91 | 1.88 | 3.76      | 1.48 | 3.65   | 1.43 | 3.80      | 1.24 |
| Male<br>N = 171                                 | 3.86 | 1.72 | 3.80      | 1.45 | 3.60   | 1.48 | 3.74      | 1.31 |
| Female<br>N = 136                               | 4.09 | 1.67 | 4.23      | 1.55 | 4.25   | 1.62 | 4.27      | 1.47 |
| Hierarchical position 1 (High)<br>N = 11        | 2.66 | 1.31 | 2.91      | 0.86 | 3.1    | 1.27 | 3.25      | 1.28 |
| Hierarchical Position 2 (High-Med)<br>N = 56    | 3.68 | 1.68 | 3.92      | 1.51 | 3.72   | 1.49 | 3.89      | 1.36 |
| Hierarchical Position 3 (Medium)<br>N = 149     | 4.03 | 1.70 | 4.05      | 1.5  | 3.95   | 1.65 | 3.96      | 1.42 |
| Hierarchical Position 4 (Low)<br>N = 85         | 4.22 | 1.72 | 4.08      | 1.58 | 3.99   | 1.58 | 4.16      | 1.46 |
| Industry Size < 100<br>N = 53                   | 3.49 | 1.50 | 3.75      | 1.37 | 3.87   | 1.92 | 4.14      | 1.57 |
| Industry Size 100 < x < 500<br>N = 94           | 3.98 | 1.64 | 4.14      | 1.48 | 4.20   | 1.51 | 4.06      | 1.33 |
| Industry Size 500 < x < 1000<br>N = 58          | 4.26 | 1.61 | 4.06      | 1.59 | 3.88   | 1.44 | 3.98      | 1.36 |
| Industry Size 1000 +<br>N = 100                 | 4.06 | 1.86 | 3.99      | 1.55 | 3.61   | 1.50 | 3.83      | 1.42 |

Source: The authors.

the working life of employees in general across age categories has decreased. The statistical *t*-test did not find any significant differences between the four cultures and age, so Hypothesis 3 is not supported. If we include the results from the analysis carried out to test Hypothesis 1, we can conclude that there is no predominant culture related to worker age. Gender differences were found in the adhocracy, market and hierarchical cultures ( $t = 2.49$ ,  $p = 0.013$ ,  $t = 3.66$ ,  $p = 0.0$  and  $t = 3.32$ ,  $p = 0.001$  respectively).

There were no differences in the clan culture as predicted by Hypothesis 4. But male workers in general scored lower values in the market, adhocracy and hierarchical cultures meaning that, in this case, Mexican workers in both manufacturing and service industries are more concerned about market orientation ( $\mu = 3.60$ ) and hierarchical and adhocracy cultures ( $\mu = 3.74$  and  $\mu = 3.80$ ). In this sense, Hypothesis 4 has to be partially accepted since there are

gender-based differences of perceived culture among Mexican workers. However, these differences are not related to the clan culture that symbolizes the collective orientation of the national culture.

## Conclusion

The results of this research confirm the findings of Nelson & Gopalan (2003) where national culture is replicated partially in organizational culture, and modernizing and rationalizing tendencies will not change the national culture in a manner similar to a natural process. Thus, homogeneity in the Mexican working force does not exist. However, there are similarities with other organizational cultures. In their study of the values of Latin American managers, Lenartowicz & Johnson (2002) found that Mexican managers ranked medium in integrity (e.g., honest, responsible),

medium in politeness (e.g., cheerful, helpful, loving, forgiving, clean, obedient, diplomatic), low in self-direction (e.g., imaginative, independent, intellectual, open-minded, and logical), and medium in drive (e.g., ambitious, capable and courageous). Based on the results of this study, Mexican workers ranked medium in the clan culture except for the top managers, and ranked medium in the adhocracy culture, confirming Lenartowicz & Johnson's (2003) findings on the factors of politeness and self-direction.

From results of their study of over 1,000 businesses all over the world, Cameron & Quinn (1999) found that the market culture predominated over the hierarchy, clan, and adhocracy cultures. Our findings in the manufacturing and service industries of Mexico showed that no one organizational culture predominated over the others, but also that the hierarchical and collectivistic dimensions of the Mexican national culture proposed by Hofstede (2001) were not replicated in the sample that we studied.

This leads to several important and interesting areas for future research: 1) Why does culture within Mexican organizations not have a clear definition toward a specific culture, similar to the results presented by Cameron & Quinn (1999) in other countries? 2) Does a company's strategy play an important role in defining organizational culture in Mexican businesses? 3) Are there important differences between Mexican businesses and foreign-owned businesses operating in Mexico that affect organizational culture and, if so, what are they?

Organizational culture is a subject that has interested researchers and business professionals for decades, especially within American businesses. However, there is a lack of research using quantitative methodologies, particularly in Mexican businesses, so comparisons can be made with studies conducted in different countries and cultures to gain a better understanding of how to achieve international standards of performance. There are qualitative studies in this area from a sociological point of view (e.g., Salas-Porras, 1992; Reygadas, 2002), but the objective of those studies relates more to specific organizations where apparently two or more cultures can combine to create a new organizational culture with a mixture of elements.

To gain higher levels of national competitiveness, business managers of Mexican businesses have to define and develop cultures within their organizations that combine two distinct but important elements, global aspects of work standards and the Mexican traditional culture, to ensure high performance standards that can help increase direct foreign investment, increase employment opportunities, and ensure the highest standards of performance in the global market.

## References

- Alducín, A.E. (1989). Los valores de los mexicanos. Grupo Financiero BANAMEX-ACCIVAL. In Hirsch, A.A. (1999). *México: Valores nacionales* (2a edición). México: Gernika.
- Allen, R.F. & Dayer, F.J. (1980). A tool for tapping the organizational unconscious. *Personnel Journal*, 59, 192-198.
- Ashkanasy, N.M., Broadfoort L.E. & Falkus S. (2000). Questionnaire Measures of Organizational Culture. In Ashkanasy, N.M., Wilderom, C. P.M., & Peterson, M., (Eds.), *Handbook of organizational culture & climate*. California: Sage Publications.
- Barnard, C.I. (1938). *Functions of an executive*. Cambridge, MA: Harvard University Press.
- Cameron, K., & Quinn, R. (1999). *Diagnosing and changing organizational culture*. Massachusetts: Addison-Wesley.
- Calderón-Moncloa, L. & Viardot, E. (2009). El impacto de los valores Latinoamericanos en la gerencia del cambio organizacional. *Oikos*, 27, 13-30.
- Gannon, M.J. (2001). *Understanding global cultures* (2nd ed.). California: Sage Publications.
- Geertz, C. (1973). *The interpretation of cultures: Selected essays*. New York: Basic Books.
- Gordon G. (2010). Managing in Mexico. An ethnographic comparison to theory and previous research. *Journal of International Business and Cultural Studies*, 2, 1-11
- Graen, G.B. (2006). In the eye of the beholder: Cross-cultural lesson in leadership from Project GLOBE. *Academy of Management Perspectives*, 20(4), 95-101
- Harris, P.R. & Moran, R.T (1984). *Managing cultural differences*, Houston, TX: Gulf.
- Harrison, J.K. & Hubbard, R. (1998). Antecedents to organizational commitment among Mexican employees of U.S. firms in Mexico. *The Journal of Social Psychology*, 135(5), 609-624.
- Hojman D.E. & Pérez, G. (2005). Cultura nacional y cultura organizacional en tiempos de cambio: la experiencia chilena. *Academia: Revista Latinoamericana de Administración*, 35(2), 87-105.
- Hofstede, G. (1984). *Culture's consequences, international differences in work-related values*. California: Sage Publications
- Hofstede, G. (2001). *Cultures consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). California: Sage Publications.
- Hope P. L. & Xin K. R. (2000). Relational demography and relationship quality in two cultures. *Organizational Studies*, 21(6), 1077-1094.
- House R.J., Hanges P.J., Javidan M., Dorfman P.W. & Gupta V. (2004). *Culture, leadership and organizations: The GLOBE study of 62 societies*. California: Sage Publications
- Inglehart R. Basáñez M. & Méndez Moreno A. (1998). *Human values and beliefs: A cross-cultural sourcebook*. Michigan: University of Michigan Press.
- Jabri, M. M. (2005). Commentaries and critical articles: Text-context relationships and their implications for cross cultural management. *International Journal of Cross Cultural Management*, 5(3), 349-360
- Kotter, J., & Heskett, J. (1992). *Corporate culture and performance*. New York: Free Press.
- Kras, E. S. (1994). *Modernizing Mexican management style*. Las Cruces, NM Editts.
- Lenartowicz, T., & Johnson, J. (2002). Comparing managerial values in twelve Latin American countries: An exploratory study. *Management International Review*, 42, 279-307.

- Nelson, R. & Gopalan, S. (2003). Do organizational cultures replicate national cultures? Isomorphism, rejection and reciprocal opposition in the corporate values of three countries. *Organizational Studies*, 27(7), 1115-1152.
- Martínez S. & Dorfman P. (1998). The Mexican entrepreneur. An ethnographic study of Mexican empresario. *International Study of Management & Organization*, 28(2), 97-123.
- Mayo, E. (1945). *The social problems of an industrial civilization*. Boston: Harvard University Press.
- Ogliastri, E., McMillen, C., Altschul, C., Arias, M.E., Bustamente, C., Dávila, C., Dorfman, P. et al (1999). Cultura y liderazgo organizacional en 10 países de América Latina: el estudio Globe. *Academia: Revista Latinoamericana de Administración*, 22, 29-57.
- Ouchi, W.G. (1981). *Theory Z: How American business can meet the Japanese challenge*. Reading, MA: Addison-Wesley.
- Paz, O. (2004, 1950). *El laberinto de la soledad* (3a reimpresión). México, D.F.: Fondo de Cultura Económica.
- Peters, T.J. & Waterman R. H. (1982). *In search of excellence: Lessons from America's best-run companies*. New York: Harper & Row.
- Peterson, D., Puia, G., & Suess, F. (2003). Yo tengo la camiseta puesta (I have the shirt on): An exploration of job satisfaction and commitment among workers in México. *Journal of Leadership and Organizational Studies*, 10(2), 73-88.
- Reygadas, L. (2002). *Ensamblando culturas*. Barcelona: Gedisa.
- Schein, E. H. (1985). *Organizational culture and leadership*. San Francisco: Jossey-Bass.
- Schein, E. H. (1999). *The corporate culture survival guide*. San Francisco: Jossey-Bass.
- Schein, E. H. (2000). Sense and nonsense about culture and climate. In Ashkanasy, N.M., Wilderom, C.P.M., & Peterson, M. (Eds), *Handbook of organizational culture & climate*. California: Sage Publications.
- Salas-Porras, A. (1992). Globalización y proceso corporativo de los grandes grupos económicos en México. *Revista Mexicana de Sociología*, 54(2), 133-162.
- Selznick, P. (1957). *Leadership in administration*. New York: Harper & Row.
- Sobrino, J. (2003). *Competitividad de las ciudades de México*. México D.F.: El Colegio de México.
- Woodcock, M. (1989). *Clarifying organizational values*. Brookfield, VT: Gower.
- Yeung, A., Brockbank, F., & Ulrich, D. (1991). Organizational culture and human resources practices: An empirical assessment. *Research in Organizational Change and Development*, 5, 59-81.

