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Carlos Navarrete
California State Polytechnic University, Pomona

James Pick
University of Redlands

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CROSS-CULTURAL TELECOMMUTING EVALUATION IN MEXICO AND UNITED STATES

Carlos J. Navarrete
California State Polytechnic University, Pomona
cjnavarrete@csupomona.edu

James B. Pick
University of Redlands
james_pick@redlands.edu

Abstract

This paper tests the impact of differences in culture on telecommuting in the United States and Mexico. The purpose of this study is to determine the impact of each country's culture on the perceptions of telecommuting satisfaction and organizational support for telecommuting. The research questions assess the telecommuting satisfaction, and extent of support by organizational policies for telecommuting in the two countries. These results are compared with the expected outcomes due to the differences in culture in both countries. The tests are done, based on a questionnaire sample of 204 employees in the U.S. and Mexico. The statistical method is crosstabulation analysis.

The results show no difference between the two samples regarding job satisfaction. Respondents in the two samples indicate differences on the extent of organizational support for telecommuting. The Mexican sample shows more support for telecommuting arrangements than the U.S. one. This result is unexpected, given the cultural differences in both countries. The findings have implications for telecommuting policies and telecommuting cross-cultural research.

Keywords: Telecommuting, cross-cultural, Mexico, United States, work, arrangements

Introduction

This paper presents the results of an investigation on the practice of telecommuting among corporate employees, focusing on the differences in experiences and perceptions among telecommuters and non-telecommuters in Mexico and the United States. The purpose of this study is to determine the impact of each country's culture on the perceptions of telecommuting satisfaction and organizational support for telecommuting. Telecommuting, or the ability of employees to work at sites other than their corporate office, has been an issue of ongoing interest to researchers and practitioners since its introduction in 1976. Many factors have contributed to keeping this issue current, and often controversial. Initially, telecommuting was thought of as an alternative to reduce traffic congestion and pollution in large cities by keeping employees from commuting from their home to their offices (Nilles et al., 1976). Later on, organizations realized its potential for cost reduction—by eliminating needs for office space (Apgar, 1998). Some also noted productivity increases, due to elimination of work distraction and commuting time for employees (Apgar, 1998). Highly skilled individuals realized the personal gains of engaging in this working arrangement (e.g., autonomy, money savings, and reduced stress). Some demanded it as a condition for employment.

The benefits of telecommuting have led many individuals and organizations to adopt it. However, there have also been reports of problems from this alternative work arrangement for individuals and organizations. They include workers' feelings of isolation by staying away from the office, work-family conflicts due to the inability to separate work and family issues, and management's inability to deal with the new mechanisms for controlling and evaluating employees. Similarly, other reports find evidence of a decline in productivity among telecommuters due to their lack of commitment to the organization or to increasing levels of stress brought about by working at home. These adverse outcomes have kept many businesses and individuals from adopting telecommuting.

Recent and more rigorous empirical studies have provided deeper explanations to alleviate the controversy, and have contributed frameworks to promote further analysis, evaluation and discussion of the actual outcomes of telecommuting. Researchers such as McCloskey and Igbaria (1998) and Bellanger (1998, 1999, 2001) conducted extensive literature reviews, provided research agendas, and set the stage for continuing research on this important issue.

This project tests the impact of cultural differences on telecommuting perceptions. Several researchers have used Hofstede's model to characterize different cultures and then to study the impact of the culture construct on different Information technologies. For example, Leidner, et al. (1999) studied the impact of culture on organizational intelligence and decision making.

Even though Hofstede's representation of culture has been extensively used in research, Hofstede's framework has been strongly criticized. For example, Williamson (2002) disqualifies this framework and advises not to use it in research. Hofstede studied IBM employees around the world, and may have been too ambitious in seeking to explain one country's culture based on a single organization. Lastly, for recent research projects, the values of the different indices and cultural constructs developed by Hofstede over two decades ago would have changed (Sivakumar 2001).

This paper explores the state of the practice of telecommuting and the experiences and perceptions of telecommuters and non-telecommuters. The study analyzes two samples, one in Mexico and the other in the United States, to empirically measure whether or not telecommuting in both countries has different levels of satisfaction and organizational support. Culture differences are analyzed, based on three out of five of Hofstede's dimensions.

Literature Review

This literature review focuses, first, on Hofstede's model and its application in comparing the Mexican and the U.S. cultures; and second, on telecommuting.

Mexican versus U.S. Cultures

The purpose of this section is to present a comparison of Mexican and U.S. cultures. The basis for this comparison is Hofstede's (1980) studies of culture. Based on four dimensions, this author defined a set of measurements to characterize a country's culture. Through this set of measurements, he is able to rank or order different cultures in such a way that human thinking, organizations, and institutions belonging to a given culture can be predicted.

Culture Definition and Differences

"Culture consists in patterned ways of thinking, feeling, and reacting, acquired and transmitted mainly by symbols, constituting the distinctive achievements in artifacts; the essential core of culture consists of traditional ideas and specially their attached values" (Kluckhohn, 1980, p. 365). According to Hofstede (1980) these values that normally influence people's preferences become part of a person's "mental programs". A mental program represents a set of value structures that define the person's thinking, feeling, and behavior. The mental programs present an order or rank according to the number of people that share them. All people share a "universal" mental program; the members of a given group share "collective" programs; and no one shares "personal" mental programs.

Individuals acquire personal, collective, and universal mental programs through interactions with other individuals and groups, in family, schools, and organizations. The mental programs, consequently, contain components of national, organizational, and group culture, where culture and values are different from person to person, organization to organization, and country to country. Hofstede (1980) focused his study on country-to-country cultural differences. He characterized cultural differences through four dimensions:

- Power distance
- Uncertainty avoidance
- Individualism
- Masculinity

Power Distance

The power distance dimension characterizes how individuals behave toward power, concentration of authority, and the difference between the less powerful individual and the more powerful one, when both belong to the same group. In order to measure the power distance dimension, Hofstede (1980) developed an index called power distance index (PDI). Cultures with low power distance have a PDI close to zero, while those with high power distance levels have a PDI close to one hundred. In a culture with high power distance the more powerful person will put on a lot of pressure to increase the distance between him or her and the less powerful person.

Table 1 shows some of the consequences for cultures with high PDI (i.e., Mexico), and low PDI (i.e., U.S.).

Table 1. Implications Due to Power Distance*

Low Power Distance	High Power Distance
Inequality should be minimized	There should be an order of inequality where everyone has a right place
Everything should be interdependent	Few things should be interdependent, most should be dependent
Subordinates are people like me	Superiors consider subordinates as being of a different kind
Superiors are people like me	Subordinates consider superiors as being of a different kind
We all should have equal rights	Powerful people are entitled to privileges
Decision-making involves managers and subordinates	Managers do decision-making autocratically and paternalistically
Subordinates reject close supervision	Subordinates accept close supervision
Stronger perception of work ethics	Weaker perception of work ethics
Employees show more cooperativeness	Employees do not trust each other
Less organizational centralization	More organizational centralization
Flatter organization structure	Taller organizational pyramid

* Source: Hofstede (1980)

Uncertainty Avoidance

Uncertainty avoidance represents how people deal with uncertainty, in particular by using technology, rules, and rituals. Hofstede also developed an index for uncertainty avoidance (UAI). The index includes three indicators: employment stability, rule orientation, and stress. He concludes that organizations with low UAI, like those in the US, will have fewer written rules, while organizations with high UAI, like those in Mexico, will have more written rules. Table 2 presents some implications for organizations due to uncertainty avoidance.

Table 2. Implications Due to UAI*

Low UAI	High UAI
Lower job stress	Higher job stress
Fewer problems in changing employer	Employees want to stay with the same employer
Managers are selected regardless of seniority	Managers are selected according to seniority
Conflict in organizations is natural	Conflict in organizations is undesirable
Activities are less structured	Activities are more structured
Fewer written rules	More written rules
Organization can be pluriform	Organization should be uniform
Managers more involved in strategy	Managers more involved in operation
Managers wanting to make risky decisions	Managers avoiding risky decisions
Less ritual behavior	More ritual behavior

* Source: Hofstede (1980)

Individualism

Individualism resembles the relationship between a given individual and society. The level of individualism influences the individual behavior within an organization. As in the other dimensions, Hofstede developed an index for individualism (II). Table 3 presents some consequences due to individualism having low or high index values. For example in a culture with low "II", employees expect the organization to take care of them like in a family, while in a culture with high "II" employees do not expect the organization to take care of them.

Table 3. Implications Due to Individualism Index*

Low Individualism Index	High Individualism Index
Employees show emotional dependence on the company	Employees show emotional independence from company
Moral involvement with the company	Employee involvement as a function or relationship
Group decision is considered better than individual decision	Individual decision is considered better than group decision
Families or clans protect the person	Everyone should protect themselves
Employees expect the company to take care of them	Employees do not expect the company to take care of them
Lower interest in new management ideas	Managers try to be up to date and to adopt modern management ideas

*Source: Hofstede (1980)

Masculinity

The masculinity dimension measures how societies cope with gender differences (Hofstede, 1980). Men and women, generally speaking, rank working issues differently. For example, advancement and earnings are more important for men than for women; while working conditions, working hours, and social aspects of the job are much more important for women than for men. A culture with high masculinity will present more prevalence of male values. Table 4 presents some implications of this dimension.

Table 4. Implications Due to Masculinity Index*

Low Masculinity Index	High Masculinity Index
Work to live	Live to work
Sympathy for the unfortunate	Sympathy for successful people
Sex roles should not mean difference in power	Men should dominate in all settings
More women in better paid jobs	Fewer women in better paid jobs
Less industrial conflict	More industrial conflict

* Source: Hoftede (1980)

Table 5 shows the values for the four cultural indices, according to Hofstede (1980) for United States, Mexico, and the average for 40 countries. Mexican culture is seen to be different from U.S. culture for three out of four dimensions. From the masculinity perspective, both countries are very similar. For power distance, U.S. individuals consider subordinates and superiors like them, while in Mexico this feeling is not true. The power distance difference also affects the shape of organizations. While United States has flatter organizations, Mexico has taller and more pyramidal ones, with a large proportion of supervisory personnel. As for the differences in uncertainty avoidance, it can be said that U.S. organizations tend to be pluriform. On the other hand, Mexican organizations tend to be uniform, with managers more oriented to operations and reluctant to make risky decisions.

Table 5. Culture Dimensions for Different Countries

Country	PDI	UAI	II	MI
Mexico	81	82	30	69
United States	40	46	91	62
Mean (40 countries)	39	64	51	39

*Source: Hofstede(1980)
PDI = Power distance index UAI = Uncertainty avoidance index
II = Individualism index MI = Masculinity index

Telecommuting

Academic researchers initiated efforts to empirically measure telecommuting outcomes and experiences, while at the same time seeking to overcome methodological issues that impair the comparison of results. One of these efforts was that of Bellanger (1998). Her model contains four determinants for telecommuting success (see Figure 1). Success can be analyzed by measuring the outcomes at the levels of society, organization, and individual. The determinants of success are: characteristics of the organization, characteristics of the individual, type of work performed by the individual, and type of technology required to do their work (see Figure 1). Bellanger argues that these determinants must be matched to ensure successful outcomes of telecommuting. For example, in another research project, findings supported the matching of computer and telecommunications technology to telecommuters, based on their needs to communicate with teammates (Bellanger, Collins, and Cheney, 2001).

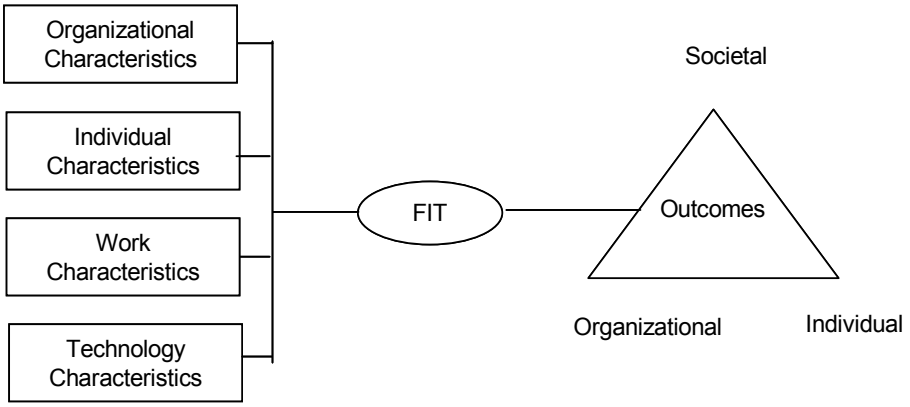

Figure 1. Bellanger's Framework for Studying Distributed Work Arrangements

Regarding the outcomes of telecommuting, Bellanger states that, at the individual level, telecommuting can provide "increased schedule flexibility, improved quality of work life, reduced commuting and clothing costs, increased job satisfaction, and reduced stress" (Bellanger, 1999, p. 142). All these benefits combine to increase productivity, satisfaction, and performance of individuals. At the societal level, telecommuting is beneficial because it may help reduce pollution and traffic congestion, two important concerns for people living in large cities. At the organizational level, telecommuting can reduce facilities and overhead costs, and increase productivity (Bellanger, 1999).

McCloskey's (2001) and Bellanger's studies are relevant to the present investigation. Both studies have measured the difference in outcomes between telecommuters and non telecommuters using the experiences of corporate employees working for a single organization. Moreover, both studies acknowledged the limitations imposed by the samples they studied.

Taking advantage of research model and using a similar instrument, the present project investigates whether or not there are cultural influences in the perception of individual satisfaction and organizational support for telecommuting arrangements in samples from the two countries.

Research Questions

Based on the levels of Hofstede indices, Table 6 gives the Mexican and U.S. characteristics that are expected to influence telecommuting organizational support and telecommuting satisfaction in both countries. The present study tests the extent of organizational support in Mexico versus the U.S. through the following hypothesis:

H1 Telecommuting in the U. S. receives more organizational support than telecommuting in Mexico.

Table 6. Predictors of Organizational Support

Low Power Distance (U.S.)	**High Power Distance (Mexico)**
Inequality should be minimized	There should be an order of inequality where everyone has a right place
Everything should be interdependent	Few things should be interdependent, most should be dependent
Subordinates are people like me	Superiors consider subordinates as being of a different kind
Superiors are people like me	Subordinates consider superiors as being of a different kind
Less organizational centralization	More organizational centralization
Flatter organization structure	Taller organizational pyramid
Smaller proportion of supervisory personnel	Larger proportion of supervisory personnel
Low Uncertainty (U.S.)	**High Uncertainty (Mexico)**
Activities are less structured	Activities are more structured
Fewer written rules	More written rules
Organization can be pluriform	Organization should be uniform
Less ritual behavior	More ritual behavior
Low Individualism (Mexico)	**High Individualism (U.S.)**
Group decision is considered better than individual decision	Individual decision is considered better than group decision
Families or clans protect the person	Everyone should protect themselves
Lower interest in new management ideas	Managers try to be up to date and to adopt modern management ideas

At the individual level the cultural differences between Mexican and U.S. employees (table 6) should have an impact on the perceived satisfaction with telecommuting arrangements. For example, U.S. employees are more likely to reject close supervision (PDI), consider superiors being like themselves (PDI), promote fewer written rules (UAI), accept that organizations can be pluriform (UAI), and consider that individual decision making is better than group decision making (II) . On the other hand, Mexican employees are more likely to have larger proportion of supervisory personnel (PDI), accept close supervision (PDI), promote more written rules (UAI), accept that organizations should be uniform (UAI), and prefer group decision making (II). This study tests the prevalence of perceived satisfaction of telecommuting in Mexico versus the U. S. The project tests the following hypothesis:

H2 U.S. employees are more satisfied with telecommuting arrangements than Mexican employees.

Methodology

A questionnaire (**http://csupomona.edu/~cjnavarrete/research/AMCIS03/survey**) measuring perceived and real outcomes of telecommuting was developed and tested using samples from each country. One comprised 111 employees of corporations in Southern California, and the other consisted of 93 employees in firms in Mexico City. The survey respondents were students responding about their experiences at firms they worked for. None worked for the universities. The 49-item instrument could not include all possible questions, such as formal part time work status and duration of telecommuting. The sample was drawn from senior and graduate students at four major universitie, 3 in the U.S. and one in Mexico. The participants were asked to provide answers to a total of 49 items in a survey conducted in classes. Before administering the questionnaire in Mexico, it was translated into Spanish, tested in both languages, and adjusted and modified according to feedback from three experts in the areas of telecommunications, information systems and management. This was assisted by both authors being bilingual.

The survey questions were grouped into six sections, four of them with answers on a 5-point Likert scale that ranged from strongly disagree to strongly agree, while the other two sections asked participants to select their answers from a list of possible responses.

The responses to the survey were recorded and analyzed using SPSS. The analysis of the data was conducted in three stages. First, the demographic characteristics of both samples were explored; second, the responses were divided into four groups (U.S. and Mexico by telecommuters and non telecommuters). Under this design, analyses of the employees' perceptions on satisfaction and organizational support were carried out. Two-way crosstabulations were applied to test associations of categorical variables. Pearson Chi Square was used to test for the significance of associations. Five associations were tested: 1) Mexico vs. U.S., 2)Mexico's telecommuters vs. Mexico's non-telecommuters, 3) U.S. telecommuters vs. U. S. non-telecommuters, 4) Mexico's telecommuters vs. U. S. telecommuters, and 5) Mexico's non-telecommuters vs. U. S. non-telecommuters.

Analysis of Results

In the case of the U.S. sample, the proportion of telecommuters in the total sample is 19.8 percent (22 out of 111) and for non-telecommuters is 80.2 percent (89 out of 111). With respect to gender and age, the majority of individuals in the total sample were males (74 percent) with an age-range between 18 and 25 years (67 percent). Chi-Square test shows no difference in the U.S. sample with respect to age and gender. In the case of Mexico, the proportion of telecommuters in the total sample is 43 percent (40 out of 93) and for non-telecommuters is 57 percent (53 out of 93). Similarly to the USA sample, the majority of individuals were males (70 out of 93). With respect to the age distribution, the Mexican sample is older, in particular the frequency of individuals in the range of 23 to 30 years old is much higher for Mexico versus the U.S. This is due to a higher proportion of graduate versus undergraduate students in the Mexican sample.

Table 7 shows that the two national samples are significantly different in work arrangement. In the Mexican sample there are 40 telecommuters and 53 non-telecommuters, while in the U.S. there are 22 and 89 respectively.

Table 7. Telecommuters by Country, Including Unemployed Respondents

	No Tele	Tele	Total
USA	89	22	111
Mexico	53	40	93
Column Total	142	62	204

Chi-square = 12.86 df = 1 Sig = .000

A more detailed analysis of the Mexican sample showed that 9 telecommuters out of 40 are unemployed. These nine are more appropriately classified as workers at home than as telecommuters, since they do not have a corporate office to connect to or relate to. The prevalence of working at home is a cultural difference, since during times of recession in Mexico, many middle class workers leave the formal labor force and join the informal labor force as self-employed workers. Sometimes, these self-employed workers form networks and alliances with each other. The survey was conducted in early 2002 at a time of economic recession in Mexico. Table 8 presents the results of a crosstabulation, excluding unemployed individuals. The chi-square test shows that the difference in the proportions of telecommuting and non-telecommuting samples remains significant.

Table 8. Telecommuting by Country, Excluding Unemployed Respondents

	No Tele	Tele	Total	No resp	Total
USA	89	21	110	1	111
Mexico	52	31	83	10	93
Column Total	141	52	193	11	204

Chi-square = 8.012 df = 1 Sig =.005

Satisfaction with Telecommuting

The second stage of the analysis of results presents the tests for differences in satisfaction between the Mexican and U.S. samples According to Table 9, there are no satisfaction differences between employees in Mexico and in the U.S. Furthermore, there is no satisfaction difference between telecommuters and non-telecommuters in the U.S. (see Table 10). In the case of Mexico, there is no significant difference between the perceptions of telecommuters and non-telecommuters (Table 11).

In the cases of both telecommuters and non telecommuters there is no difference between the two countries regarding under satisfaction by telecommuting arrangements (Tables 12 and 13).

Table 9. Crosstabulation of Telecommuting Satisfaction by Country

	Disagree	Agree	Neutral	Total	No res	Total
U. S.	6	65	23	94	17	111
Mexico	12	55	23	90	3	93
Column Total	18	120	46	184	20	204

Chi-square = 6.374 df = 4 Sig = .173

Table 10. U.S. Sample: Telecommuting Satisfaction by Type of Employee

U. S.	Disagree	Agree	Neutral	Total	No res.	Total
No telecommuting	6	49	18	73	16	89
Telecommuting	-	16	5	21	1	22
Column total	6	65	23	94	17	111

Chi-square = 4.848 df = 4 Sig = .303

Table 11. Mexican Sample: Telecommuting Satisfaction by Type of Employee

MEX	Disagree	Agree	Neutral	Total	No res.	Total
No telecommuting	8	24	18	50	3	53
Telecommuting	4	31	5	40	-	40
Column total	12	55	23	90	3	93

Chi-square = 9.046 df = 4 Sig = 0.06

Table 12. Telecommuters: Telecommuting Satisfaction by Country

Telecommuters	Disagree	Agree	Neutral	Total	No res.	Total
U.S.	-	16	5	21	1	22
MEX	4	31	5	40	-	40
Column total	4	47	10	61	1	62

Chi-square =3.186 df = 4 Sig = 0.527

Table 13. No-Telecommuters: Telecommuting Satisfaction by Country

No-Telecommuters	Disagree	Agree	Neutral	Total	No res.	Total
U.S.	6	49	18	73	16	89
MEX	8	24	18	50	3	53
Column total	14	73	36	123	19	142

Chi-square =7.13 df = 4 Sig = 0.129

Organizational Support in Mexico and the U.S.

Another important factor in the decision to telecommute is whether or not the organization supports different working arrangements. To test this research question, the survey asked respondents to indicate the level of management support to telecommuting. Table 14 shows that there is significant difference in the extent of organizational support for telecommuting between respondents in Mexico and the U.S., with more support evident in Mexico. Furthermore, there is significant difference in the extent of organizational support for telecommuting between telecommuters and non telecommuters in the U. S. (Table 15). The former receives more organizational support. However, this comparison is not significant for the Mexican case (Table 16), nor are comparisons significant between the two nations for telecommuters or non-telecommuters. (Tables 17 and 18).

Table 14. Crosstabulation of Presence of Organizational Support for Telecommuting by Country

	Disagree	Agree	Neutral	Total	No res	Total
USA	31	31	44	106	5	111
Mexico	27	45	17	79	14	93
Total	58	76	61	185	19	204

Chi-square = 12.922 df = 4 Sig = .012

Table 15. U.S. Sample: Telecommuting Organizational Support

U. S.	Disagree	Agree	Neutral	Total	No res.	Total
No telecommuting	29	17	38	84	5	89
Telecommuting	2	14	6	22	-	22
Column total	31	31	44	106	5	111

Chi-square = 16.453 df = 4 Sig = .002

Table 16. Mexican Sample: Telecommuting Organizational Support

MEX	Disagree	Agree	Neutral	Total	No res.	Total
No telecommuting	17	14	12	43	10	53
Telecommuting	10	21	5	36	4	40
Column total	27	35	17	79	14	93

Chi-square = 8.181 df = 4 Sig = 0.085

Table 17. Telecommuters: Telecommuting Organizational Support by Country

Telecommuters	Disagree	Agree	Neutral	Total	No res.	Total
U.S.	2	14	6	22	-	22
MEX	10	21	5	36	4	40
Column total	12	35	11	58	4	62

Chi-square =4.208 df = 4 Sig = 0.379

Table 18. No-Telecommuters: Telecommuting Organizational Support by Country

No-Telecommuters	Disagree	Agree	Neutral	Total	No res.	Total
U.S.	29	17	38	84	5	89
MEX	17	14	12	43	10	53
Column total	46	31	40	127	15	142

Chi-square =7.91 df = 4 Sig = 0.095

Conclusions

This investigation explored the differences between telecommuting perceptions of employees in the U.S. and Mexico. The project tests perceived levels of satisfaction and organizational support for telecommuting arrangements. There were country differences in organizational support of telecommuting. However, these differences are contrary to the culture based forecast. Hofstede's model predicts that *Telecommuting in the U. S. will receive more organizational support than telecommuting in Mexico* (H1). This hypothesis is not supported by this project, since telecommuting for Mexicans received more organizational support than for U.S. respondents. Mexican and U.S. respondents have similar perceptions in telecommuting satisfaction. This results do not support *H2-U.S. employees are/will be more satisfied with telecommuting arrangements than Mexican employees.*

Differences in economic development, information technology infrastructure, availability of computers, and education suggest a higher proportion of telecommuters in the U.S. sample than in Mexico. However, the proportion of telecommuters in the Mexican sample is higher than for the U.S. This is partly explained by the older age and higher unemployment levels of Mexican versus U.S. respondents. Both factors favor telecommuting arrangements in Mexico.

Difference in the extent of organizational support for telecommuting between the two nations is another important finding. Although the U.S. respondents indicate greater prevalence of organizational practices, the Mexican respondents report more organizational support. It may be that strong informal means of support in Mexico enhances sense of support. This needs further comparative investigation regarding the formal and informal support mechanisms.

Previous researchers have acknowledged limited generalizability of their findings due to the fact that samples were drawn from a single organization or because sampled individuals performed the same type of work. This investigation seeks to surmount these limitations by surveying individuals who work for different organizations and who perform different types of job. However, the present investigation is not exempt from study limitations, which include the narrow demographic profile of the sample, the particular definition of telecommuting utilized, and the non-representativeness of the Mexican and U.S. samples. Particularly, future research could include matched pairs of firms in the same industries, a more traditional industrial sector i.e. to emphasize cultural differences, a longer survey with more employment/organizational and telecommuting history items, and larger sample size. In future studies, use of a statistical sample frame, rather than a convenience sample, would remedy this weakness, albeit it is more costly in time and resources. For example, a industry based study would complement our findings. Having firms from the same industry and size will help in keeping other participating variables constant.

Telecommuting is a challenging research issue due to the many factors involved in its practice (i.e., organizational characteristics, individual characteristics) and the many levels this arrangement may impact (i.e., society, organization, individual), as well as to the difficulty in targeting the right population. Additional delimitation of the individual characteristics of telecommuters needs to be emphasized in further investigations. Much has been said about the rise and demands for knowledge workers and the benefits of expanding corporate boundaries to reach further workforce and skills. Telecommuting and the use of information technology to eliminate physical commutes have been demonstrated to be viable options that increase employee productivity and satisfaction, as well as corporate reach.

Another dimension to consider while evaluating this project results are the critiques that Hofstede model has received. First, culture is a dynamic construct and the indices for the four cultural dimensions could have changed after 23 years. Second, culture is present at different levels: national, organizational, group (i.e. family) and individual. In this project we did not control for the different types of organization. And third, culture cannot be characterized with a model based on Hofstede indices.

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