

Hofstede's Cultural Dimensions 30 Years Later: A Study of Taiwan and the United States*

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Abstract

Hofstede's (1984, 2001) work on work-related cultural dimensions has been regarded as a paradigm in the field of cross cultural studies. Specifically, his country classification on five work-related cultural values, power distance, uncertainty avoidance, masculinity-femininity, individualism-collectivism, and Confucian work dynamics, have been frequently cited by researchers in the past few decades. While his work has been used effectively, his data were collected 30 years ago and have become dated. By collecting data from one Eastern culture, Taiwan, and one Western Culture, the United States, this study has updated and re-examined Hofstede's (1984, 2001) cultural dimensions in these two cultures. In addition, this study has extended Hofstede's work by investigating occupational culture in the higher education setting. The results of this study suggested that work-related cultural values in a specific culture are not static and can be changed over time. When the political, societal, and economic environments change, people's cultural values also change. Thus, many cultural theories should be updated and re-evaluated periodically.

Introduction

In the past 3 decades, Hofstede's (1984, 2001) work-related cultural dimensions were used as research paradigm in the field of intercultural communication, cross cultural psychology, and international management. His country classification on five work-related cultural values, power distance, uncertainty avoidance, masculinity-femininity, individualism-collectivism, and Confucian work dynamics, has been frequently cited by researchers in the past few decades. While his work has been used effectively, his data were collected 30 years ago and have become dated. In order to update and expand Hofstede's (1984) research, there are two purposes of this current study. First, this study has collected data from one Eastern culture, Taiwan, and one Western culture, the United States, in order to provide updated information about work-related cultural values in these two cultures. Second, this study has expanded Hofstede's (1984, 2001) study by studying work-related cultural values in the higher education setting. The following section of this paper reviews literature and scholarly research related to Hofstede's cultural dimensions.

Literature Review

Hofstede's Cultural Dimensions

Hofstede's (1984) *Culture's Consequences* explores the domain of studying international organizations. He collected data from a large multinational corporation, IBM, and analyzed data collected from forty different countries. Through his empirical data analysis, he concluded that "organizations are cultural-bounded" (p. 252). In addition, he identified

four work-related cultural dimensions, including power distance, uncertainty avoidance, individualism, and masculinity, to analyze work-related cultural values in different countries.

The first dimension, power distance, refers to the power inequality between superiors and subordinates. In high power distance organizations, organizational hierarchy is obvious. There is a line between managers and subordinates. Different from high power distance organizations, low power distance organizations tend to have a flat organizational structure. The second dimension, uncertainty avoidance, refers to people's tolerance of ambiguity. In high uncertainty avoidance organizations, there are more written rules in order to reduce uncertainty. In low uncertainty avoidance organizations, there are fewer written rules and rituals. The third dimension, individualism-collectivism, refers to how people value themselves and their groups/organizations. People with high individualistic values tend to care about self-actualization and career progress in the organization, whereas people with low individualistic values tend to value organizational benefits more than their own interests. The fourth dimension, masculinity (MAS), defines the gender roles in organizations. In high MAS organizations, very few women can get higher-level and better-paying jobs. In low MAS organizations, women can get more equitable organizational status.

In addition to the original four cultural dimensions, Hofstede (1990) proposed the fifth cultural dimension, called Confucian Work Dynamic. The Chinese Culture Connection (1987) conducted a Chinese Value Survey (CVS) based on traditional Chinese cultural values and identified this non-Western cultural dimension. The Chinese Culture Connection constructed a survey of Chinese values and administered this survey to university students in 22 different countries. The results of factor analysis demonstrated that four factors were extracted from the 40 scale items. Three of the four factors were correlated with Hofstede's (1984) work-related cultural dimensions. Only one factor, Confucian work dynamics, was not correlated with Hofstede's (1984) cultural dimensions. The new cultural dimension includes four items: (1) ordering relationship, (2) thrift, (3) persistence, and (4) having a sense of shame. These four items represented the Confucian values in the Chinese society. Hofstede (1990) adopted this Eastern cultural dimension as the fifth work-related cultural dimension in his book, *Cultures and organizations: Software of the mind*. Hofstede (2001) renamed this cultural dimension as Long-Term Orientation (LTO).

Re-Examination of Hofstede's Cultural Dimensions

In addition to identifying work-related cultural dimensions, Hofstede (1984) proposed six areas for continued research: (1) non-Anglo cultural dimensions; (2) additional countries; (3) cultural changes over time; (4) sub-cultures, such as regional, occupational, and organizational cultures; (5) the consequences of cultural dimensions; and (6) foreign organizational and management theories. In order to investigate cultural changes over time, Fernandez and his colleagues (1997) conducted a study of Hofstede's work-related cultural dimensions in 9 countries and discussed the changes in the past 25 years by collecting data from senior business students and business professionals. They argued that societal changes such as economic growth, education, and democracy could affect work-related cultural dimensions. Significant changes in cultural values occur as "external environmental factors shape a society" (p. 52). The United States was included in their study, but Taiwan was not studied by Fernandez et al. (1997). This study included both Taiwanese and United States samples. In addition, this study investigated university employees' work-related cultural

values because Hofstede (1984) had argued that sub-cultures, such as occupational cultures, should be studied further.

Methods

Pilot Study

In order to ensure that the scales used in the formal study are statistically reliable, a pilot study of Taiwanese and American university administrative workers was conducted in March and April 2000. In both universities, 50 questionnaires were distributed. The total number of questionnaires collected from the Taiwanese university was 37 (74% response rate). The number of questionnaires obtained from the American university was 42 (84% response rate). The questionnaire was designed in English and translated into Chinese. The Chinese version of the questionnaire was back-translated into English by a Taiwanese doctoral student. The researcher compared the original English questionnaire and the back-translated questionnaire. After making some minor adjustments, the meanings of the two questionnaires matched and met Brislin's (1970) rules for back-translation.

A quantitative questionnaire which measured Hofstede's (1984; 1990; 2001) five cultural dimensions (power distance, uncertainty avoidance, individualism, masculinity, and Confucian work dynamics) was used as the research instrument. Each of the cultural dimensions was measured by four items. The reliability results demonstrated that two cultural dimensions had low reliability scores. The reliability scores for the power distance cultural dimension and uncertainty avoidance scale were .34 and .49, respectively. The reliability scores for individualism (.63), masculinity (.78), and Confucian work dynamics (.66) were satisfactory. Since the reliability scores for two of the cultural dimensions were low, the scales for measuring work-related cultural dimensions were replaced by Dorfman and Howell's (1988) cultural scales.

Methods of the Formal Study

Research Instrument. A self-administered quantitative survey questionnaire was used in this study. Hofstede's (1984) theory and cultural dimensions were used as the theoretical base for the questions and are supported by other authors (Triandis, 1982). Though the four dimensions are regarded as a paradigm, the items that measure each dimension have been criticized by several researchers. Dorfman and Howell (1988) pointed out "Hofstede's measures and analytical procedures have been subjected to criticism" (p. 130). For instance, they criticized Hofstede's (1984) uncertainty avoidance index contending that the items reflect three different constructs. They also highlighted the level of analysis issue. According to Dorfman and Howell (1988), "the scale only taps power distance at the national level; it cannot measure individual differences" (p. 130).

Based on the results of the pilot study and the reviews of previous literature, Hofstede's (1984) cultural-value items were replaced by Dorfman and Howell's (1988) new measure of Hofstede's (1984) dimensions. This measure has been used in several cross cultural studies (e.g., Nicholson, 1991; Fernandez, Carlson, Stepina, & Nicholson, 1997). This demonstrated that these two research instruments were theoretically equivalent. Nicholson (1991) also argued that Dorfman and Howell's (1988) new scales are psychometrically more reliable than Hofstede's (1984) scales.

Data Collection and Sampling. Employees from two public universities, a Taiwanese university and an American university, were surveyed in this study. These two universities differed in size, but the missions of these two universities were similar. One hundred and

eighty questionnaires were distributed to the Taiwanese participants in May, 2001. One hundred and fifty seven (87.2%) participants returned this survey. After checking completion of the questionnaire, one hundred and fifty six (86.7%) questionnaires were determined to be valid. One hundred and eighty questionnaires were distributed to the U.S. participants in June and July, 2001. One hundred and forty seven (81.7%) participants returned this survey. All of them contained sufficient data to be considered valid responses. In each university, questionnaire distribution and data collection were performed by one university worker who helped the researcher to collect data. All of the questionnaires were put in large envelopes and distributed to different departments in the university. After anonymously completing the questionnaire, respondents returned the questionnaire to the data collector in each university.

The samples for this study were selected based on the criteria of accessibility, functional equivalence, and representativeness. A sampling issue that is well discussed in cross-national surveys is equivalence. According to Frey (1970), "it is essential to note that equivalence, in any ordinary sense, is *not* absolutely vital to cross-national comparability. What is absolutely vital is for the researcher to understand the full meaning of his operations, not for these operations to be totally equivalent even in a functional sense in all countries. ... Functionally equivalent samples are desirable" (pp. 232-233).

In order to meet Frey's (1970) three criteria, the author tries to match the sample from these two cultures as much as possible. The samples in this study were functionally equivalent because all of the participants did administrative work for universities in their respective countries. Their job titles included secretary, specialist, administrative staff, clerk, human resources personnel, accountant, and administrative teaching assistant. To represent the administrative system of universities, both *academic units* and *administrative units* were surveyed in these two universities. A stratified sampling method was used. In both universities, 45 (25%) questionnaires were distributed to academic units; 135 (75%) questionnaires were distributed to administrative units. The data set for this study was based on 303 respondents from two public universities, one Taiwanese University and one U.S. University. In both cultures, approximately 30% of participants are male. About 70% of the participants in both cultures are female. The average age for Taiwanese participants was 38 years old. The average age for the U.S. participants was 43 years old. The average years working for the organization was approximately 9 years in both cultures.

After the one-dimensional assumption of the scales was confirmed by factor analysis, a reliability test was conducted to check the internal consistency of each scale. According to the results of the reliability analysis, all of the scales used in this study were above .50 and met Nunnally's (1967) standard. Table 1 summarizes the results of the reliability tests.

Results and Discussions

The results of this study demonstrated that both Taiwan and the United States have significant changes in work-related cultural values compared to Hofstede's (1984; 2001) study. Table 2 summarizes the statistical results of this study. In the following sections, the statistical results of five work-related cultural dimensions are discussed.

Table 1. Reliability Scores for Sub-Scales

Variables	Taiwan	U.S.A.
Power Distance	.55	.72
Uncertainty Avoidance	.71	.77
Masculinity	.78	.86
Collectivism	.67	.64
Confucian Work Dynamics	.57	.58

Power Distance

According to Hofstede's (1984) study, Taiwan was a medium/high power distance culture; whereas the United States was a medium/low power distance culture. The result of this current study seemed to be somewhat different from Hofstede's (1984) study. In this study, the Taiwanese participants have a medium score ($M=3.01$) on power distance; the U.S. participants have a medium/low score ($M=2.55$) on power distance. The results of the U.S. sample seemed to be in line with Hofstede's (1984) study. However, the Taiwanese participants seemed to have a lower power distance cultural value compared to the previous study. Taiwanese participants' changing scores on power distance seemed to support the analysis and findings of some recent studies.

Recent studies (e.g., Myers, 1996; Wu, Taylor, & Chen, 2001) suggested that Taiwan has experienced dramatic societal and cultural changes in the past two decades. For example, Myers (1996) discussed the cultural change phenomenon in Taiwan. He argued that Taiwanese culture is affected by Chinese culture, Japanese culture, and American culture. Specifically, his article discusses how democracy has replaced authoritarianism in Taiwan. Wu et al. (2001) also proposed that internationalization, democratization, and media liberalization are three factors that have caused societal changes in Taiwan. Martial law in Taiwan was abolished in 1987. Since then, Taiwan has moved dramatically toward democratization. Due to the process of democratization, it is not surprising that the Taiwanese participants in the study have a lower power distance value than before.

Table 2. Means for Cultural Dimensions

Items	A	B
Power Distance		
1. Managers should make most decisions without consulting subordinates.	2.79	2.54
2. It is frequently necessary for a manager to use authority and power when dealing with subordinates.	3.64	3.39
3. Managers should seldom ask for the opinions of employees.	2.52	2.10

4. Employees should not disagree with management decisions.	3.46	2.54
5. Managers should not delegate important tasks to employees.	2.68	2.20
Total	3.02	2.55
Uncertainty Avoidance		
1. It is important to have job requirements and instructions spelled out in detail so that employees always know what they are expected to do.	5.68	5.89
2. Managers expect workers to closely follow instructions and procedures.	5.28	5.35
3. Rules and regularities are important because they inform workers what the organization expects of them.	5.45	5.56
4. Standard operating procedures are helpful to employees on the job.	5.35	5.48
5. Instructions for operations are important for employees on the job.	5.61	5.55
Total	5.47	5.57
Masculinity		
1. Meetings are usually run more effectively when they are chaired by a man.	3.44	1.71
2. It is more important for men to have a professional career than it is for women to have a professional career.	3.69	1.71
3. Men usually solve problems with logical analysis; women usually solve problems with intuition.	3.70	2.40
4. Solving organizational problems usually requires an active, forcible approach which is typical of men.	3.54	2.08
5. It is preferable to have a man in a high level position rather than a woman.	3.52	1.60
Total	3.58	1.90
Collectivism		
1. Group welfare is more important than individual rewards.	4.54	4.06
2. Group success is more important than individual success.	4.92	4.32
3. Being accepted by the members of your workgroup is very important.	5.71	5.25
4. Employees should pursue their goals after considering the welfare of the group.	4.47	4.44
Total	4.91	4.52
Confucian Work Dynamics		

1. Ordering relationships by status and observing this order is important in the workplace.	4.53	2.79
2. Thrift is important in the workplace.	4.75	4.31
3. Persistence is important in the workplace.	5.44	5.23
4. Having a sense of shame is important in the workplace.	5.54	2.84
Total	5.06	3.79

A=Taiwanese data, N=156, Scale=1-7; B=the U.S. data, N=147, Scale=1-7

Uncertainty Avoidance

Participants from both cultural groups tend to have a high uncertainty avoidance value. Hofstede's (1984) study demonstrated that Taiwan was a medium uncertainty avoidance culture; whereas the United States was a medium/high uncertainty avoidance culture. The results of this current study was different from Hofstede's (1984) study. In this study, both the Taiwanese participants (M=5.47) and the U.S. participants (M=5.57) have high scores on uncertainty avoidance. But, the U.S. participants' high score on uncertainty avoidance seemed to be in accordance with Fernandez et al.'s (1997) study. In their study, the United States was characterized as a high uncertainty avoidance culture. These authors conclude "the shift made by the United States from a weak uncertainty avoidance country in Hofstede's study to being a strong uncertainty avoidance country in the present study seems reasonable in light of the political, economic, and social changes the United States has undergone over the past two decades. In particular, the increased uncertainty about the economic power of the United States may be a factor in this change" (Fernandez et al., 1997, p. 50).

All of the participants in this study are administrative workers in major universities. Both the Taiwanese participants and the U.S. participants scored high on uncertainty avoidance which demonstrates that university employees in these two cultures prefer well-defined job descriptions and work procedures.

Masculinity

This cultural dimension refers to the expected gender roles in leadership expectation. A higher score on masculinity means that participants prefer men to have power and expect men to be effective leaders in organizations.

According to Hofstede's (1984) study, Taiwan was a medium/low masculinity culture; whereas the United States was a medium/high masculinity culture. The result of this current study contradicts Hofstede's (1984) study. In this study, the Taiwanese participants have a medium score (M=3.58) on masculinity; the U.S. participants have a very low score (M=1.90) on masculinity. But, the U.S. participant's low score on Masculinity was very similar to Fernandez et al.'s (1997) study. Their research results demonstrated that the United States is a feminine culture as defined by Hofstede.

According to Fernandez et al. (1997), "Hofstede's rankings classified the United States as masculine, although the score was close to the mean. In the present study, the United States scored well below the mean. This is consistent with changes in the work force, in which women have increasingly gained positions of power since Hofstede's data were collected" (p. 52).

Fernandez et al. (1997) did not study Taiwan. But, they studied China. "China scored the highest of the masculinity counties. ...This finding may reflect the more traditional role separation of men and women in this country" (p. 51). Similar to China, Taiwan was affected by Confucianism. According to Yang (2000), Confucianism has had a strong influence on gender roles. The gender roles in Confucianism culture are the extroverted male and the introverted, submissive female (Yang, 2000).

Wu Lun, a key concept of Confucianism, defines the five basic relationships: ruler/subject, father/son, husband/wife, older brother/younger brother, and between friends. According to Chen and Chung (1994), "these relationships are assumed to be unequal and complementary" (p. 303). Due to the profound influence of Confucianism, Taiwanese have a more clear distinction between male gender roles and female gender roles. Compared with the U.S. participants, Taiwanese university employees perceived male leaders to be more effective than female leaders. The results of this study also implied that the U.S. participants have more awareness about gender equality in the workplace.

The different findings between this study and Hofstede's (1984) study may also be due to different operationalizations of the Masculinity dimension. Since the concept of Masculinity was operationalized differently, the different results should be interpreted with caution. Hofstede (1984) defined Masculinity by stereotypical gender expectations. In his study, masculine work goals are advancement, earnings, training, and up-to-date qualities. Feminine work goals are friendly atmosphere, position security, physical conditions, and cooperation. He also mentioned that "the degree of masculinity and femininity of a country's dominant value is related to sex role differentiation" (Hofstede, 1984, p. 178). Previous studies criticized that Hofstede's (1984) operationalization *did not* focus on the *division of sex roles* in a culture (Dorfman & Howell, 1988; Nicholson, 1991). In order to know the division of sex roles in the cross cultural context, Dorfman and Howells' (1988) measurement seemed to be more appropriate.

Also, different sampling structures may explain the different research findings. According to Hofstede (1984), "the MAS scores are mainly based on men's answers" (Hofstede, p. 191). In this dissertation study, most of the participants were women. Hofstede (1984) mentioned that there were very few studies related to the masculinity dimension: "There is room for more cross cultural studies in this area" (Hofstede, 1984, p. 199).

Collectivism

The Taiwanese participants have a high collectivism value. But, the U.S. participants seemed to be more collectivistic than participants in Hofstede's (1984; 2001) study. According to the results of Hofstede's (1984; 2001) study, Taiwan was a highly collectivistic culture, whereas the United States was the most individualistic culture. Fernandez et al.'s (1997) study also demonstrated that the United States was the most individualistic country among the nine countries in their study. The results of this current study are somewhat different from Hofstede's (1984; 2001) study. In this study, the Taiwanese participants have a medium high score (M=4.91) on collectivism; the U.S. participants also have a medium score (M=4.52) on collectivism. The U.S. participants have a higher score on Collectivism probably because of the sampling issue. Hofstede's (1984) participants were IBM employees. Fernandez et al.'s (1997) participants were business professionals and advanced business students. Different from previous studies, participants in this study were all university

employees. Universities are non-profit organizations. Hence, university workers may be less competitive and less individualistic than business workers.

Confucian Work Dynamics

The Taiwanese participants have a high score ($M=5.06$) on Confucian work dynamics; the U.S. participants have a medium score ($M=3.79$) on Confucian work dynamics. The importance of Confucianism on Chinese culture has been discussed by previous literature. According to Yum (1988), "in the philosophical and cultural history of East Asia, Confucianism has endured as the basic social and political value system for over one thousand years" (p. 376). Taiwanese participants' high score on Confucian work dynamics reveals that Confucianism still has strong influences on Taiwanese university employees' work-related value system. Another interesting finding of this study was that the U.S. participants had a medium score on this Eastern cultural dimension. Especially, the U.S. participants scored high on the persistence item. The work ethic of persistence is highly recognized by both cultural groups.

Conclusion and Implications

As mentioned earlier, Hofstede (1984) has proposed six areas for continued study. This study has expanded Hofstede's (1984) studies. First, this study examined a non-western cultural dimension, Confucian work dynamics. The Confucian work dynamics dimension was operationalized by Chinese Culture Connection (1987), instead of western scholars. Very few previous studies quantitatively investigated the influences of this important cultural dimension. Second, this study was conducted three decades after Hofstede's study. The changes of cultural values over time were also compared and discussed. The scores on most of the cultural dimensions were different from Hofstede's (1984) study. These results are significant because this result demonstrated that cultural values can change over time. When the political, societal, and economic environments change, people's cultural values also change. Thus, many cultural theories should be updated and re-evaluated periodically. For instance, the changes in power distance will cause changes in expected leadership styles in a culture. Third, this study used universities as examples to study occupational culture. Some findings are interesting. For example, participants from both cultures scored high on the uncertainty avoidance dimension. It demonstrated that university workers from both cultures preferred structured administrative procedures. This finding may reveal the characteristics of university work because administrative works were more standardized than creative works, such as advertising copy writing.

In summary, this study has updated and expanded Hofstede's (1984; 2001) cultural studies in Taiwan and the United States. The results of the more recent study have brought significant insights to the field of cross cultural communication in the organizational context. Future researchers may continue this chronological line of study of cross cultural communication and supplement with the study of more cultures. Then, the knowledge about cross cultural communication can be updated and extended.

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