

Hofstede's Cultural Measure In A National Forest Recreation Context

Chieh-Lu Li¹, Harry C. Zinn¹, Garry E. Chick¹, Alan R. Graefe¹ and James D. Absher²

¹ The Pennsylvania State University, Boalsburg, PA, USA
e-mail: cx1345@ yahoo.com (Chien-Lu Li)

² USDA Forest Service

Current demographic trends indicate population growth for ethnic minority groups is increasing considerably faster than the overall rate of the U.S. population (U.S. Bureau of the Census [USBC], 2000). According to current projections, non-Hispanic Whites will make up barely one-half of the total population by 2050 and will lose their majority status by 2060 (Riche, 2000). To better understand the current demographic change, we study the cultural values that promise to impact the diverse population.

In the most exhaustive cross-cultural study to date, Hofstede (1980) established four dimensions of national cultural values: individualism, power distance, masculinity, and uncertainty avoidance. Hofstede's study is also one of the widely used among international management and marketing scholars. Additional studies have shown Hofstede's cultural measure to be generalizable across multiple contexts and societies (e.g., Furrer, Liu, & Sudharshan, 2000; Mattila, 1999). Moreover, Clark (1990) argued that Hofstede's measure might account for many cultural differences among individuals, suggesting that such measure might also prove useful for assessing ethnic differences in perceived service quality in forest recreation settings.

While Hofstede's measure of cultural values has been widely used, several researchers (e.g., McSweeney, 2002) also questioned about the validity of these cultural measures. As Hofstede suggested that "..... *my theory of cultural differentiation is like a product of research laboratory, which awaits the efforts of development technicians to elaborate it into something of particular use*" (2001, p. 462). Further analyses of these cultural measures are needed to determine their validity in a forest recreation context. Thus, the purpose of this study is to examine Hofstede's measure of cultural values in a National Forest recreation context.

During summer, 2002, we surveyed visitors to the Angeles National Forest near metropolitan Los Angeles, USA. Using purposive sampling at sites known to be heavily used by visitors with diverse ethnic backgrounds, we obtained a sample of 444 Anglo-Americans, 312 Hispanic-Americans, and 319 Asian-Americans (overall n = 1,172).

We used confirmatory factor analysis (CFA), exploratory factor analysis (EFA), correlations, and one-way analysis of variance (ANOVA) to test Hofstede's original four dimensions in a forest recreation context. Our initial intention was to use CFA to confirm Hofstede's four dimensions, Power Distance (PDI), Individualism (IND), Masculinity (MAS), and Uncertainty Avoidance (UAV). Our test (with four items per dimension) revealed a poor fit according to several indicators (e.g., NFI = 0.695, RMR = 0.134) via LISREL 8.50 program. Given the poor fit of the original four-dimension cultural value model, we used EFA to explore the dimensionality of the items in the National Forest recreation context. We considered both orthogonal (uncorrelated factors) and oblique (correlated factors) solutions, via both Varimax and Direct Oblimin rotation. The results of both the orthogonal and the oblique solutions were very similar and suggested no interpretable patterns of dimensionality.

By examining the correlation matrix of Hofstede's 16 cultural value items, we found the items within the original Hofstede's dimensions were almost uncorrelated. Items were as likely to correlate across dimensions as they were within dimensions, suggesting that the responses of participants in this study did not reflect the pattern found in workplace and consumer studies. Because we found no interpretable dimensions among Hofstede's items, we used One-way ANOVA to test the relationship between the 16 items and ethnic group membership. We found that eight cultural value items differed significantly among ethnic groups and tested their power to represent cultural differences. Reliability analysis revealed that seven of the eight items should be retained and one item dropped, yielding a Cronbach's alpha of 0.779. Since perceived service quality is related to cultural difference (Furrer, Liu, & Sudharshan, 2000; Mattila, 1999), further verification of these cultural measures suggest these seven cultural items possess the predictive power of perceived service quality.

Therefore, our final cultural values measure was comprised of two items from Hofstede's original Power Distance dimension (Inequalities are expected; Less powerful people should be dependent on more powerful people), one item from the Individualism dimension (Look after immediate family), two items from the Masculinity dimension (Money and material things are important; Men are to be assertive, ambitious, and tough), and two items from Uncertainty Avoidance dimension (Uncertainty is a normal feature of life; Emotions should not be shown). The higher scores of the item implied more power distance, more individual, more masculine, and *less* uncertainty avoidance.

The results of our test of Hofstede's cultural measure suggest that the measure of cultural values in the forest recreation context differs substantially from those in workplace and consumer contexts. Developing a more complete understanding of the structure of cultural values as they apply to forest recreation will require additional research with multiple forest recreation populations.

References:

- Clark, T. (1990). International marketing and national character: A review and proposal for an integrative theory. *Journal of Marketing*, 54(October), 66-79.
- Furrer, O., Liu, B.S. & Sudharshan, D. (2000). The relationships between cultural and service quality perceptions – Basic for cross-cultural market segmentation and resource allocation. *Journal of service research*, 2(4), 355-371.
- Hofstede, G. (1980). *Culture's Consequences: International Differences in Work-Related Values*. Beverly Hills, CA: Sage.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. 2nd Edition. Thousand Oaks, CA: Sage.
- Mattila, A. S. (1999). The role of culture in the service evaluation process. *Journal of service research*, 1(3), 150-61.
- McSweeney, B. (2002). Hofstede's model of national cultural differences and their consequences: A triumph of faith – a failure of analysis. *Human relations*, 55(1), 89-118.
- Riche, M.F. (2000). *America's diversity and growth: Signposts for the 21st century*. Population Bulletin, 55(2), 43p. Washington DC: Population Reference Bureau.
- U.S. Bureau of the Census (USBC). (2000). *Statistical abstract of the United States: 2000* (120th Ed.) Washington, DC.

Keywords: Cultural values, individualism, power distance, masculinity, uncertainty avoidance