



# Relationships between Hofstede's cultural dimensions and tourist satisfaction: A cross-country cross-sample examination

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## ARTICLE INFO

### Keywords:

National culture  
Visitor satisfaction  
Cultural distance  
Cross-sample validation  
Hofstede  
Cultural values

## ABSTRACT

Culture has been assumed to influence tourist behavior but due to the difficulty of measuring culture values directly at the individual level, the relationship between national culture and visitor satisfaction remains yet to be empirically attested. This study used two national level inbound tourist samples, i.e., Tourism Research Australia's 2017 International Visitor Survey holiday/pleasure travellers' sample and the Hong Kong Tourist Satisfaction Index Project 2016 sample, to test the relationships between Hofstede's six cultural dimensions (Power Distance, Individualism/Collectivism, Masculinity/Femininity, Uncertainty Avoidance, Long Term Orientation/Short Term Normative Orientation, and Indulgence/Restraint) and visitor satisfaction. Bivariate correlation with bootstrapping tests show consistent correlations between four of the six cultural dimensions and visitor satisfaction across the two samples. While Individualism and Indulgence are found to be positively related to visitor satisfaction, Power Distance and Long Term Orientation are negatively related to visitor satisfaction. The findings are validated with a further test involving the concept of cultural distance. This study contributes to the literature by providing solid evidence on the relation between culture and visitor satisfaction. Calls for future research are discussed.

## 1. Introduction

Tourism is a global marketplace where destinations market to and host visitors from different national cultures. The debate as to 'if' and 'to what degree' national cultural differences should be taken into account in reaching and serving these markets remains unresolved. On the one hand, there are those that argue that a 'global consumer' has emerged that share a common set of values, preferences, and behaviors with all consumers (Dann, 1993; Nowak & Kochkova, 2011). The cultural differences that once separated people for hundreds, if not thousands, of years are collapsing creating a smaller more homogenous world brought about by a variety of forces including the global media, email, the internet, economic unifications, and migration and tourism. The fact that many international visitors travel to the same destinations, stay and dine in the same brands of hotels and restaurants, and pay for admission into the same theme parks and attractions can be construed as evidence of cultural evolution of convergence towards commonly accepted preferences and values.

Alternatively, there are those who believe human nature is more complex (de Mooij & Beniflah, 2016). Though international visitors

may show similarities in their choice of destinations, proponents of divergence contend that visitors come to these destinations with different expectations and preferences that are partly rooted in their shared societal or cultural values (Torres, Fu, & Lehto, 2014; McLeod, 2004). Proponents in the fields of psychology and cross-cultural (anthropological) psychology assert that beneath this current towards a convergence of human values and preferences lurks human bias, where we are predisposed, consciously or unconsciously, to break society up into different human groups creating an 'us' versus 'them.' The evidence from experimental designs involving pre-linguistic, pre-aculturated infants indicate an innate preferences for liking those like us and disliking those unlike us is based upon infant's quick judgements of the other's facial expressions and social behavior (Mahajan & Wynn 2012; Hamlin, Wynn & Bloom 2010). The existence of conflict based upon ethnic, religious, and political differences can also be construed as evidence that these preferences for liking similar others (and disliking dissimilar others) are not outgrown and are also societally influenced (Shiraev and Levy 2010; Lindholm 2008). Such societal preferences have evolutionary roots designed to ensure the survivability of the societal group (Jenner, MacNab, Briley, Brislin, & Worthley, 2008,

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Hofstede, 2005).

Specific to tourism and the purpose of this study, preferences, in turn, form the basis of expectations, particularly for those consumers drawn to new and different experiences like many leisure visitors. Ultimately, these preformed expectations underlie what is desirable, which is at the heart of a visitor's post consumption judgement that survey researchers assess as satisfaction with the destination and the services encountered (Bowen & Clarke, 2002; Hsu, Woodside, & Marshall, 2013; Pikkemaat & Weiermair, 2001; Van Birgelen et al., 2002). Hence, a visitor's assessment of their level of satisfaction is, in part, 'culture-bound' rather than 'culture-free' (Pantouvakis, 2013), as visitors from different cultural backgrounds often evaluate the same experience differently based upon their unique culture-specific perspectives. Understanding how visitors across many heterogeneous cultures perceive and evaluate their experiences becomes an important issue underlying an international destination's success, given that customer loyalty (e.g., repeat visit intent) and positive word-of-mouth are earned by meeting and exceeding customer expectations (Kozak, Bigne, & Andreu, 2003; Torres et al., 2014; Yuksel & Yuksel, 2001).

This study addresses the convergence–divergence debate as to what degree, if any, does national culture explain visitor behavior. This study attempts to add to this debate by testing the relationship between national cultural dimensions and visitor satisfaction drawing from two large secondary data sources allowing the researchers to examine the association across multiple samples and settings for validity and reliability purposes. In the past, often the test of the relationship between the two constructs has been explored with relatively small samples comparing one country with another that does not reflect the broad cultural diversity of either today's international visitors or the destinations they visit. In addition, by including in the analysis measures of national cultural dimensions from both visitors' country of citizenship and their cultural distance from their hosts, this study puts forth a more robust and generalizable theoretical framework that links culture and satisfaction together to build a stronger basis for understanding the global nature of the tourism marketplace and how service quality can be best managed.

## 2. Literature review

National cultural difference is an important and relevant topic in its own right given that for many destinations' tourism demand is global in nature (Pizam & Fleischer, 2005). The increasing wealth in both developed and developing countries, the easing of cross-border travel restrictions, improvements to international transportation infrastructures, and reduced travel costs have led to steady increases in the number of international tourist arrivals over the years (Peng, Song, Crouch, & Witt, 2015).

Early cross-cultural tourism studies employed indirect methods to understanding culture and its implications for tourism management, yielding little more than generalized stereotypes of tourism markets (See Pizam & Fleischer, 2005 for a literature review). These analyses evolved to country-by-country comparisons concerning destination choice, attitudes and purchasing behaviors (Mykletun, Crofts, & Mykletun, 2001; Reisinger & Mavondo, 2006; Rosenbaum & Spears, 2005). Later on, researchers came to the belief that culture is a measurable and stable construct that can be scored on various dimensions and linked to specific consumer preferences and behaviors (Jenner et al., 2008). Like Steenkamp (2001), we contend that this latter approach affords managers and researchers a greater understanding of the cultural norms and values that shape customer's preferences and expectations, which in turn, are the basis of their subsequent evaluation of service encounters.

### 2.1. Understanding culture as a value concept

An understanding of national culture begins with an understanding

of values (de Mooij, 2015). In the marketing literature, value is defined in several ways such as money used in an economic exchange (monetary value), benefits received by the consumer (consumer value), or in socio-psychological terms, personal and societal values. In consumer psychology, definitions of personal values generally are consistent with Rokeach's (1973, p.5) definition as “an enduring belief that one mode of conduct or end-state value is preferable to an opposing mode of conduct or end-state value.” Hence, from a societal level

*“People's attitudes are based on relatively few, stable societal values they collectively hold that provide the individual solutions to a limited number of universal problems. These value-based collective solutions are limited in number and universally known ... and that different cultures have different preferences among them” (Hills, 2002, p. 2).*

Societal values are often viewed as bi-polar constructs as they concern choices between alternative end states (Horley, 2012). National cultural values represent complex collective attitudes and behaviors acting across a society as opposed to personal values affecting individual attitudes and behavior (Hsu et al., 2013). The decreased variability in values within a nationality or multinational region (Erez & Earley, 1993) is derived in a society's shared values representing historic “patterned ways of thinking, feeling, and reacting” (Kluckhohn, 1954, p. 86). Though many have argued that *trans*-border economic consolidation of markets (e.g., European Union, North America Free Trade Agreement, Association of South East Asian Nations), international tourism, and immigration are influencing global convergence of societal values (Nowak & Kochkova, 2011; Reisinger & Crofts, 2012), the cultural legacies and values of individual nations are considered to be among the many forces influencing consumer attitudes and decision-making (Correia, Kozak, & Ferradeira, 2011; Hsu et al., 2013; Lam, 2007), and thus is essential to those conducting business that involve serving international consumers.

### 2.2. Measuring national cultural values

Researchers have at their disposal several well-developed national culture models from which they can choose for a research design to score national cultures that are based on large, diverse samples (See Hsu et al., 2013 for a literature review). One of the key considerations in understanding culture and how it can be quantitatively measured is that all cultures are relevantly unique “attempts to ensure the survivability of the related societal group” (Jenner et al., 2008, p. 164). Hence, all measurement models are focused on societal values that are stable and relatively slow to change. Efforts to measure culture quantitatively began with Kluckhohn and Strodtbeck (1961). They purported that the solutions to the following five problems preferred by a given society reflect that society's cultural values. The five fundamental problems to be solved by every society are:

- What facet of time - *past, present or future* -should people primarily focus?
- What is the appropriate relationship between humans with the natural environment – *mastery, submission or harmony*?
- How should individuals relate with one another – *hierarchically, as equals, or according to one's individual achievement or merit*?
- What is the principal motivation of behavior – *to express one's individuality, to grow and become, or to achieve*?
- What is the nature of the human character – *good, bad, or a mixture*?

Aggregated measurements to questions to assess each preferred solutions, scored on a Likert scale, reflect the cultural values of that society.

Later, Hofstede (1980, 2005) published the results of a cross-cultural research study of IBM employees from 40 countries, whereby the derived five factors used to distinguish people from various national cultures. These dimensions are based on the fundamental problems he

posited all societies face which are in line with Kluckhohn and Strodtbeck (1961). They are: 1) the relationship between the individual and society; 2) society disparity or inequality; 3) the social consequences of gender; and, 4) the handling of uncertainty inherent in social and economic life. The national cultural dimensions that emerged from his analysis are:

- Power Distance (PDI) – the degree to which class differences are accepted in society;
- Individualism (IDV) - the degree to which the welfare of the group is valued more than that of the individual;
- Masculinity (MAS) – motivation to achieve, value in competition and materialism;
- Uncertainty Avoidance (UAI) - tolerance for risk and uncertainty; and
- Long-term orientation (LTO) – the preference for stability, frugality, respect for tradition, and future-oriented (Hofstede, 2005).

Recently, a sixth dimension – Indulgence (versus Restraint), abbreviated as IND – was added and thus formed the 6-dimension model of national culture (Hofstede Insights, n.d.). Hofstede and colleagues have often warned that this framework should only be applied at the macro level measuring cross-border differences between consumers and the organizations that create behavior (de Mooij & Beniflah, 2016; de Mooij & Hofstede, 2002).

### 2.3. National culture as a determinant of visitor satisfaction

Most who work in, or conduct research on, the hospitality and tourism industry would argue that differences exist between visitors who come from different national cultures as to what they expect in a destination, hotel, etc. However, few have explored the link between a visitor's cultural legacy and the varying degree of satisfaction with the same service experience. Yi (1990) provided a summary of the various theoretical frameworks designed to understand and measure customer satisfaction. They range from Expectancy-Disconfirmation Theory, Value-Percept Theory, Dissonance Theory, to Evaluative Congruity Theory. According to Yuksel and Yuksel (2001), consumer's satisfaction is a relative concept, where satisfaction is judged relative to some standard that is based in part on the consumer's socially acquired values and desires which by definition are culturally bound. Hence, the individual visitor is “more sensitive to the service provider's ability to facilitate the desired outcomes” (Mattila, 1999, p. 258), which are based on what LaRoche, Kalamas, and Cleveland (2005, p. 280) coined as “mental programming of self-fulfillment” which has at its basis human bias (Mahajan & Wynn 2012; Hamlin, Wynn & Bloom 2010). If this is true, the impact of cultural values on tourist expectations and assessments of service encounters should be evident in satisfaction scores.

Several tourism researchers have called for managers to take into account the attitude and behavioral differences from tourists from different national cultures in their approach to measuring and managing service quality (Armstrong, Mok, Go, & Chan, 1997; Reisinger & Turner, 1997). Indeed, literature reviews by Song, Chu, Chen, and Houston (2018) and Zhang, Beatty, and Walsh (2008) bear this out across a variety of consumer goods and services. Regarding tourism research, where arguably overall satisfaction is more complex and multi-dimensional, several studies have found these relationships in bi-variate country comparisons studies. Reisinger and Turner (1997) in their comparison of Thai tourists and their Australian hosts on their evaluative likes and dislikes of one another, suggested that culturally derived differences between Thai tourists and their Australian hosts could ultimately influence visitor satisfaction. In addition, McCleary, Choi, and Weaver (1998) in their study of the Korean and US business travellers found between-group differences in hotel selection criteria.

Still, other tourism research has focused on one or more of

Hofstede's cultural dimensions with various dimensions of visitor preferences with different success. For example, Kozak, Crofts, and Law (2007) assessed a sample of 1180 international visitors to Hong Kong on their tolerance for risk (e.g., threat to health, natural disasters, terrorism) by assigning them their home country's UAI score. The results clearly show a relationship between the respondents' UAI scores and their tolerance for risk. In addition, Crofts and Erdmann (2000) in a study of 983 international airline passengers from a large dataset based on US Department of Commerce's Tourism Industries survey, found that subjects from high MAS societies evaluated their airline experience more critically than those assigned to the low MAS societies as to their country of citizenship. However, Wong and McCain (2016) in their study of 136 passengers found assigning subjects into East versus West cultural groupings based on their home country's UAI, PDI, and IND scores added little to an understanding of the perceived justice to airline service failures. These authors offer two explanations for their results: 1) in this sample the results may be an indication of a shift towards globalization in service recovery standards; 2) the Hofstede measures may be out-dated. Two other plausible explanations should also be considered. First, the choice of a limited number of Hofstede dimensions, if deemed warranted, should be taken with care, where MAS may have also been an appropriate dimension to include in such an exploratory study. Second, previous research has shown that sample sizes have to be large to capture the effects of culture on preferences and judgments, given that culture is but only one of many social-economic forces influencing today's consumers.

In summary, although the tourism literature is reasonably well informed that national culture would make a difference in explaining visitor satisfaction and tourists' service evaluations (cf. Crofts & Erdmann, 2000; Kozak, 2001), more often, such investigations have taken an indirect measure of national culture by comparing visitor satisfaction between nationalities (e.g., Crofts & Pizam, 2003; Kozak, 2001). While these studies have provided a certain level of understanding regarding the differences between nationalities, the direct link between cultural values and visitor satisfaction remains largely ‘implied,’ rather than ‘directly tested and proved.’ The current study addresses this knowledge gap by employing a multi-sample multi-setting design and measured national cultures directly by assigning the values of the six cultural dimensions of Hofstede's model onto individual respondents in large national samples in its effort to examine the relationship between national culture and visitor satisfaction. The direct relations between the six Hofstede's cultural dimensions and visitor satisfaction, attested in this study, are hoped to provide conclusive empirical evidence clarifying the general understanding of national culture's influences on tourist behavior.

Some have argued that not all of the six cultural dimensions of Hofstede will be evoked in a post evaluative visitor experience indicating a priori need to identify a subset of cultural dimensions to include (Crofts & Pizam, 2003; Money & Crofts, 2003). It is also true that it would be an easier case to relate PDI with satisfaction reviewing Hofstede's (2005) descriptions of each dimension. Hofstede (2001) himself pointed out the clarity and simplicity yielded by plotting scores for each cultural dimensions against a dependent measure of interest. Adding more than one cultural dimensions into such analysis yield results that are difficult to imagine (and interpret) as they are points in space. However, including all the dimensions capture the essence of cultural bias that have the potential of forming the basis of creating insightful typologies of visitor behavior. We contend the strength of this study's analysis is its inclusion of all dimensions as unique measures of cultural dissimilarities that collectively form the basis of collective human basis both consciously and unconsciously. Moreover, the repeated measures employed in this multi sample study that tests the strength and reliability of the cultural dimensions with satisfaction is a strength as well.

#### 2.4. Cultural distance as a determinant of visitor satisfaction

Cultural distance, a concept derived from national culture, is also included in the study. Cultural distance measures the gap between the visitor's country of residence and host country and has provided additional insights demanding a more comprehensive framework for understanding the link between culture and satisfaction. Crofts and McKercher (2006), for example, found that first-time visitors to Hong Kong, who were from countries high in cultural distance from their host destination and availed themselves in fully pre-packaged tours, were more satisfied with their overall visit than those that did not take pre-packaged tours. On the other hand, repeat visitors from low cultural distance countries reported on average higher overall satisfaction if they explored Hong Kong as more free-and-independent travellers. Although this study offered good insights on the relationship between cultural distance and visitor satisfaction, the mix of cultural distance with travel modes (package vs. free-and-independent) and visitor types (first-timers vs. repeat) compromised a clear picture regarding the relationship between cultural distance and satisfaction. Similarly, Ahn and McKercher (2015) examined the relationship between cultural distance and trip satisfaction using aggregated data from Hong Kong Tourism Board's *Visitor Profile Report*. Results offered limited evidence: a significant inverse relationship was found between cultural distance and satisfaction with the attitude of shop assistants among short-haul visitors. Given the aggregated percentage nature of the data used in the study, the limitation in disclosing a true relation among the study population is evident. In the context of alpine tourism, Weiermair and Fuchs (2000) examined the impact of cultural distance on perceived service quality gaps. Results, however, did not support the hypothesis that there is a negative correlation between cultural distance and final quality judgment.

Despite several attempts to investigate the impact of cultural distance on visitor satisfaction, the findings so far appear to be inconclusive at best. This should be partly attributed to the equally loose conceptual and operational design in these studies. It seems one critical issue has been overlooked in these studies. That is, the calculation of cultural distance scores inevitably positions cultural distance as a relative concept, which largely depends on what the host destination is. To different host destinations, the same source market country would score different values of cultural distance. By logic reasoning, the relative measurement nature in calculating cultural distance scores through comparing a tourist source market country's culture to the destination country's culture would disguise the findings regarding the impact of cultural distance on visitor satisfaction if the contextual setting of which destination's national culture being taken as the benchmark is not adequately considered. Based on our conceptualisation, if there exists a direct relationship between national culture and visitor satisfaction, cultural distance between a visitor's home country and the destination country would be a derived construct from this direct relationship and impact of cultural distance on visitor satisfaction would be better explained by the direct link between national culture itself and visitor satisfaction. In the current study, we put this argument into test and take this additional test as a validation measure of our central thesis around the relationship between national culture and visitor satisfaction.

### 3. Methods

In this study, we focussed on testing the relationship between Hofstede's six cultural dimensions and visitor satisfaction. We used two national level large tourist datasets, which contain individual-level visitor satisfaction measures and created the six cultural dimensions scores for each respondent based on their country of residence. The first is Tourism Research Australia's 2017 International Visitor Survey dataset. The data contains responses to a survey administered at airport departure lounges completed by 39,959 respondents. For the current

study, we selected 15,997 of these respondents who stated their primary reason to visit Australia, as shown in their incoming passenger card, was a holiday. After some data purification, a total of 14,892 international holiday-making tourists were included in our analysis. We then computed the six cultural dimension scores of each case according to the country of residence of the respondents following the method of Pantouvakis (2013), Reisinger and Crofts (2009), Magnini, Kara, Crofts, and Zehrer (2012). The alternative approach of analysing differences between 28 countries would have yielded unwieldy output tables fraught with Type I statistical errors, as opposed to intervals data for each nationality spread across the six Hofstede dimensions. The underlying assumptions with the chosen approach are that: 1) Hofstede's scores of each nation's population accurately reflects the sub-population of a country's citizens who have the means and interest to take holidays internationally; and, 2) between country differences should be greater than within group differences on the dimensions. In the Australia holiday visitor sample, out of the 14,892 cases used in the database, valid sample sizes for running the pairwise correlations between the six cultural dimensions and three satisfaction ranged from 7288 to 7544.

Hofstede's published country scores of cultural dimensions from the website (Hofstede Insights, n.d.) were retrieved and computed into the database. Only those respondents from the 28 countries that could be assigned Hofstede's cultural dimension scores were retained for the analysis. To test the relationships between cultural dimensions and visitor satisfaction, we used bivariate Pearson correlation with an option of bootstrapping in SPSS. Pearson correlation was chosen because the measurements of the pairwise variables can be regarded as continuous. Further data check revealed that the data did not violate univariate normality (skewness values ranging from  $-0.969$  to  $0.558$ ; kurtosis values ranging from  $-1.671$  to  $1.654$ ) and no outliers were identified. The bootstrap samples were set at 500, and a 95% confidence interval was reported. The six cultural dimensions (i.e., PDI, IDV, MAS, UAI, LTO, and IND) were paired with three satisfaction measures (i.e., overall trip satisfaction (O-SAT), satisfaction with the arrival airport experience (A-SAT), and satisfaction with immigration on departure (I-SAT)) and a correlation matrix was generated with the results.

The International Visitor Survey data were collected through interviews in the major Australian cities. Given each port of entry serves slightly different international markets, we divided the whole national sample into sub-samples based on the locations of the interview. This step, in turn, provides a more robust test of the reliability of the relationships being examined. We thus created sub-samples for those who were interviewed in Sydney ( $n = 6175$ ), Melbourne ( $n = 3109$ ), Brisbane ( $n = 1968$ ), Perth ( $n = 1687$ ) and ran the correlation analyses with these subsamples. We report this part of the work as Study 1.

The second dataset is the Hong Kong Tourist Satisfaction Index Project data which collected satisfaction data from international tourists before leaving Hong Kong at airport departure lounges and the like (Hong Kong Tourism Satisfaction Index, 2016; Song, van der Veen, Li, & Chen, 2012). We used the latest dataset in 2016 which contains 2626 usable survey cases. We conducted similar data purification as in Study 1. First, we checked the respondents' self-reported country of residence and merged those different expressions of the same country into one country name (e.g., merging England, Scotland into the United Kingdom; merging Holland and Netherlands into the Netherlands). Second, we checked the country list against Hofstede's published countries with cultural dimensions scores (Hofstede Insights, n.d.) and created the six cultural dimensions variables in the database for those respondents coming from countries with Hofstede's cultural dimensions scores. In cases where some countries have missing cultural dimensions scores (e.g., Israel has a missing score in IND; Fiji has missing scores in LTO and IND), we retained these cases with missing values in the specific cultural dimensions variables. Later bivariate correlation analysis applied a pairwise exclusion approach in calculating the correlations so that the missing values would not affect the accuracy of the

**Table 1**  
Descriptive Statistics of key variables in Study 1.

| Variable           | N         | Minimum   | Maximum   | Mean      | Std. Deviation | Skewness  | Kurtosis   |           |            |
|--------------------|-----------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
|                    | Statistic | Statistic | Statistic | Statistic | Statistic      | Statistic | Std. Error | Statistic | Std. Error |
| PDI                | 14892     | 13.00     | 100.00    | 54.787    | 22.342         | .330      | .020       | -.944     | .040       |
| IDV                | 14892     | 14.00     | 91.00     | 53.768    | 28.638         | -.061     | .020       | -1.664    | .040       |
| MAS                | 14892     | 5.00      | 95.00     | 59.455    | 17.142         | -.231     | .020       | 1.503     | .040       |
| UAI                | 14892     | 8.00      | 92.00     | 50.383    | 23.094         | .432      | .020       | -.687     | .040       |
| LTO                | 14892     | 24.00     | 100.00    | 61.444    | 24.070         | -.050     | .020       | -1.418    | .040       |
| IND                | 14877     | 17.00     | 78.00     | 49.959    | 18.048         | -.133     | .020       | -1.341    | .040       |
| O-SAT              | 7544      | 1         | 5         | 4.50      | .587           | -.929     | .028       | 1.258     | .056       |
| A-SAT              | 7299      | 1         | 5         | 4.18      | .745           | -.809     | .029       | 1.040     | .057       |
| I-SAT              | 7372      | 1         | 5         | 4.26      | .723           | -.969     | .029       | 1.654     | .057       |
| Valid N (listwise) | 7272      |           |           |           |                |           |            |           |            |

Note: PDI= Power Distance Index; IDV= Individualism vs. Collectivism; MAS = Masculinity vs. Femininity; UAI=Uncertainty Avoidance Index; LTO = Long Term Orientation vs. Short-Term Normative Orientation; IND=Indulgence vs. Restraint; O-SAT= Overall Trip Satisfaction; A-SAT= Satisfaction with Arrival Airport; I-SAT= Satisfaction with Passport Control (Immigration).

findings. Similarly, we chose two measures of visitor satisfaction, overall trip satisfaction and satisfaction with immigration services, and subsequently ran pair-wise correlations between them and the six cultural dimensions variables. A total of 61 countries/regions with available Hofstede's cultural dimensions scores were identified in this dataset. The increased variability derived from these 61 country scores provided an even more rigorous test of the relationship between national culture measures and visitor satisfaction when compared to study 1's results. Due to missing values in some countries' cultural dimensions scores and pairwise exclusion of missing values in running the bivariate correlation, the valid sample size in the correlation analysis ranged from 2420 to 2456.“

Although the Hong Kong Tourism Satisfaction Index Project designated multiple items for measuring both overall trip satisfaction and satisfaction with immigration services, to enable meaningful comparison of findings with that in Study 1, we chose the more direct and straightforward measurement items from the multiple items and only used a single item to measure overall trip satisfaction and another single item measuring satisfaction with immigration. To run the correlation analysis, we adopted the same bootstrapping approach setting the bootstrap samples as 500 and a 95% confidence interval. We chose Pearson correlation as the data can be mostly regarded as continuous in their values. Further check of the data showed no extreme violation of univariate normality (skewness values ranging from -1.132 to 0.782; kurtosis values ranging from -1.669 to 1.881) and no clear outliers were identified. Hence, study 1 and study 2 provide cross-context and cross-sample verification for the central questions under examination.

Furthermore, we ran a validation test by engaging the concept of cultural distance. Our reasoning is, if some cultural dimensions are correlated with visitor satisfaction, the relationship between cultural distance and visitor satisfaction may reflect the relationship between culture itself and visitor satisfaction to a certain degree if two research contexts with contrasting benchmarking cultures in calculating cultural distance can be compared. In Study 1, Australia as a historically Western culture country was taken as the benchmarking destination culture in calculating the culture distance between the tourist's original culture and the destination. In Study 2, Hong Kong as the destination was taken as the benchmarking culture to show the cultural distance between the source market and the destination. We argue that the cultural distance is a relative concept and when put in an application, the anchoring benchmarking culture in calculating the distance is therefore critical.

Following Kogut and Singh (1988), we used the following formula to calculate the cultural distance measures.

$$CD_j = \sum_{i=1}^n \{(I_{ij} - I_{ib})^2 / V_i\} / n$$

In the formula,  $CD_j$  is the cultural distance between the  $j$ th country/region and the benchmarking destination country/region.  $I_{ij}$  is the  $j$ th country's score in  $i$ th cultural dimension.  $I_{ib}$  is the index score of the  $i$ th cultural dimension of the benchmarking destination country/region.  $V_i$  is the variance of the  $i$ th cultural dimension's index values in the set of countries/regions compared.  $n$  is the number of cultural dimensions used to calculate the cultural distance.

Following this formula, we calculated three cultural distance measures using different combinations of the six cultural dimensions. These include 1) a two-dimension measure of cultural distance using PDI and UAI (CD2) as the most salient two dimensions that may demonstrate country-to-country cultural distance; 2) a four-dimension measure using PDI, IDV, MAS, and UAI (CD4), and, 3) a six-dimension measure using all the six dimensions (CD6). As cultural distance is a derived variable calculated with consideration of the difference of the cultural dimensions between two countries, using different combinations of the 6 dimensions in calculating the cultural distance score may avoid some measurement errors in this construct.

The three cultural distance measures were created in both databases of Study 1 and Study 2. Subsequently, pairwise bivariate correlation analysis was run between the three cultural distance measures and two satisfaction measures (overall satisfaction and satisfaction with immigration) in both studies. The results were expected to demonstrate some difference due to the two different cultures (Australia vs. Hong Kong) being taken as the benchmarking base for calculating the distance, which will further show the validity of the findings in Study 1 and Study 2.

## 4. Results

### 4.1. Study 1 results

We provide the descriptive statistics of the variables in Table 1. Table 2 shows the results of Study 1. As shown in Table 2, the correlations of each cultural dimension with the three satisfaction measures were largely consistent. However, except for MAS and UAI, the correlations of the other four cultural dimensions with overall satisfaction appeared to be stronger than those with satisfaction with arrival airport and satisfaction with immigration.

Overall, PDI is negatively correlated with overall trip satisfaction ( $r = -0.260, p < .01$ ), meaning that tourists from high power distance countries tend to be less satisfied with the trip to Australia. In addition, both MAS ( $r = -0.030, p < .05$ ) and LTO ( $r = -0.245, p < .01$ ), were negatively associated with overall trip satisfaction, indicating that tourists from countries with high MAS and LTO scores tend to be less satisfied with their trip to Australia. It should be noted that the correlation between MAS and O-SAT is weaker than that between LTO and

**Table 2**  
Correlation matrix: Satisfaction-cultural dimensions.

|                         | PDI                          | IDV                        | MAS                          | UAI                          | LTO                          | IND                        |
|-------------------------|------------------------------|----------------------------|------------------------------|------------------------------|------------------------------|----------------------------|
| <b>Whole Sample</b>     |                              |                            |                              |                              |                              |                            |
| O-SAT                   | <b>-.260**</b> (-.282;-.237) | <b>.315**</b> (.295; .339) | <b>-.030*</b> (-.052;-.008)  | <b>.01</b> (-.013; .032)     | <b>-.245**</b> (-.265;-.224) | <b>.287**</b> (.265; .308) |
| A-SAT                   | <b>-.083**</b> (-.106;-.062) | <b>.170**</b> (.145; .192) | <b>-.045**</b> (-.068;-.022) | <b>-.113**</b> (-.137;-.090) | <b>-.213**</b> (-.240;-.189) | <b>.170**</b> (.148; .191) |
| I-SAT                   | <b>-.068**</b> (-.092;-.045) | <b>.133**</b> (.110; .156) | <b>-.029*</b> (-.053;-.004)  | <b>-.074**</b> (-.100;-.050) | <b>-.172**</b> (-.196;-.149) | <b>.127**</b> (.107; .148) |
| <b>Sydney Sample</b>    |                              |                            |                              |                              |                              |                            |
| O-SAT                   | <b>-.272**</b> (-.308;-.236) | <b>.340**</b> (.311; .377) | <b>-.003</b> (-.036; .031)   | <b>-.066**</b> (-.106;-.031) | <b>-.281**</b> (-.315;-.246) | <b>.305**</b> (.272; .339) |
| A-SAT                   | <b>-.130**</b> (-.163;-.099) | <b>.260**</b> (.226; .297) | <b>-.014</b> (-.048; .025)   | <b>-.167**</b> (-.199;-.128) | <b>-.282**</b> (-.315;-.248) | <b>.239**</b> (.208; .270) |
| I-SAT                   | <b>-.111**</b> (-.140;-.078) | <b>.206**</b> (.169; .243) | <b>-.016</b> (-.051; .017)   | <b>-.140**</b> (-.178;-.104) | <b>-.238**</b> (-.271;-.202) | <b>.195**</b> (.167; .229) |
| <b>Melbourne Sample</b> |                              |                            |                              |                              |                              |                            |
| O-SAT                   | <b>-.333**</b> (-.379;-.285) | <b>.368**</b> (.323; .410) | <b>-.069**</b> (-.117;-.021) | <b>.176**</b> (.123; .230)   | <b>-.244**</b> (-.288;-.196) | <b>.333**</b> (.292; .378) |
| A-SAT                   | <b>-.078**</b> (-.127;-.028) | <b>.091**</b> (.044; .140) | <b>.005</b> (-.045; .055)    | <b>.025</b> (-.030; .082)    | <b>-.096**</b> (-.147;-.040) | <b>.075**</b> (.026; .127) |
| I-SAT                   | <b>-.031</b> (-.076; .018)   | <b>.032</b> (-.016; .086)  | <b>-.011</b> (-.055; .036)   | <b>.043</b> (-.006; .094)    | <b>-.055*</b> (-.105;-.003)  | <b>.024</b> (-.026; .072)  |
| <b>Brisbane Sample</b>  |                              |                            |                              |                              |                              |                            |
| O-SAT                   | <b>-.330**</b> (-.386;-.274) | <b>.353**</b> (.290; .416) | <b>-.049</b> (-.110; .015)   | <b>.055</b> (-.003; .121)    | <b>-.309**</b> (-.379;-.241) | <b>.302**</b> (.240; .366) |
| A-SAT                   | <b>-.151**</b> (-.215;-.092) | <b>.156**</b> (.091; .220) | <b>-.007</b> (-.075; .057)   | <b>.008</b> (-.055; .072)    | <b>-.158**</b> (-.224;-.091) | <b>.165**</b> (.102; .242) |
| I-SAT                   | <b>-.175**</b> (-.239;-.109) | <b>.212**</b> (.150; .271) | <b>-.020</b> (-.091; .058)   | <b>.043</b> (-.021; .113)    | <b>-.166**</b> (-.230;-.102) | <b>.190**</b> (.117; .254) |
| <b>Perth Sample</b>     |                              |                            |                              |                              |                              |                            |
| O-SAT                   | <b>-.151**</b> (-.216;-.090) | <b>.163**</b> (.100; .229) | <b>.037</b> (-.039; .111)    | <b>.027</b> (-.042; .099)    | <b>-.044</b> (-.108; .017)   | <b>.101**</b> (.033; .158) |
| A-SAT                   | <b>.014</b> (-.061; .079)    | <b>.030</b> (-.046; .099)  | <b>.103**</b> (.033; .169)   | <b>-.034</b> (-.097; .037)   | <b>-.091**</b> (-.154;-.021) | <b>.007</b> (-.055; .090)  |
| I-SAT                   | <b>-.008</b> (-.077; .053)   | <b>.052</b> (-.019; .118)  | <b>.145**</b> (.076; .216)   | <b>-.024</b> (-.097; .045)   | <b>-.087**</b> (-.153;-.016) | <b>-.023</b> (-.094; .044) |

\*significant at the 0.05 level; \*\*significant at the 0.01 level.

Values in the bracket show the lower and upper values of 95% confidence interval based on 500 bootstrap samples.

Note: PDI=Power Distance Index; IDV= Individualism vs. Collectivism; MAS = Masculinity vs. Femininity; UAI=Uncertainty Avoidance Index; LTO = Long Term Orientation vs. Short-Term Normative Orientation; IND=Indulgence vs. Restraint; O-SAT=Overall Trip Satisfaction; A-SAT=Satisfaction with Arrival Airport; I-SAT=Satisfaction with Passport Control (Immigration).

#### O-SAT.

On the other hand, IDV and IND were found to have a positive correlation with overall trip satisfaction ( $r = .315$ ,  $p < .01$  and  $r = 0.287$ ,  $p < .01$  respectively), indicating that visitors from individualist culture countries and those from countries with high indulgence scores tend to be more satisfied with their trips to Australia. While UAI was not found to be correlated with overall trip satisfaction, it was found to be negatively related to satisfaction with arrival airport and satisfaction with immigration upon departure.

We further ran the analyses on the 4 subsamples based on 4 major cities: Sydney, Melbourne, Brisbane and Perth. As shown in Table 2, the results with the sub-samples are largely consistent with that of the whole sample. Those bifurcating results were marked with bold type in these tables, and there are only one of such values with the Melbourne sample and two with the Perth sample.

To further test the collective explanation power of the 6 national cultural dimensions on visitor satisfaction, we ran regression analysis putting the 6 national cultural dimensions as predictors to overall trip satisfaction. Furthermore, we put another block of control variables including previous visits to Australia, total nights of stay in the current trip, gender, and age group in the regression model. Income would be a meaningful social demographic variable to be put in the model as a control variable; however, as the dataset involves multiple country respondents and respondents in different countries were asked with the income question in different currencies, we found income would not be a suitable predictor to be put in the model. The regression results showed that IDV ( $\beta = .209$ ,  $p < .001$ ) and IND ( $\beta = 0.059$ ,  $p = .009$ ) had significant positive effects on overall trip satisfaction, while LTO ( $\beta = -0.061$ ,  $p = .003$ ) had a significant negative effect on overall trip satisfaction. The effects of UAI ( $\beta = 0.021$ ,  $p = .104$ ), PDI ( $\beta = -0.026$ ,  $p = .229$ ), and MAS ( $\beta = -0.020$ ,  $p = .095$ ) on overall trip satisfaction were not significant at 0.05 level. The adjusted R square of the regression model with the 6 cultural dimensions as predictors was .104, showing that collectively the 6 cultural dimensions representing a “Gestalt” type of national culture influence, explained about 10% of the variance of overall trip satisfaction. Adding the block of control variables, the results showed that only age group ( $\beta = -.071$ ,  $p < .001$ ) was a significant predictor and negatively associated with overall trip

satisfaction; previous visits ( $\beta = 0.011$ ,  $p = .340$ ), total nights of stay ( $\beta = -0.011$ ,  $p = .327$ ), and gender ( $\beta = 0.007$ ,  $p = .505$ ) did not seem to be related to overall trip satisfaction. The variance inflation factor (VIF) scores of IDV and IND were 5.963 and 4.212 in the 6 cultural dimension one block model, indicating some collinearity issues among the six dimensions, especially between IDV and IND. The VIF scores of all other 4 dimensions were below 4.

#### 4.2. Study 2 results

With the Hong Kong Tourist Satisfaction Index Project data, we identified highly consistent findings regarding the relationship between national culture and visitor satisfaction. We provided the descriptive statistics of the key variables in Table 3 and the results in Table 4. As shown in Table 4, four of the 6 cultural dimensions, namely PDI, IDV, LTO, and IND demonstrated significant correlations with overall trip satisfaction and the correlation coefficients were very close to those identified in the Australia sample in their values (PDI: Hong Kong  $-.167**$  vs. Australia  $-0.260**$ ; IDV: Hong Kong  $0.263**$  vs.  $0.315**$ ; LTO: Hong Kong  $-0.258**$  vs. Australia  $-0.245**$ ; IND: Hong Kong  $0.230**$  vs. Australia  $0.287**$ ). In addition, both MAS and UAI demonstrated very weak or insignificant correlations with overall satisfaction across both samples (MAS: Hong Kong  $0.006$  ns vs. Australia  $-0.030*$ ; UAI: Hong Kong  $-0.098**$  vs. Australia  $0.01$ ns). With regards to the correlations between satisfaction with immigration service and the six cultural dimensions, the cross-sample examination showed that findings were consistent in five out of the six cultural dimensions. Only on MAS were bifurcating findings found (Hong Kong  $0.045*$  vs. Australia  $-0.029*$ )

Once again, to test the collective explanation power of the 6 cultural dimensions on overall trip satisfaction, we run similar regression tests to Study 1. The regression model only taking the 6 cultural dimensions as predictors of overall trip satisfaction explained 8.5% (adjusted R square = 0.085) of the total variance of overall trip satisfaction. However, only IDV ( $\beta = 0.273$ ,  $p < .001$ ) and MAS ( $\beta = -0.078$ ,  $p = .001$ ) turned to be significant predictors. Adding the control variable block (including gender, age, education, prior visit times, monthly household income, and travel mode) did not add much to the

**Table 3**  
Descriptive Statistics of key variables in Study 2.

| Variable           | N         | Minimum   | Maximum   | Mean      | Std. Deviation | Skewness  | Kurtosis   |           |            |
|--------------------|-----------|-----------|-----------|-----------|----------------|-----------|------------|-----------|------------|
|                    | Statistic | Statistic | Statistic | Statistic | Statistic      | Statistic | Std. Error | Statistic | Std. Error |
| PDI                | 2486      | 11.00     | 100.00    | 57.266    | 20.019         | .196      | .049       | -.908     | .098       |
| IDV                | 2486      | 6.00      | 91.00     | 48.408    | 30.853         | .319      | .049       | -1.654    | .098       |
| MAS                | 2486      | 5.00      | 95.00     | 56.759    | 14.284         | .099      | .049       | 1.881     | .098       |
| UAI                | 2486      | 8.00      | 100.00    | 54.029    | 20.591         | .380      | .049       | -.794     | .098       |
| LTO                | 2468      | 7.00      | 100.00    | 61.667    | 29.609         | -.121     | .049       | -1.669    | .099       |
| IND                | 2459      | .00       | 99.00     | 48.399    | 18.380         | -.001     | .049       | -1.323    | .099       |
| O-SAT              | 2593      | 0         | 10        | 7.68      | 1.662          | -.837     | .048       | 1.061     | .096       |
| I-SAT              | 2585      | 0         | 10        | 7.93      | 1.882          | -1.132    | .048       | 1.428     | .096       |
| Valid N (listwise) | 2392      |           |           |           |                |           |            |           |            |

Note: PDI=Power Distance Index; IDV= Individualism vs. Collectivism; MAS = Masculinity vs. Femininity; UAI=Uncertainty Avoidance Index; LTO = Long Term Orientation vs. Short-Term Normative Orientation; IND=Indulgence vs. Restraint; O-SAT=Overall Trip Satisfaction; I-SAT=Satisfaction with Passport Control (Immigration).

explanation power (adjusted R square = 0.087). Once again, high VIF scores were found with IDV (8.417), PDI (5.027), LTO (5.023) and IND (4.087), indicating multicollinearity among the cultural dimensions as predictors.

Overall, the cross-sample test of the relationship between national culture and visitor satisfaction generated highly consistent findings between the two samples, which show that the findings withstood the change of the destination context and thus were robust.

4.3. Further validation with cultural distance

We further ran a validation test on the findings of the Study 1 and Study 2 by engaging the concept of cultural distance. The method section elaborated on the calculations of different cultural distance scores considering different combinations of cultural dimensions. In our investigation, Hong Kong and Australia represent two cultures ideally demonstrating the East-West divide in national cultures. As shown in Table 5, in four of the six cultural dimensions, namely PDI, IDV, LTO, and IND, Hong Kong and Australia scores were sharply different in cultural distance. While Hong Kong represents a culture which is with high power distance, less individualistic, long-term oriented and less indulgent, Australia is scored as a culture as low power distance, highly individualistic, short-term oriented, and more indulgent. Therefore, taking Hong Kong and Australia as the benchmarking culture respectively to calculate the cultural distance scores, similar cultural distance values in the two samples would mean roughly opposite positions of the respondent's home culture. Based on the above findings regarding the correlations between culture and visitor satisfaction, we would expect between the two samples, the correlations between visitor satisfaction and cultural distances should demonstrate some contrasting differences.

Table 6 lists the correlations between the two measures of satisfaction and the three measures of cultural difference. As shown in Table 6, the results in relation to two measures of the culture distance, i.e., those measured by engaging four dimensions and six dimensions respectively, exhibit clear contrast between the two samples. While the results with the Hong Kong sample show positive correlation coefficients, the results with the Australia sample show negative correlation

**Table 4**  
Correlation matrix: Satisfaction-cultural dimensions –whole Hong Kong sample.

|       | PDI                   | IDV                 | MAS                | UAI                   | LTO                    | IND                 |
|-------|-----------------------|---------------------|--------------------|-----------------------|------------------------|---------------------|
| O-SAT | -.167** (-.205;-.133) | .263** (.226; .298) | .006 (-.033; .048) | -.098** (-.140;-.058) | -.259** (-.299;-.224)  | .230** (.193; .265) |
| I-SAT | -.104** (-.139;-.065) | .177** (.141; .214) | .045* (.002; .093) | -.129** (-.175;-.080) | -.192** (-.232; -.148) | .165** (.125; .202) |

\*significant at the 0.05 level; \*\*significant at the 0.01 level.

Note: Values in the bracket show the lower and upper values of 95% confidence interval based on 500 bootstrap samples. PDI=Power Distance Index; IDV= Individualism vs. Collectivism; MAS = Masculinity vs. Femininity; UAI=Uncertainty Avoidance Index; LTO = Long Term Orientation vs. Short-Term Normative Orientation; IND=Indulgence vs. Restraint; O-SAT=Overall Trip Satisfaction; I-SAT=Satisfaction with Passport Control (Immigration).

**Table 5**  
Comparison of cultural dimension scores between Hong Kong and Australia.

| Country/region             | PDI       | IDV       | MAS      | UAI       | LTO       | IND       |
|----------------------------|-----------|-----------|----------|-----------|-----------|-----------|
| Hong Kong                  | 68        | 25        | 57       | 29        | 61        | 17        |
| Australia                  | 36        | 90        | 61       | 51        | 21        | 71        |
| <b>Absolute Difference</b> | <b>32</b> | <b>65</b> | <b>4</b> | <b>22</b> | <b>40</b> | <b>54</b> |

coefficients instead. The results were not contrasting between the samples in regards to the cultural distance scores constructed with two cultural dimensions. It is argued that cultural distance scores calculated by four or six dimensions are more accurate than that created by two dimensions. We can confidently claim that the validation results effectively supported the validity of the findings in Study 1 and Study 2.

5. Conclusions and discussion

Before summarizing this study's findings, it is important to discuss its limitations. First, this research is limited by the use of secondary datasets. The Tourism Research Australia's International Visitor Survey Questionnaire only includes single items in measuring different aspects of visitor satisfaction (e.g., overall satisfaction with the destination, satisfaction with immigration service). As single item measurement cannot effectively identify and eliminate the measurement errors, the measurement of satisfaction in this research can be improved to be more accurate. Future research should consider multi-item measurements, such as that used in Song et al. (2012) and Huang, Hsu, and Chan (2010) to enable more reliable analysis of visitor satisfaction.

Second, the cultural values of respondents, and the cultural distance between responding international visitor with their host culture, could only be assessed by assigning scores for each of the Hofstede six dimensions based on each subject's country of residence. Hence, the cultural values assigned to each subject may not always be an accurate measure of the individual's personal values. We would posit that future research that includes direct measures of an individual's culturally derived values would seemingly yield more robust results linking

**Table 6**  
Correlations between satisfaction and cultural distance (Hong Kong sample vs. Australia sample).

| Sample    |       | CD2                                | CD4                                | CD6                                |
|-----------|-------|------------------------------------|------------------------------------|------------------------------------|
| Hong Kong | O-SAT | -.063** (-.107; -.020)<br>N = 2456 | .134** (.096; .175)<br>N = 2456    | .172** (.132; .212)<br>N = 2456    |
| Australia | O-SAT | -.236**(-.257; -.217)<br>N = 7544  | -.286** (-.307; -.264)<br>N = 7544 | -.320** (-.340; -.298)<br>N = 7544 |
| Hong Kong | I-SAT | -.116** (-.151; -.077)<br>N = 2446 | .030 (-.009; .068)<br>N = 2446     | .077** (.034; .117)<br>N = 2420    |
| Australia | I-SAT | -.091** (-.116; -.069)<br>N = 7372 | -.128** (-.149; -.106)<br>N = 7372 | -.165** (-.189; -.141)<br>N = 7372 |

\*significant at the 0.05 level; \*\*significant at the 0.01 level.

Note: O-SAT = Overall Trip Satisfaction; I-SAT = Satisfaction with Passport Control (Immigration); CD2 = cultural distance score calculated using PDI and UAI; CD4 = cultural distance score calculated using PDI, IDV, MAS, and UAI; CD6 = cultural distance score calculated using all 6 cultural dimensions.

Values in the bracket show the lower and upper values of 95% confidence interval based on 500 bootstrap samples.

individual norms and values with evaluative judgements. However, the consistent evidence revealed in this study that these cultural values shared across a society represent central tendencies of collective norms and values that in turn influence visitors' expectations and judgements. Thus, behavior (e.g., human judgement) is in part culture-bound explaining why visitors from different cultural backgrounds often evaluate the same experience differently based upon their unique culture-specific perspectives.

Third, the use of Hofstede's (1985, 2005) cultural values dimensions as measures of a nation's culture values is not without its critiques. Though it is commonly used for such purposes, the dimensions were derived from a single employer (e.g., IBM's 117,000 employers from 40 nations) for purposes understand and bridge national cultural gaps in the workplace. Moreover, the dimensions may arguably have become dated given the original four dimensions were developed in the early 1970's. Hofstede (2005) himself concluded that even though cultural values are slow to change, they do change meaning that few developed countries today little resemble what they were like 50 years ago. Though Hofstede and associates periodically update their scores from broader samples, the last comprehensive revision was in 2010. Researchers considering extending this line of research may wish to consider alternative data sources such as the World Values Survey ([www.worldvaluessurvey.org](http://www.worldvaluessurvey.org)).

In this paper, we demonstrated the relationships between Hofstede's six cultural dimensions and visitor satisfaction by a series of rigorous tests using two large samples across two destination contexts. Our results consistently show that 5 out of the 6 Hofstede cultural dimensions, namely, Power Distance (PDI), Individualism (IDV), Long-Term Orientation (LTO), indulgence (IND), and to a certain degree Uncertainty Avoidance (UA) have significant correlations with visitor satisfaction measures. The relationships are especially pronounced when visitor satisfaction is measured at the overall destination experience level, compared to the less robust results measuring satisfaction with immigration service and, satisfaction with the arrival airport. No doubt length of flight and travel fatigue contributed to the variance associated with satisfaction measures of airport and immigration services.

Our findings offer significant theoretical insights in understanding the cultural influences on consumer behavior in the tourism context and beyond. As noted in the literature review, tourism studies showing the influences of national culture on tourist behaviors have mostly taken an indirect measurement approach taking nationality as a proxy variable of national culture (Crofts & Pizam, 2003; Kozak, 2001; Pizam & Sussmann, 1995; Reisinger & Turner, 1997). While these studies have no doubt advanced our understanding of national culture's influences on tourist behaviors, how exactly national culture in its different value dimensions affects tourist behaviors remain unclear.

Our study found that Power Distance and Long-Term Orientation are negatively correlated to visitor satisfaction. Uncertainty Avoidance

too are negatively correlated in the Hong Kong sample and two of the four subsamples in Australia (e.g., Sydney, Melbourne). On the other hand, Individualism and Indulgence are positively correlated to visitor satisfaction across both samples. According to Hofstede (2000), power distance involves how societies respond to inequality that can be based upon power, wealth, and social status. In both samples, the relationship was negatively correlated meaning visitors from high power distance countries tend to be less satisfied with airport immigration where authoritative power of customs officials is implied and likely trumps power discrepancies in wealth and status. The relationship between power distance and satisfaction with the airport experience and overall trip satisfaction was found to be negatively correlated with power distance across both samples. These findings suggest that visitors from countries who are from countries where social class inequalities between those being serve and those whose roles are to serve are expected and functional (high PDI) tend to be more critical of their experiences at the airport and during their trip. Similar findings were yielded comparing subject's cultural distance scores regarding power distance suggesting that satisfaction is in part based upon the national culture of the visitors as well as the host countries relative distance from that norm or value.

The positive relationship between both Individualism and Uncertainty Avoidance on satisfaction can seemingly be explained by Hofstede (2001) as both indexes correlate with one another. Individualism, as opposed to collectivism, describes the norms influencing the relationship between the individual and the collective society that prevails across all national cultures. As an analogy, Hofstede (2001, p. 209) stated:

“Some animals, such as wolves are gregarious; others, such as tigers, are solitary. The human species should no doubt be classified with the gregarious animals, but different human societies show gregariousness to different degrees.”

Thus, visitors from more socially extroverted societies should be more receptive to the societal contrasts and uncertainties inherent in international travel. Regarding the less consistent and robust relationship between Uncertainty Avoidance scores and satisfaction in these datasets, suggests that the two measures provides insights as to the relative tendencies of international visitors to respond to and find satisfaction across similar service encounters in cultures different from their own. In the tourism literature, especially in the context of Hong Kong as a tourist destination, studies have consistently show that Western visitors (high IDV and UAI) tend to be more satisfied than their Asian counterparts with the same service or destination offerings in Hong Kong (cf. [Hong Kong Tourism Satisfaction Index, 2016](#); [Wong & Law, 2003](#)).

The relationships between Long-Term Orientation and Indulgence on satisfaction are more difficulty to explain in such a post hoc fashion given their relative newness and the limited research they have



garnered. With this said, we offer two Gestalt or holistic approaches as alternative ways of explaining how an individual's satisfaction may be based upon multiple, as opposed to single, cultural values (e.g., dimension) underlying societally derived preferences and expectations. One such perceptive suggests that individuals will view experiences like an international vacation or service encounter holistically and take into account multiple aspects of their culturally bound values and preferences in their evaluations of their satisfaction (Bitner, 1992; Lin, 2004). In other words, the holiday experience is a complex series of experiences or moments of truth that occur over a wide range of time providing ample opportunity of many preformed preferences and expectations to be met or challenged. Therefore, a true evaluation of individual's overall satisfaction may often be based upon values and norms that individually, or in combination with others, may not necessarily appear logical to researchers as outside observers.

Arguably, a more plausible proposition is that culturally bound preferences and expectations are based upon each society's collective norms and values that combined form the basis of judgements. As previously discussed, individuals are born with and develop innate preference to like others with similar values and characteristics, and dislike others who are dissimilar. The societal values known, and yet to be discovered, holistically form the basis of the judgements of what is desirable and undesirable. Such innate judgements occur instinctually, often unconsciously, requiring little information processing (Shirayev et al., 2010, Lindholm 2008) and as such provide dimensionality to the collective ways of thinking, feeling and reacting unique to each distinct society. Though each individual's mental programming is unique, much is shared with others making human behavior somewhat predictable (Hofstede, 2001). Some collective behavior is universal, while others are shared within the collective group which in the focus of this study is national culture.

Regardless of the alternative ways in which to interpret the results, this study puts forth tentative evidence that East-West cultural differences explain in part satisfaction evaluations. Though the East-West cultural divide was not specifically tested in this study, Eastern countries tend to have high scores on PDI and LTO, which are confirmed in our study to be negatively related to visitor satisfaction. Conversely, Western nations generally score high IDV and IND, which were found to be positively associated to visitor satisfaction.

The importance of visitor satisfaction in leveraging a tourist destination's economy cannot be underestimated. Judging from correlation coefficients between national cultural dimensions and visitor satisfaction identified in the current study, we can conclude with a certain level of confidence that national culture may explain 8%–10% of the total variances of the overall visitor satisfaction with an international tourist destination. Though the explanatory power of national culture on visitor satisfaction in the international travel context is arguably small, the results are highly consistent and statistically significant, indicating that cultural values are one of the many socioeconomic variables that explain consumer behavior.

Obviously, more insights can be generated from these datasets in a post hoc fashion that can single out the interaction between the various cultural dimensions among themselves and including other socio-economic factors in explaining visitor satisfaction. In addition, the interaction of these cultural dimensions on tourism metrics of importance (e.g., visitor satisfaction, repeat visit intent, positive word of mouth) could potentially form the basis of unique typologies of international visitors that are easier for tourism managers to grasp. The popularity of Cohen (1979) and Plog (2001) typologies of tourist behaviors underscore the clarity such typologies aid tourism practitioners that one size fits all does not work in attracting and serving heterogeneous markets.

It is also our hope that through this study we have advanced the concept of cultural distance in validating our findings. Our empirical tests verify that cultural distance is a derived construct determined in part by host culture itself in its relationship with visitor satisfaction. The relationship between cultural distance and visitor satisfaction may

be misinterpreted by generalizing from cross-sectional studies if the host destination culture as the benchmark is not considered. Therefore, we caution that the relationship between cultural distance and visitor satisfaction should be interpreted with care considering the destination context, as the host destination's values would be a moderator to such a relationship. The relationship between cultural distance and visitor satisfaction is ultimately determined by the relationship between national cultural dimensions and visitor satisfaction.

#### CRediT authorship contribution statement

**Songshan (Sam) Huang:** Data curation, Formal analysis, Writing – original draft. **John Crofts:** Conceptualization, Writing – original draft, Writing – review & editing.

#### Acknowledgements:

The authors acknowledge the support from Tourism Research Australia (TRA) and the Hong Kong Tourist Satisfaction Index Project for allowing us to use their datasets to run the analyses in this study. Our special thanks go to Dr George Chen, Principal Analyst of Tourism Research Australia for providing the TRA data for use, and Prof Haiyan Song and Dr Robert van der Veen for providing the Hong Kong Tourist Satisfaction Index Project data for our analyses.

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