

# Does Culture Impact Choice of Pictures for Websites: An Analysis of Chinese Cultural Dimensions on Websites of Chinese Universities

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## Abstract

The Internet and global information technology have changed the way people advertise because of instant access to different cultures. Reflection of culture in web items have gained the attention of researchers and China, with more than 704 million Chinese speaking internet users and unique cultural norms, is needed to be studied comprehensively. This study tried to measure the cultural dimensions and compare the findings of cultural elements in pictures presented on the homepages of Chinese educational websites with Hofstede's cultural dimension scores. Content analysis of pictures from top 100 universities in China was done and the results indicated pictures of male teachers and students in group were more frequently selected for the homepages. More frequent pictures of teachers addressing seminars or meetings, posing for pictures and students busy in extracurricular activities showing cultural advertising appeals for Chinese students. The study result is correlated with individualism, masculinity, indulgence and pragmatism. However, a different fashion is seen for power distance and uncertainty avoidance. The finding might be interesting for advertisers having interest in Chinese educational market and cultural scholars. Findings suggest that institutions should adopt local values to effectively communicate with the local users, however, further research is needed especially regarding Chinese society.

**Keywords:** Cultural Communication, Hofstede's Cultural Dimensions, User-Centred Design, Higher Education Marketing, Advertising Appeals, Chinese Culture

## 1. Introduction

University websites are considered as an important tool to publicize the information and build their image by internet (Breitenbach & Van Doren, 1998), which has gained the status of innovative and developed communication channel (Peterson, Balasubramanian, & Bronnenberg, 1997). Choice of content for university website is gaining more importance in recent time because of globalization phenomenon and an increased use of internet among students as compared to common population (Jones, 2002). Presently, communication experts in universities are facing new challenges, as they have to deal with international students along with their local aspirants. The website contents needed to be according to suitability of local and international cultural groups. Hence, it becomes crucial to study how culture is presented on the websites of universities and impact of the cultural differences in relation to choice of these contents.

The Internet, first developed in 1968 by a group of scientists belonging to US Defence Advanced Research Projects Agency, was made to link different university and government computer centres in US to share various kinds of data (Cerf, 1992). Initially, limited to technical or scientific community, internet has become inexpensive, practical, and sophisticated tool for web based advertising to communicate across the world. By dealing with these technologies, people have extraordinary, almost supernatural tools to spread their messages. Now organizations and institutes may have the opportunities to interact with individuals globally and cast a cultural impact.

It is considered that websites are dynamic communication media for sharing and growth of culture (Alejandro, 2010), so display of cultural dimensions in the website content can impact usability and popularity of a website (Smith, Dunckley, French, Minocha, & Chang, 2004). This makes it imperative to conduct a comprehensive study dealing with the relationship of cultural dimensions and selection of web contents.

It is also considered that nowadays websites are focusing on pictures and highly visual in nature (Pauwels, 2005). In his famous book, "Confessions Of An Advertising Man", the father of advertising Ogilvy (1963) considered pictures more important than words, because pictures could capture attention of the readers, which is true for internet and new media technologies in recent times (Nysveen & Lexhagen, 2001). Pictures are considered as an important tool to portray the cultural aspects of a particular society (Luna, Peracchio, & de Juan, 2002), so research about presenting culture on websites has gained attention of researchers from different fields of

knowledge, esp. cultural communication and web design. However, a lesser amount of research has been done regarding culture presented through images, and majority of research in this domain deals with the developed and English speaking countries. Little work has been regarding how higher education institutes in China display cultural values of the society through websites. This less discussed part of visual communication requires attention of research scholars owing to universal appeal of pictures esp. on websites.

Hu, Thornton, and Li (2012) stated that people with access to higher education have increased 543 times that of 1949 (185,000) reaching nearly 98 m by 2009. The Economist cited China as the coming force in universities in one of his special report in March 2011 edition with the fact that number of higher-education institutions has more than doubled in the past decade, from 1,022 to 2,263. The magazine also stated that the number of students enrolled in degree courses has risen from 1m in 1997 to 5m in 2011 (Special report, 2011). Presently, Chinese Ministry of education (2014) showed that there were more than two thousand (2542) in 2014, having 2246 regular colleges and universities with 444 non-public ones, and 296 colleges and universities for adults with one non-public institute. People's Daily Online stated "China's higher education institutions of various forms had about 31 million students in 2010, an increase of 35 percent compared to 2005" (People's Daily Online, 2011). The number of students at regular higher education institutes are described as 21m, plus 11.80m in other forms of college programs. China (31 million) has surpassed the United States (18 million) to rank first in the world regarding students in higher education (Hu, 2011). Similarly, China has gained the status of ranking first in the world regarding internet users (674m), with 49.5% internet penetration (Internet world stats, 2015). This also indicates that internet in China is growing at exponential rate, as the number of Chinese-speaking internet users has grown to more than 704 million (Internet world stats, 2016).

All these facts make it necessary to study the relationship between Chinese culture and choice of web contents, esp. the pictures on the homepages that are considered as door to the website. This study is an effort to present a discussion based on measureable parameters grounded on summery of content analysis of pictures presented on homepages of top 100 universities' websites in China.

## **2. Objective of the Study**

This study investigates the cultural values reflected in pictures used on homepages of Chinese universities and their comparison with the scores assigned to different cultural dimensions. The findings might be interesting for advertisers, communication specialists and web designers, who are interested in Chinese market, especially the education sector.

## **3. Significance of the Study**

This study is significant for scholars interested in cultural differences esp. in context of Chinese culture. China is considered an international management site to study cultural differences from western societies and examining the implementation of western developed theories (Geert Hofstede, 1993). Universities has started expanding globally, so a greater understanding of cultural presentation and impacts becomes increasingly important. The reason behind this is based on the fact that countries, throughout the world, have different cultural values and norms. The things acceptable in one culture may not be considered acceptable or legal in another culture. For example, to give a clock as a gift is considered unlucky in China because it sounds like 'to wish someone death' (Eagan & Weiner, 2011). So it is important to understand what cultural values are more acceptable for Chinese markets to address target users. This study might provide additional details to existing knowledge about Chinese culture.

## **4. Theoretical background**

Culture has always been a point of interest among the scholars of international advertising, cultural communication and web design. Majority of the scholars think that it is difficult to define culture; as Williams (1985) stated that culture is a very complicated word. Different scholars have presented their own definition of culture, but none of those definition is considered as universal and final definition of culture. Adler (1974) define culture as "the mass of life patterns that human beings in a given society learn from their elders and pass on to the younger generation". Asuncion-Lande (1975) defines it as "the sum total of the learned behaviors of a people which are transmitted from generation to generation, which are generally considered to constitute their tradition, and which serve them as potential guides for action". In the same fashion, Grawitz (1986) viewed "culture not as a set of things known intellectually, but a set of values, of manners of living and of thinking by all the members of a society". Okun, Fried, and Okun (1999) see culture as "a complex web, a set of processes by which identifiable groups of people make sense of their common life experiences, including the past experience of their groups and their anticipated future". Ho (1995) presented understanding of culture on two levels, firstly culture as "a basic unit of analysis and is concerned with intercultural differences; and secondly on individual scale with

intercultural as well as intracultural variations. Another way to look at the culture is to explore the dimensions that vary along different cultures, and Hofstede's (2010) definition "the collective programming of the mind, which distinguishes the members of one group or category of people from another" is considered as one of the most popular definition among people dealing with web and cultural studies.

Geert Hofstede (2001) and (2010a) executed one of the most comprehensive and inclusive studies on how values in the organizations are defined by culture. Started his research project with thousands of IBM employees in 53 countries from 1978-83, he continues to improve his findings and strengthen his arguments. Present study has taken up Hofstede theory of national cultural dimensions to evaluate the cultural elements in pictures presented on the homepage of Chinese universities owing to the fact that many researchers have used Hofstede's framework for cultural understanding and comparison (Eirlys E. Davies, 2012; Fernandez, Carlson, Stepina, & Nicholson, 1997). Hofstede has identified six main dimensions of national culture along which countries can be hierarchically ordered and he claimed that these cultural dimensions represent independent preferences for one state of affairs over another that distinguish countries (rather than individuals) from each other (G. Hofstede et al., 2010a).

Many researches has already shown that pictures and the depicted cultural values can influence the decision making process of the target users (Xue & Muralidharan, 2015). Chinese philosophy is considered as an important part of Chinese culture, which should be followed while dealing with Chinese markets (Keller & Kronstedt, 2005). The reason for depends on the point that Chinese society, being based on Confucian thoughts, have different perspective than the western countries. This study has analyzed the cultural characteristics of the pictures on homepages of Chinese universities websites by using Hofstede's dimensions of masculinity, power distance, individualism, uncertainty avoidance, pragmatism (long-term vs. short-term orientation) and indulgence (G. Hofstede et al., 2010a).

Table 1 Hofstede's Cultural Dimensions of China

Cultural dimension	Power distance	Individualism	Masculinity	Uncertainty avoidance	Long term orientation	Indulgence
Rank	10-14	58-63	11-13	70-71	87	75
Score	80	20	66	30	4	24

Source: (G. Hofstede, G.J. Hofstede, & M. Minkov, 2010b)

#### 4.1 Power Distance

The expectation and acceptance of inequality of power distribution within a country is termed as power distance and countries can be significantly different in the extent to which power values are accepted.

The term 'power distance' was devised by Mauk Mulder, an experimental psychologist (Mulder, 1977), and promoted by Geert Hofstede in his well-known book, "Cultures and Organizations" (G. Hofstede et al., 2010a). Hofstede stated power distance is "the extent to which the less powerful members of organizations and institutions within a country expect and accept that power is distributed unequally". The countries that accept power values firmly and shows power respect can be classified as high power distance, and those that strongly support egalitarian values can be classified as low power distance (G. Hofstede et al., 2010a; Schwartz, 1994).

In cultures with high power distance, subordinates expect to be led and do not question authority because of power respect as they show tolerance in accepting power hierarchy and vertical communication. Superiors, teachers and people in position are entitled to privileges because of their status in high power distance cultures, whereas superiors and subordinates consider each other as equals, and equality of roles with a culture of questioning authority is assumed in low power distance countries (Chee & West, 2007; G. Hofstede et al., 2010a; Moran, Abramson, & Moran, 2014).

China might be considered as one among top 14 countries with higher rankings of power distance. China, with a high score of 80, is a society where inequalities amongst people are considered acceptable. Status is generally recognized by age, university degree and profession of a person. In business as well as education culture, use of a person's title is important, and people usually do not have aspirations beyond their ranks. According to an international study comparing the status of teachers in 21 countries, the highest levels of public respect for teachers is given in China (Coughlan, 2013), which is a clear reflection of high scores on power distance index.

It is supposed that pictures of faculty may also be given preference to the pictures of students or common people in China, as earlier research showed that frequency of images of faculty and people with authority was positively correlated with score on power distance index (Callahan, 2005).

## 4.2 Individualism

Talcott and Shils (1951) introduced the distinction between collectivism and individualism to the modern organization theory, in terms of self-orientation versus social system. In contrast to some western developed countries like the United States, Australia and the United Kingdom, China is considered as a collectivistic country (G. Hofstede et al., 2010a; Triandis, 2001).

G. Hofstede et al. (2010a) relate individualism to the degree of interdependence, a society maintains among its members, based on what self-image people have about themselves in terms of “I” or “We”. In collectivist societies, people focuses collective achievement and interpersonal relationships, whereas in individualist societies people favors individuality and individual rights. Chinese culture is highly collectivistic with a score of 20 and researchers agree to categorize China into one of the typical example of countries with collectivism (Hui, Lee, & Wang, 2015). Chinese seems to prefer goals related to in-groups esp. family integrity and people prefer the interests of group instead of themselves. (Bittner, 2007; Ralston, Holt, Terpstra, & Kai-Cheng, 1997). In collectivistic cultures, it seems necessary to build an association and trust between parties, and researchers also agree that creating trust has more appeal to Chinese people (De Mooij & Hofstede, 2010; Zhang & Neelankavil, 1997). In this case, pictures of people in groups seems preferable for a designer to consider for homepage, so it is expected that pictures with people in groups may have more frequency compared to pictures showing individual people on homepages of Chinese university websites.

## 4.3 Masculinity

Firstly, the term “gender role” was used by Sexologist John Money in 1955, and the term “gender identity” was used in 1966 (Money, 1994). The idea was further developed by many scholars from different disciplines. Hofstede defined the concept of masculinity/ femininity in terms of roles assigned to male and female in a society. This role differentiation is not significant in feminine societies, but colossal in masculine societies.

Demonstration of performance and achievement is important in masculine societies, thus the success of a person is measured by the position, status and designation. In masculine cultures, household work is less shared between husband and wife than in feminine cultures. Female do household works and male do the official and outdoor jobs in masculine culture (De Mooij & Hofstede, 2010; G. Hofstede et al., 2010a).

Researchers have been interested in gender portrayal and gender roles for long time, studies showed that females represented less in masculine societies like China esp. doing important roles and positions (X. Li, 1995; Rudman & Phelan, 2010). As China is a Masculine society with a score of 66 (G. Hofstede et al., 2010a) so it is anticipated firstly that pictures showing male may get more place on homepages, secondly pictures showing male faculty may get preference as compared to female faculty.

Researches also showed that countries with high masculinity present pictures of buildings as compared to people, esp. buildings with grandeur instead of natural aesthetic sceneries (Callahan, 2005; G. Hofstede et al., 2010a). As natural scenes are more related to feminine dimension, so it is also predictable that on homepages of Chinese universities websites, pictures showing university building or name of the university would get more frequency as compared to pictures showing human element or natural scenes appealing to aesthetic senses.

## 4.4 Uncertainty Avoidance

G. Hofstede et al. (2010a) stated, “The extent to which the members of a culture feel threatened by ambiguous or unknown situations and have created beliefs and institutions that try to avoid these is reflected in the score on Uncertainty Avoidance”. Cultures of strong uncertainty avoidance societies value conservatism and traditional beliefs and have a need for rules, regulations and formality, whereas people living in low uncertainty avoidance culture likes to stay in ambiguity and accept risks and changes (De Mooij & Hofstede, 2010).

With a low score of 30 on Uncertainty Avoidance, China has flexibility for laws and rules, gives less place to stress in life and interested in taking risk like starting a new business (G. Hofstede et al., 2010a). Countries with lower scores tend to allow individuals to manage their own risks, which provide environments for acceptance of more innovation. Chinese are more tolerant of ambiguity and opinions different from what they have (G. Hofstede, 2001). This point favors the assumption that ambiguity is related to abstract images, which is negatively correlated to uncertainty avoidance scores (Callahan, 2005), so it is expected that more abstract images might be seen on homepages of Chinese websites.

## 4.5 Long-term vs. Short-term Orientation

Long-term vs. Short-term Orientation, has been defined as “how the society tries to sustain some links with its own past while dealing with the challenges of the present and future”, simply, this dimension implies investment

in the future. A country with high pragmatism ranking prefers to maintain time-honored traditions and norms while viewing societal change with suspicion, whereas people living in low pragmatism ranking welcome modernization and societal changes to invest for future (G. Hofstede et al., 2010a).

China is among top five pragmatic countries scoring 87 on long-term orientation dimension. Chinese society shows an ability to adapt traditions easily to changed conditions, which is also applicable to university environments. Modern additions in teaching like sports and extracurricular activities are welcomed and have important place in Chinese universities. It is assumed that pictures showing extracurricular activities and games will be more than pictures with student teacher educational activities on websites of universities.

#### 4.6 Indulgence

Cultures can be described as Indulgent or Restrained in terms of how people socialize in society. Hofstede defined this dimension as “the extent to which people try to control their desires and impulses, based on the way they were raised”. Centered on social learning, Indulgence deals with relatively weak control while restraint deals with relatively strong control on desires (G. Hofstede et al., 2010a).

China, with a low score of 24, is a restrained society and have an inclination towards cynicism and pessimism. As people consider that actions are restrained by social norms, they try to control gratification of their desires and do not put much emphasis on leisure time. Based on this score, it is considered that less attention is given to pictures focusing on laughing faces on university homepages.

#### 4.7 Hypotheses

This discussion helped the researcher to develop the following hypotheses.

H1: Pictures showing faculty and/or leaders will have more frequency as compared to pictures showing students and/or common people on homepages of Chinese universities. (Power Distance)

H2: Pictures showing people in groups will have more frequency as compared to pictures showing individuals on homepages of Chinese universities. (Collectivism/ Individualism)

H3: Pictures showing male will be more frequent compared to pictures showing females on homepages of Chinese universities. (Masculinity/Femininity)

H4: Pictures showing male faculty/ people in position will be more frequent compared to pictures showing females faculty/ people in position on homepages of Chinese universities. (Masculinity/Femininity)

H5: Pictures showing buildings will be more as compared to pictures with human elements on homepages of Chinese universities. (Masculinity/Femininity)

H6: Pictures showing buildings will be more as compared to pictures showing natural sceneries on homepages of Chinese universities. (Masculinity/Femininity)

H7: Pictures showing abstract ideas will be more than pictures with meaningful interpretation on homepages of Chinese universities. (Uncertainty Avoidance)

H8: Pictures showing extra-curricular activities and games in campus will be more than traditional educational activities on homepages of Chinese universities. (Long-term vs. Short-term Orientation)

H9: Pictures showing laughing faces will be portrayed less often as compared to picture showing people with serious poses on homepages of Chinese universities. (Indulgence)

The intension behind these hypotheses is to judge how culture is depicted in pictures on Chinese universities homepages, and to compare the result with the Hofstede’s score on national cultural dimensions for China.

### 5. Research Methodology

Content analysis of 725 pictures, from homepages of Chinese universities, was performed to analyse the cultural dimensions. Only one university did not present any pictures. Homepage of university website was selected as sampling unit and pictures, with meaningful visual information, on the homepage were taken as unit of analysis. Banner ads, small icons and small pictures not depicting any meanings were not part of study owing to lack of visual information or inconsistency. Data was collected during the period of September 2015 to November 2015, which resulted in 725 pictures from top 100 university websites from China. University ranking was based on the website titled as “ranking web of universities” ([www.webometrics.info](http://www.webometrics.info)).

#### 5.1 Coding

A coding sheet was prepared based on available literature related to Hofstede’s cultural model and website design. First, selected pictures were coded into one of two basic categories i.e. pictures with human element and

pictures without human element.

Pictures with human element were coded for the following information based on titles, captions, picture background, text, and coders' judgment.

- a. number of people to measure individualism (picture with single person, with two or three persons, and with four or more than four persons)
- b. gender to determine masculinity (male, female, male and female together, and imperceptible)
- c. job of the person in picture to measure power distance (faculty/ important personalities, students, faculty and students, common people and others)
- d. Activities to measure indulgence and pragmatism (people involved in convocation, addressing seminars/events, inauguration, academic, official, extracurricular, causal or award distribution activities. People sitting or standing to pose for photograph, headshots, and laughing people were also added in the coding of activities).
- e. The pictures selected as "others" were also specified by coders at the time of coding.

Pictures without human element were coded, to determine masculinity and uncertainty avoidance, into

- f. Building (when building was the most prominent feature of the picture), university gates (where name is prominent), natural sights, abstracts and others (specified by coder at the time of coding).

### 5.2 Inter-coder reliability

The researcher and a native Chinese graduate student from China coded pictures independently. First, both coders practiced on pictures from top 10 universities to attain reliable agreement on each of these individual coding categories. Cohen's Kappa was performed to check the reliability of the data, which was .79; further discussion was made to increase level of understanding among coders. When a common understanding was achieved, the coding for top 100 universities was made by both independently. Inter-coder reliability was checked for complete data by using Cohen's Kappa, which showed reliability result of .92.

## 6. Analysis and Results

First, the pictures were categorized into pictures with and without human elements, which further analyzed according to the hypotheses. No significant difference was observed, and the data showed that pictures portraying people (n= 358, 49.4%) were almost equal to 367 pictures without human element (50.6%). The data is not normally distributed so non parametric chi square test is chosen to test the following hypotheses.

Table 2 Categories of Pictures

Pictures Categories	Frequency	Percentage	Mean	SD	$\chi^2$
Pictures with People	358	49.4	3.58	3.34	.112*
Pictures without People	367	50.6	3.67	2.96	
Total	725	100			

**\*0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 362.5.**

The first hypothesis about power distance dealing with frequency of pictures showing faculty and/or leaders and students and/or common people on homepages of Chinese universities was evaluated by analyzing 358 pictures with human elements. The analysis showed that teachers, students and both together were the most frequently portrayed in the pictures on homepages, and no much difference was observed between the portrayal of faculty (39.7%) and students (35.2%) on the homepages (see table 3), whereas 17.6% pictures had both faculty and students. Although result of non-parametric  $\chi^2$  chi square showed that overall categories of pictures with human models differed significantly ( $\chi^2 = 428.73$ ,  $p = .000$ ) in terms of their jobs, the result is unlike when only category of teachers and students is compared ( $\chi^2 = .995$ , Asymp. Sig = .328) showing no significant difference. This data of this study does not support the first hypothesis of this study, which anticipated a higher frequency of faculty members and/or people in key positions (leaders, army officials, businessmen etc.) in pictures.

Table 3 Occupation

Occupation	Frequency	Percentage	Means	SD	$\chi^2$
Faculty / Important Personalities with Faculty	142	39.7	1.78	1.72	428.74*
Students	126	35.2	1.58	2.72	
Both Faculty and Students	63	17.6	1.19	1.05	
Artist/ Government Officers	10	2.8	.13	.33	
Common People	8	2.2	.10	.30	
Others	9	2.5	.11	.38	
Total	358	100			

\*p=.000

Pictures showing people in groups (74.9%) were more common on homepages of Chinese universities compared to pictures showing individuals (13.7%) and pictures showing small groups (11.4%). The average number of pictures showing groups was higher (M= 3.35, SD= 2.18) than pictures with individual model (M= .61, SD= 1.53). The chi square result was also significant ( $\chi^2 = 480.86$ ,  $p = .000$ ) which indicated the difference and favored the second hypothesis about individualism/ collectivism.

Table 4 Individual vs.Group Status

Picture status	No of People	Frequency	Percentage	Means	SD	$\chi^2$
Individual	Single	49	13.7	.61	1.53	480.86*
Small Groups	Two Persons	23	6.4	.29	.58	
	Three Persons	18	5.0	.23	.63	
Large Group	More than three persons	268	74.9	3.35	2.18	
	Total	358	100.0			

\*p=.000

Regarding masculinity, pictures of males (39.9%) and pictures of male and female together (40.5%) were frequently selected for homepages of Chinese universities. This is according to the low ranking (11-13) and high score (66) of China on masculinity dimension, and also favors the third hypothesis of the study.

Table 5 Gender

Gender	Frequency	Percentage	Means	SD	$\chi^2$
Males	143	39.9	1.79	2.13	367.03*
Females	29	8.1	.36	.67	
Both Male and female	145	40.5	1.81	1.52	
Males with 1 female	10	2.8	.13	.40	
Females with one male	2	.6	.03	.16	
Imperceptible	29	8.1	.36	.62	
Total	358	100.0			

\*p=.000

The favor for presenting male in role of teacher is also seen as data revealed that among 142 pictures of teachers, 65% (n= 93) pictures of male teachers were part of homepages, 41 (29%) pictures showed both male and female teachers whereas only 1 picture having single female as prominent feature. Both third and fourth hypotheses were proved by the data.

Table 6 Teachers' Gender

Gender of teachers	Frequency	Percentage
Males	93	65.49
Females	1	.70
Both male and female	41	28.87
Males with 1 female	5	3.52
Females with 1 male	0	0.0
Imperceptible	2	1.41
Total	142	100

Data of pictures without human elements revealed that campus sights and university buildings were the most frequent items (N=156, 42.5%) on homepages, whereas 5.2 % pictures showed university gates with institute names, but the status of 156 pictures showing buildings (21.52%) was less compared to pictures with human element (n=358, 49.38%). This does not favor fifth hypothesis of the study, but the qualitative analysis of pictures shown on websites portrayed huge building as a projection of masculinity. On the other hand, when only categories of pictures without human elements were compared, the pictures of buildings (n=156) 42.5% were more in comparison to 98 (26.7 %) pictures showing natural sights, which demonstrated a trend towards a high masculine culture (see table 7). Result of two tailed chi square shows that overall types of pictures without human element differ significantly ( $\chi^2 = 411.10$ ,  $p = .000$ ) from each other. Chi square value for comparison of pictures showing buildings with pictures showing natural sceneries showed a significant difference of 103.93 with .000 p value, and supported the sixth hypothesis of study.

Table 7 Categories of Pictures without Human Elements

Pictures without People	Frequency	Percentage	Means	SD	$\chi^2$
Building	156	42.5	1.68	1.52	411.10*
Gate with Name	19	5.2	.20	.47	
Nature	98	26.7	1.05	1.61	
Chinese Characters	32	8.7	.34	.82	
Library	2	.5	.02	.14	
Study Items	3	.8	.03	.18	
Abstract Pictures	9	2.5	.10	.39	
Other	48	13.1	.52	.84	
Total	367	100			

\*p=.000

The percentage of abstract pictures was very low (2.5%) among pictures without human elements. This lack of abstract pictures on university homepages was not in consistent with a low score for uncertainty avoidance, and seventh hypothesis of the study.

Dealing with next hypothesis of the study, 76 pictures showing extra-curricular activities and games in campus (21.2%) were more frequent compared to 45 traditional educational activities (12.6%) on homepages of Chinese universities.



Table 8 Activities

Activities	Frequency	Percentage	Means	SD	$\chi^2$
Extracurricular Activities	76	21.2	1.3	1.79	277.69*
Addressing Seminars/Events	65	18.2	1.09	1.47	
Official activities	51	14.2	1.04	1.84	
Posing for picture	47	13.1	.83	1.63	
Academic Activities	45	12.6	.71	1.47	
Award Distribution Activities	16	4.5	.69	1.12	
Causal Activities	16	4.5	.68	1.40	
Convocation Pictures	12	3.4	.58	1.24	
Headshots	10	2.8	.47	.92	
Inauguration	9	2.5	.33	.65	
Laughing	2	.6	.29	.79	
Others	9	2.5	.08	.31	
Total	358	100.0			

\*p=.000

This supports the hypothesis and is according to high ranking of long term orientation. Similarly low number of pictures showing laughing faces (.6%) compared to picture showing serious poses (13%) on homepages of Chinese universities also approved the last hypothesis of the study.

## 7. Discussion and Recommendations

By analysing pictures on Chinese universities homepages, the study attempts to infer the relation between cultural dimensions and choice of pictures as advertising appeal. The main interest of study is to analyse cultural characteristics of pictures according to Hofstede's national cultural dimensions.

China, the most populated and fourth largest country of the world, has always been an important study topic for scholars from china as well as other countries (Cohen, 2011). The role of markets in China has gradually increased since 1978, as it started changing from a "Marxist socialist" to a "market socialist" (Nee, 1989). After economic reforming and open-up policy of China, urbanization process, with a rapid change, has been seen by the world. The market-oriented reforms and urge to compete with other countries have considerably impacted China's education policy, progress and promotion strategies. This impact is not limited to purely business organizations, education sector has also progressed with the same pace in China.

The higher education system of China has been undergoing transformation during the whole reform period till the recent five-year plans, and is still progressing. Opening up policy and reforms have increased the level of higher education in terms of quality as well as number of new entering students (Ngok, 2007). The change from Marxist socialist to market socialist has also effected the process of advertising, also in education sector. Additionally knowledge of the impact of culture on marketing decisions is important to marketing strategies of education institutions. This study attempted to analyse the visual presentation of Chinese cultural dimensions in 725 pictures from top 100 university websites from China.

Previous studies showed strong theoretical grounds regarding china as high power distance country, so it was expected that pictures having teachers, faculty and people in power would be more frequent than students and common people. However, the situation was different with almost equal frequency of faculty and students pictures in the data of top 100 universities. In real life, respect for teachers and elder people is seen everywhere in China, which is also verified by an international study comparing their status in 21 countries which concluded that "teachers in China have the highest levels of public respect" (Coughlan, 2013).

The reason behind almost same amount of pictures having teachers and pictures having students might be related to universal appeal of students for university advertising. On asking one web designer of a university, he specified that "activities of the students are considered important to attract the upcoming students". This might be the reason for almost equal number of teachers and students pictures. A detailed study is needed to know the reasons behind selection of students and teachers pictures for homepage of university.

China's low score on the dimension of individualism may be reflected by selection of pictures having people in groups. As China is a collectivistic country, and collectivism appeals more to Chinese people, so the web

designers may select pictures with collectivistic appeal more often to attract Chinese students. 75% pictures having people in large groups is consistent with Hofstede's view that in a collectivistic society like China, individualistic behaviour may be seen as selfish. Only 13.7% pictures used on the homepages shows single person, as individualism may not appeal Chinese people. The result also in harmony with other studies Wang, Bishop, Chen, and Dow Scott (2002), H. Li, Li, and Zhao (2009), Tang (2011) and Kang and Kozar (2016), which also suggest that Chinese are collectivistic by culture, so the web designers might use pictures reflecting collectivistic characteristics when advertising for Chinese students.

Traditionally, girls/women were considered as passive and boys/men were considered as active in China, and the score of 66 on masculinity dimension is also reflection of that. The data of this study shows the same behaviour as more picture showing male are selected in comparison to female pictures and similar behaviour in seen to portrayal of teachers pictures. Teaching is considered as very sacred profession in China, so male teachers are more frequent (65%) on homepages. On the other hand, selection of 45% pictures of building compared to 27% pictures of natural sights also show that masculinity appeals more to Chinese web designers and students. An interesting observation is the presentation of Chinese characters on the homepage shows that Chinese are proud of their language and show it generally engraved on the stone to present the magnanimous Chinese history. Another study also supported the same result that Chinese might use buildings more frequently to indicate university's prestige, standing, and progress (Tang, 2011). 5.2% pictures showing gates and gates with the name of university shows power and control in the hands of authority, which is another indication of masculinity.

Low frequency of abstract pictures might be owing to that fact the abstractness have less universal advertising appeal. Extracurricular activities were most commonly portrayed on the homepages which shows that Chinese welcome the addition of games in educational institutes, majority of universities in China have sports grounds and pay focus to games as part of the studies, which mean they are ready to accept the changes. A high frequency of serious poses as compared to laughing faces is reflection of restrained behaviour, as seriousness at educational institutions are given preference instead of leisure and fun activities.

Interestingly, majority of the universities have English version of website for their universities, but that is usually poorly designed and administrated in terms of pictures portrayal, a comprehensive study is needed to understand cultural needs of foreign countries, especially for Chinese communication scholars and web designers for the process of selecting more appropriate and usable pictures for English version of their university websites. Only a few universities among these top 100 universities does not have English version of the websites, Guilin University of Electronic Technology, Guilin and China Medical University, Shenyang for example.

Overall analysis showed that Chinese culture does play a role in picture selection for university's internet marketing, and advertising campaign is designed according to culture and advertising appeal common in the society. As far relation of the data with scores on Hofstede's cultural dimensions is concerned, the study result is correlated with individualism, masculinity, indulgence and pragmatism. However, a different fashion is seen for power distance and uncertainty avoidance. Overall, pictures of male teachers and students in group were seen more on the homepages, and pictures of teachers were selected mainly addressing seminars of meeting, whereas student's pictures were selected showing extracurricular as well as educational activities.

## 8. Limitation

This study deals with online marketing strategies of Chinese educational institutes with a focus on pictures presented on homepages. However, it has certain limitations.

1. The study is done on a small scale, large scale study is needed to explore more about marketing strategy to present a comprehensive guideline for using pictures on websites. This research can be used as a guiding principle for further research.
2. The focus of this paper is just pictures, textual analysis at different levels may be included in future research.
3. This research deals only with the homepages, other pages can also be included in further research.
4. The study has taken up just education sector, other sector can also be included and comparison can be made between different sectors to confirm the validity of the research.
5. This study has focus solely to Chinese culture; future research can compare Chinese culture with other countries culture.

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