DIFFERENCES IN PERCEPTIONS AND PRACTICES OF CULTURAL DIMENSIONS IN THE MALAYSIAN CONSTRUCTION INDUSTRY

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DIFFERENCES IN PERCEPTIONS AND PRACTICES OF CULTURAL DIMENSIONS IN THE MALAYSIAN CONSTRUCTION INDUSTRY

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A project report submitted in partial fulfilment of the requirements for the award of Bachelor of Science (Hons.) Quantity Surveying

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DECLARATION

I hereby declare that this project report is based on my original work except for citations and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at UTAR or other institutions.

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APPROVAL FOR SUBMISSION

I certify that this project report entitled **"DIFFERENCES IN PERCEPTIONS AND PRACTICES OF CULTURAL DIMENSIONS IN THE MALAYSIAN CONSTRUCTION INDUSTRY"** was prepared by **KONG SU ZEN** has met the required standard for submission in partial fulfilment of the requirements for the award of Bachelor of Science (Hons.) Quantity Surveying at Universiti Tunku Abdul Rahman.

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Specially dedicated to
my beloved mother and father,
none of this would be possible without them.

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DIFFERENCES IN PERCEPTIONS AND PRACTICES OF CULTURAL DIMENSIONS IN THE MALAYSIAN CONSTRUCTION INDUSTRY

ABSTRACT

National culture plays a big part in the workplace, they are one of the best predictors of workplace outcome. How are the cultures perceived and practiced in the Malaysian construction industry and is there any difference among the different groups of industry practitioners? This study provides an overview of national cultures in the construction industry workplace. It highlights the differences in cultural perception and practices when compared according to the attributes of the construction industry practitioners. Previous research on culture such as those carried out by Hofstede, Trompenaars and the GLOBE study were reviewed to form the base of this research. Questionnaires were sent to construction industry practitioners which are property developers, consultants, construction businesses and others. There were 70 valid replies. The study concluded that construction industry practitioners have low power distance and weak uncertainty avoidance; they are collectivist, feminine, particularistic in perception but universalistic in practice, and humane. Construction industry practitioners with lower levels of education are more collectivist than practitioners who have higher levels of education. Members of the construction industry have a lower uncertainty avoidance in behaviour compared to belief, they are more universalistic in behaviour than belief and they are more humane in behaviour compared to belief. This study can be enlarged to include other countries to be compared to the Malaysian national culture. Cultural values of construction industries of major cities in other countries can be compared to the cultural values in Kuala Lumpur.

Keywords: Culture; Construction industry practitioners; Perception and practice; Attributes; Differences

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LIST OF SYMBOLS / ABBREVIATIONS

CBD	Central Business District
GLOBE	Global Leadership and Organisational Behaviour Effectiveness
QS	Quantity Surveyor

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CHAPTER 1

INTRODUCTION

1.1 Background to the Research

Culture used to only concern tourists and diplomats, it had little to do with the workplace; however, international policy changes in many Asian and eastern European countries in the 20th century enabled international joint ventures and outsourcing (Taras et al. 2011). Business counterparts quickly realised that attention to national cultural differences in the workplace was essential in making these relationships successful (Taras et al. 2011).

There are opinions that values and cultures are converging as globalisation occurs; however, many argue that this is only on a superficial level and differences between cultures of different nationalities are still evident; some aspects of culture are indeed becoming more similar- these are relatively superficial manifestations of culture, others- deeper, underlying level of the values- are actually growing further apart (Taras, Steel and Kirkman, 2011; Mead and Andrews, 2009; Hofstede, Hofstede and Minkov, 2010).

While culture does not explain everything, they are actually one of the best predictors of many workplace outcomes (Taras, Steel and Kirkman, 2011). Therefore understanding culture is very important in the workplace. Cultural values impact the work climate and work satisfaction positively (Taras, Steel and Kirkman, 2011).

Members of the construction industry of varying cultures will work in different ways and methods. How they deal with difficulties and problems in a situation are also different. Work climate and environment will also differ due to the factor of differing cultures.

1.2 Research Problem

It is established that different countries have different cultures. Research in the past has highlighted cultural dimensions that are relevant to all the countries. Differences in values of cultural dimensions between countries have also been studied.

With regards to the paragraph above, will these differences in culture affect the practices of different members of the construction industry? If so, what are these differences and how do they vary from each other?

1.3 Research Aim and Objectives

The aim of this study is to find out the differences in perception and practice of cultural dimensions among the industry practitioners in the Malaysian construction industry.

The objectives of this project are:

1. To find out the perceptions and practices of national workplace cultures in the construction industry of Malaysia.

2. To compare the cultural differences according to the attributes of construction industry practitioners.

3. To compare the differences in perceptions and practices of culture among the construction industry practitioners

1.4 Methodology

The study began with reviewing textbooks, journals and sources on the internet on culture. Reviews were done on previous studies conducted to learn more about the cultural dimensions discovered and values of cultural dimensions in Malaysia in order to prepare for an in-depth study of these values and differences of cultural dimensions when applied specifically to the Malaysian construction industry practitioners. It was followed by questionnaires distributed to the Malaysian construction industry practitioners.

1.5 Limitation

The questionnaires are only distributed to individuals working in the construction industry in West Malaysia, particularly in the Kuala Lumpur area.

1.6 Outline of Report

The present chapter discusses the background and introduction of cultures and its relationship to the working environment and practices. It also expounds the aim and objectives of this study with an introduction to the research methodology and limitations.

Chapter 2 discusses the literature review undertaken. Explanations are done on what culture is, dimensions of culture, Hofstede's study on culture, Trompenaars's study on culture and the GLOBE (Global Leadership and

Organisational Behaviour Effectiveness) project. It also illustrates the Malaysian culture in terms of the dimensions and studies explained above.

Chapter 3 is relating research methodology used in this study. The justification of questionnaire survey adopted in this study is explained. It also highlighted the strategy in the questionnaire design and method of analysis.

Chapter 4 explains the results and discussion. Analysis and interpretation is done on the data collected. Various tests to test reliability of the data, differences in cultural dimension according to attributes of the construction industry practitioners, and differences between perception and practice of culture are also done on the data. Comparison of means of the cultural dimensions are recorded. In each cultural dimension, differences in values compared to attributes of construction industry practitioners and differences between perception and practice are also discussed. Reliability of the results are also reported.

Chapter 5 concludes the study. It starts with the introduction to conclusion. The conclusion of differences in perceptions and practices of cultural dimensions are then reported and discussed. Implications and impacts of the study are also listed. Limitations of the study and recommendations are expounded in this chapter.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The literature review section starts with the introduction of culture and the different types of culture, national culture and organisation culture.

After the above, the reader will the taken through explanations on dimensions of culture and previous studies conducted based on this.

Lastly, a summary listing dimensions of culture that the author will use in the questionnaire.

2.2 What is Culture?

The definition of culture is the collective programming of the mind, it arises in two ways which are values and superficial ways such as symbols, rituals and heroes (Hofstede, Hofstede and Minkov, 2010).

According to Mead and Andrews (2009), culture is unique and particular to one human group and not to others, different human groups respond or react to similar situations in different ways.

2.3 National Culture versus Organisational Culture

National culture should not be confused with organisational culture. National cultures “are part of the mental software we acquired during the first ten years of out lives, in the family, in the living environment, and in school, and they contain most of our basic values” (Hofstede, Hofstede and Minkov, 2010, p. 346). Organisational cultures “are acquired when we enter a work organisation as young or not-so-young adults... they are more superficial” (Hofstede, Hofstede and Minkov, 2010, p.346).

For the purpose of this study, “*culture*” in this sense means national culture and not organisational culture.

2.4 Dimensions of Cultures

It is believed that all societies face the same problems and only the answers differ, attempts were then made at identifying what problems were common to all societies and this resulted in the forming of cultural dimensions (Hofstede, Hofstede and Minkov, 2010). (pg. 29)

A dimension combines together a number of phenomena in a society that were found to occur in combination, an aspect of a culture that can be measured relative to other cultures is a dimension (Hofstede, Hofstede and Minkov, 2010)

2.5 Previous Studies on Culture

Culture has been studied extensively by many. Literature review is done on studies done by Geert Hofstede, Fons Trompenaars and the GLOBE study because these studies focuses more on how differences in culture affects the workplace.

2.5.1 Hofstede's Study on Culture

Hofstede's study on culture uses five dimensions which are (Hofstede, Hofstede and Minkov, 2010):

- Power Distance
- Uncertainty avoidance
- Individualism and Collectivism
- Masculinity and femininity
- Long- versus short- term orientation

2.5.1.1 Power Distance

Hofstede, Hofstede and Minkov (2010, p. 61) defined power distance as the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally.

The power distance dimension explains how cultures cope with inequalities in society and the effects this pose in the workplace (Mead and Andrews, 2009). Every nation's culture is bound by hierarchies (Hofstede, Hofstede and Minkov, 2010; Mead and Andrews, 2009). Power distance can be broad or narrow.

In cultures where power distance is narrow the society tries to reduce them in ways; hierarchies are considered as just convenience arrangements rather than having real justification, managers are usually practical and systematic and admit the need for support and employees do not like close supervision (Mead and Andrews, 2009).

Wider power distances have acceptance of hierarchical ordering and sometimes even encourage the difference; managers are expected to make decisions autocratically and employees manage the work according to what the manager wants (Hofstede, Hofstede and Minkov, 2010; Mead and Andrews, 2009).

In countries with small-power-distance, employees are less dependent on their bosses, there is also interdependence between bosses and subordinates and subordinates do not find it difficult to approach and contradict his/her boss (Hofstede, Hofstede and Minkov, 2010).

Malaysia has the broadest power distance, social formalities are extremely important (Mead and Andrews, 2009; Abdullah and Low, 2001). Malaysia is ranked number 1 out of 76 countries in terms of power distance (Hofstede, Hofstede and Minkov, 2010).

2.5.1.2 Uncertainty Avoidance

This dimension deals with how a society tolerate or try to avoid uncertainty (Mead and Andrews, 2009).

Where need for uncertainty avoidance is high people appear anxiety-prone, they tend to value long term stability and try to plan as well as possible the future; competition and conflict are feared in the society due to their impacts (Mead and Andrews, 2009). Stronger uncertainty avoidance however does not always constrain creativity (Hofstede, Hofstede and Minkov, 2010).

Societies with lower uncertainty avoidance needs experience lower levels of anxiety and stress, willingness to accept risk and change is higher, managers do not find it hard to break formal rules and bypass hierarchical structures if necessary, competition and even some types of conflict are deemed healthy and accepted (Hofstede, Hofstede and Minkov, 2010; Mead and Andrews, 2009).

Malaysia has weak uncertainty avoidance, ranking 66 out of 76 countries (Hofstede, Hofstede and Minkov, 2010; Mead and Andrews, 2009).

2.5.1.3 Individualism and Collectivism

Individualism and collectivism deals with the degree of dependence or independence on his/her own resources in order to achieve a good life and independence or dependence on a group (Mead and Andrews, 2009). Hofstede, Hofstede and Minkov (2010, p. 91) states collectivism as power of the group.

Culture more inclined to individualism stress individual identity, they are expected to be independent in achieving and satisfying their own needs (Mead and Andrews, 2009). Rights and achievements of individuals are respected and individual decisions are more valuable than group decisions; individuals feel comfortable having thoughts and opinions that are different from the majority and these thoughts and decisions are respected (Mead and Andrews, 2009).

Members of cultures that are more individualist emphasize personal time from work, freedom in carrying out a job and work that is challenging; members of cultures that are more collectivist emphasize training, good physical working conditions and being able to fully utilize their skills in the workplace (Hofstede, Hofstede and Minkov, 2010).

Managers prefer variety over conformity at work and have comparatively weak emotional connections and have only calculative loyalty to the company; competition is tolerated, even if it is among members of the same group (Mead and Andrew, 2009).

In contrast, members of cultures more inclined to collectivism put more importance on group interests rather than individual interests; identity of a person comes from the group that he/she is a member of; loyalty within a group is stressed and may be considered more important than efficiency (Mead and Andrews, 2009).

Managers like conformity and loyalty to the organisation, a loyal but inefficient employee might be more valued than an efficient but deemed disloyal employee (Hofstede, Hofstede and Minkov, 2010; Mead and Andrews, 2009).

Malaysia is collectivist, ranked 54 out of 76 countries (Mead and Andrews, 2009; Abdullah and Low, 2001; Hofstede, Hofstede and Minkov, 2010).

2.5.1.4 Masculinity and Femininity

The term masculinity and femininity is not taken literally by Hofstede and is used in a technical sense (Mead and Andrews, 2009). Concerns outside the house-traditionally hunting and fighting are usually undertaken by men, concerns with taking care of the home, the children and people in general which are tender roles are usually undertaken by women (Hofstede, Hofstede and Minkov, 2010).

In more masculine cultures roles between males and females are strongly differentiated; some jobs are reserved just for men and some just for women; men are supposed to work and provide for the family, women are supposed to be tender and take care of the family and relationships (Hofstede, Hofstede and Minkov, 2010; Mead and Andrews, 2009).

In more feminine cultures, roles between men and women are less strongly distinguished, men and women are regarded fairly in the same jobs at all levels, gender is not a factor to whether a person is suitable for a job (Hofstede, Hofstede and Minkov, 2010; Mead and Andrews, 2009).

Members of masculine cultures place importance on earnings, recognition, advancement and challenge at work; members of feminine cultures place importance on good relationship with managers, cooperation, a workplace near to home and employment security (Hofstede, Hofstede and Minkov, 2010).

Malaysia is considered to be on the borderline between masculine and feminine with a ranking of 34-36 (Mead and Andrews, 2009; Hofstede, Hofstede and Minkov, 2010).

2.5.1.5 Long- Versus Short- Term Orientation

"Long-term orientation stands for the fostering of virtues oriented toward future rewards- in particular, perseverance and thrift; short term orientation stands for the fostering of virtues related to the past and present- in particular, respect for tradition, preservation of "face", and fulfilling social obligations" (Hofstede, Hofstede and Minkov, 2010, p. 239).

In countries where members are long-term orientated wide differences in social and economic conditions are not desired; where members are short-term oriented meritocracy and differentiation according to abilities are desired (Hofstede, Hofstede and Minkov, 2010).

Malaysia is ranked 50 out of 93 countries in term of long-term orientation (Hofstede, Hofstede and Minkov, 2010).

2.5.2 Trompenaars's Study on Culture

Trompenaars's study focused on the issue of dealing with, managing and doing business with counterparts in other countries with different cultures (Mead and Andrews, 2009). The model focused on 7 parameters which are:

- Universalism versus particularism
- Collectivism versus individualism
- Neutral versus emotional
- Specific versus diffuse
- Status
- Time
- Nature

2.5.2.1 Universalism versus Particularism

Universalism is the notion that good and bad applies the same everywhere- a person is considered to do something good or bad based on rigid rules and not on the circumstances, it is the belief that practices and ideas can be applied everywhere without alteration; particularism is more concerned with the obligation of relationships- a person who in a normal situation would be considered to be doing something bad may not be viewed so due to circumstances, it is the belief that circumstances command how practices and ideas should be applied, a person could be late to a meeting because he/she got into a car accident (Mead and Andrews, 2009; Hodgetts, Luthans and Doh, 2006).

Members of cultures with high universalism focus more on formal rules than relationships and business contracts are taken seriously and adhered to; members of cultures with high particularism on the other hand focus more on relationships and trust compared to formal rules, legal contracts do not carry the same weight as in cultures of high universalism and the way deals are executed are often changed after a relationship is established (Hodgetts, Luthans and Doh, 2006).

Malaysia is also considered a country with high universalism scoring 62% opting not to help a friend write a false review (Trompenaars and Hampden-Turner, 1998).

2.5.2.2 Individualism versus Communitarianism

This dimension is similar to Hofstede's dimension of *individualism versus collectivism;* communitarianism in this case refers to people regarding themselves as part of a group (Hodgetts, Luthans and Doh, 2006).

This is particularly relevant in terms of negotiations, motivation and decision-making; communitarian cultures prefer to make decisions in a group (Mead and Andrews, 2009).

Malaysia scored 45% opting for individual freedom, however, it also scored 56% in receiving individual credit (Hodgetts, Luthans and Doh, 2006; Trompenaars and Hampden-Turner, 1998).

2.5.2.3 Neutral versus Emotional

Members of cultures that are more neutral tend to keep their feelings controlled, subdued and in check, they try not to make decisions based on emotions; members of emotional societies tend to show their emotions (Mead and Andrews, 2009; Hodgetts, Luthans and Doh, 2006).

Malaysians have an emotional culture, Malaysians tend not to separate personal from professional relationships and are personally offended by negative feedbacks (Abdullah and Low, 2001).

Malaysia scored 30% in choosing not to show emotions openly (Trompenaars and Hampden-Turner, 1998).

2.5.2.4 Specific versus diffuse

A specific culture is “one in which individuals have a large public space and they readily let others enter and share and a small private place they guard closely and share with only close friends and associates” Hodgetts, Luthans and Doh, 2006). A diffuse culture is “one in which public space and private space are similar in size and individuals guard their public space carefully, because entry into public space affords entry into private space as well” (Hodgetts, Luthans and Doh, 2006, p.113).

Malaysia is considered to have a specific culture (Trompenaars and Hampden-Turner, 1998).

2.5.2.5 Achievement versus Ascription

Individuals in achievement cultures are given status based on how well they perform their functions; individuals in ascription cultures are accorded status based on who or what a person is (Hodgetts, Luthans and Doh, 2006).

Status is divided into achieved cultures and ascribed cultures; achieved cultures are where a member of that culture gains statues based on his/her achievements; ascribed cultures have members whose status are based on class, background, gender and age (Mead and Andrews, 2009).

2.5.2.6 Time

This deals with the way people manage the concept of time. There are cultures that treat time as sequential where time is planned and treated as a series of events, people usually only do one activity at a time and keep to appointments and plans strictly; cultures that treat time as synchronic tend to juggle different events at the same time, they are also more flexible in terms of appointments and plans (Mead and Andrews, 2009; Hodgetts, Luthans and Doh, 2006).

Some cultures tend to live in nostalgia, some tend to live in the present and some believe in destiny that they must realize; how cultures perceive and put importance to these 3 aspects depends on whether they view time as sequential or specific and the degree of importance they put on this (Hodgetts, Luthans and Doh, 2006).

Malaysian are considered short-term oriented (Trompenaars and Hampden-Turner, 1998).

2.5.2.7 Nature

Cultures that are "inner-directed" believe that they are above nature and can and should control nature; culture that are "outer-directed" believe in going with the laws of nature and go along with the direction and laws of nature (Mead and Andrews, 2009).

In dealing with cultures that are "inner-directed", it is important to be tough; in dealing with cultures that are "outer-directed", it is important to be polite and maintain good relationships with the other party (Hodgetts, Luthans and Doh, 2006).

Malaysia is "outer-directed", they do not believe in controlling nature (Trompenaars and Hampden-Turner, 1998). Malaysian culture tends to see oneself at one with the nature, they also believe in *feng shui* (Abdullah and Low, 2001).

2.5.3 The GLOBE Study

The GLOBE (Global Leadership and Organisational Behaviour Effectiveness) project expanded Hofstede's five dimensions to nine; these are (Hofstede, Hofstede and Minkov, 2010; House, et al., 2004):

- Power distance
- Uncertainty avoidance
- Institutional collectivism
- In-group collectivism
- Assertiveness
- Gender egalitarianism
- Future orientation
- Humane orientation
- Performance orientation

The GLOBE study measures values and practices. Practices are the extent to which a society engages in the dimension practices; values are the extent to which an organisation facilitates and rewards improved performance of the said dimension (House, et al., 2004). However, it is criticized for having creating the questions in researchers' jargon with too many complicated terms which even expert social scientists would find hard to answer (Hofstede, Hofstede and Minkov).

2.5.3.1 Performance Orientation

Performance orientation is "the extent to which an organisation or society encourages and rewards group members for performance improvement and excellence" (Hodgetts, Luthans and Doh, 2006, p.119).

Societies with higher performance orientation tend to reward performance, value training and development, emphasize results more than people (House, et al., 2004).

Malaysia has a performance oriented culture with a score above the mean for both values and practices (House, et al., 2004).

2.5.3.2 Future Orientation

This dimension is inspired by Hofstede's long-term orientation dimension (Hofstede, Hofstede and Minkov, 2010). This dimensions is defined as "the degree to which individuals in organisations or societies engage in future-oriented behaviours such as planning, investing in the future, and delaying gratification (Hodgetts, Luthans and Doh, 2006, p.119).

Malaysia has a high future orientation with scores above the mean for both values and practices (House, et al., 2004).

2.5.3.3 Gender Egalitarianism

Gender egalitarianism is defined as “the extent to which an organisation or a society minimizes gender role differences and gender discrimination” (Hodgetts, Luthans and Doh, 2006, p.118).

Malaysia scores above the mean score for gender egalitarianism in terms of practices, however, they score below the mean of 4.51 with a score of 3.78 in terms of values (House, et al., 2004).

2.5.3.4 Assertiveness

Assertiveness is defined as “the degree to which individuals in organisations or societies are assertive, confrontational, and aggressive in social relationships (Hodgetts, Luthans and Doh, 2006, p.119).

Societies that score higher on assertiveness usually prefer assertive dominant and tough behaviour (House, et al., 2004).

Malaysia is less assertive with a score below the mean in terms of practices but scores higher than the mean in terms of values (House, et al., 2004).

2.5.3.5 In-Group Collectivism

This dimensions explains the degree to which individuals show and express loyalty, pride, and cohesiveness in their families or organisations (Hodgetts, Luthans and Doh, 2006).

Organisations that score higher on collectivism have members who are highly dependent with the organisation (House, et al., 2004).

In terms of in-group collectivism, Malaysia is more collectivist than the mean in terms of practice and values (House, et al., 2004).

2.5.3.6 Institutional Collectivism

Institutional collectivism is the degree to which societal and organisational institutional practices place incentive on and encourage collective action and collective distribution of resources (Hodgetts, Luthans and Doh, 2006).

In collectivist cultures, task-performance leadership behaviours are closely associated with relationship-maintenance behaviours (House, et al., 2004).

In terms of institutional collectivism, Malaysia is more collectivist than the mean in terms of practice and values (House, et al., 2004).

2.5.3.7 Power Distance

The definition of power distance in the GLOBE study is not the same as Hofstede's study (Hofstede, Hofstede and Minkov, 2010). Power distance in this case is defined as "the degree to which members of an organisation or society expect and agree that power should be unequally shared (Hodgetts, Luthans and Doh, 2006, p.118).

Societies with higher power distance tend to differentiate classes, see power as providing social order (House, et al., 2004).

Malaysia is in the middle in terms of power distance in practices and has a wider power distance in terms of values (House, et al., 2004).

2.5.3.8 Humane Orientation

Humane orientation is defined as “the degree to which individuals in organisations or societies encourage and reward individuals for being fair, altruistic, friendly, generous, caring, and kind to others” (Hodgetts, Luthans and Doh, 2006, p.119).

Societies with higher humane orientation view other people as important, have high priority for values of altruism, kindness, love and generosity; societies with lower human orientation view self-interest as important, have high priority for values of pleasure, comfort and self-enjoyment (House, et al., 2004).

Malaysia is considered a humane oriented society in terms of practices and values (House, et al., 2004).

2.5.3.9 Uncertainty Avoidance

Uncertainty avoidance is defined as “the extent to which members of an organisation or society strive to avoid uncertainty by reliance on social norms, rituals, and bureaucratic practices to alleviate the unpredictability of future events” (Hodgetts, Luthans and Doh, 2006, p.118).

Societies with higher uncertainty avoidance tend to formalize their interactions with each other and show stronger resistance to change (House, et al., 2004).

Malaysia shows a high uncertainty avoidance in terms of practices and values (House, et al., 2004).

2.6 Summary

After analysing the cultural dimensions from these studies, the dimensions were narrowed down and filtered to the dimensions most applicable to the construction industry.

From Hofstede's study, the cultural dimensions chosen are power distance, uncertainty avoidance, individualism and collectivism, and masculinity and femininity.

The cultural dimension of universalism versus particularism was chosen from Trompenaar's research. Also, the cultural dimension of humane orientation was chosen from the GLOBE study.

These 6 cultural dimensions make up the cultural dimensions studied in this research.

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CHAPTER 3

METHODOLOGY

3.1 Research Method

In this study, the best method chosen to carry out the research is through questionnaires. This enables more data from respondents to be collected in a short amount of time.

The research used here is based on research done by Geert Hofstede on national culture where he introduced a paradigm which is the dimension approach. This approach has since acquired normal science status (Hofstede, Hofstede and Minkov, 2010). This type of research uses the questionnaire as the research instrument. Questions are asked to find out what people think the world ought to be versus what people want for themselves: belief and behaviour (Hofstede, Hofstede and Minkov, 2010). In this study, the term "*belief"* is interchangeable with "*perception"*, and "*behaviour"* is interchangeable with "*practice"*. Questions are posed to the respondents and based on a group questions, conclusions are made on a dimension of culture.

3.2 Procedures

The study first focused on literature review relevant to the topic studied. Textbooks, journals and websites were reviewed. The literature review focused on the cultural dimensions worked on by other researchers such as Hofstede, Trompenaars and the researchers on the GLOBE study.

After sufficient literature review was completed, the cultural dimensions were narrowed down into cultural dimensions most likely to affect the construction industry's practices. The 6 cultural dimensions were then chosen.

Next, the questionnaires were distributed to the areas selected and subsequently collected.

The data were then analysed. The data were analysed in accordance with the cultural dimensions. Data analysis methods will be further explained in the next section. After data analysis was conducted, discussion was then done on the analysis.

Finally, a conclusion was drawn with recommendations and limitations listed out.

3.3 Samples

The sample size of this study is 70 respondents. Samples were taken from companies involved in the construction industry in Malaysia.

The questionnaires were distributed by hand. The hard copy of the questionnaire were sent by hand to offices around Kuala Lumpur such as the Central Business District (CBD), Wangsa Maju and Bangsar.

The questionnaires were sent to companies involved in construction. This includes Engineering firms, Quantity Surveying firms, Architecture firms, Property Development companies, Suppliers, Construction Businesses and others.

3.4 Research Instrument

Questionnaires were used as the research instrument. A written questionnaire was chosen because it was the fastest way to get responses back from many people and it lets a respondent reply in a private and anonymous manner (Salkind, 2009).

The questionnaire used a 5-point Likert Scale. This will be discussed further in the design section. The purpose of the questionnaire in this study was first to find out the national workplace culture of the construction industry in Malaysia. The second purpose was to establish the variations in culture in construction industry practices compared to attributes of the respondents.

3.4.1 Questionnaire Design

For the questionnaire, the questions were broken down into part A and part B. Part A collects data on the cultural variations of the respondents and part B collects data on the attributes of the respondents. This can be seen in the questionnaire inserted in appendix A.

Part A of the questionnaire was broken down into 3 major questions. Question 1 asked about the perception of the respondents towards the cultural dimensions. Question 1 listed down 22 statements and asks the respondents if they agreed with these statements.

Question 2 of part A tested the practice of the respondents towards the cultural dimensions. Questions 2 listed down 22 statements that are similar to question 1 and they respondents are asked if they practice these statements.

Question 3 of part A asked the respondents to grade their company's overall performance.

Question 1 and 2 were based on a five-point Likert scale. Respondents were asked to choose a number from 1 to 5. The labels for the numbers are listed in table 2.1.

Table 2.1: Level of Agreement

Ratings	Definitions
1	Strongly disagree
2	Disagree
3	Neutral
4	Agree
5	Strongly agree

For question 3, the respondents were also asked to choose from a 5-point Likert Scale. However, as they were asked to rate their company's performance, a different label is used. The labels for the numbers of this question are shown in table 2.2.

Table 2.2: Level of Performance

Ratings	Definitions
1	Well below average
2	Somewhat below average
3	Average/ on par with peers
4	Somewhat above average
5	Well above average

Part B finds out the attributes of the respondents. The questions have multiple choice answers for the respondents to select their correct categories. This can be seen in the questionnaire inserted in appendix A.

3.4.1.1 Question 1 of Part A: Testing Perceptions in Different Cultural Dimensions

The statements below were the statements used to test the beliefs of the respondents in the cultural dimensions.

The statements in this chapter are numbered according to questionnaire located in appendix A. Readers can refer to the questionnaire in the appendix if so needed.

3.4.1.1.1 Power Distance

The statements used for the dimension of power distance are shown in table 3.1.

Table 3.1: Statements to Test Perceptions of Power Distance

Statement Number	Statement
Statement no. 7:	The contractor is seen as a trusted member of the team in traditional procurement scenarios.
Statement no. 11:	Members of the project team will normally agree to carry out tasks that are not their responsibility when the client asks them to.
Statement no. 12:	Tasks done by a junior (such as measurement done by a graduate quantity surveyor or intern) should be checked by a supervisor.
Statement no. 13:	The client shall be corrected by the consultants if he/she makes a mistake.
Statement no. 14:	It is normal to voice out opinions that are different from people of more senior position.

After reliability analysis was done, the statements were narrowed down to statements no. 7, 13 and 14 to accurately measure this cultural dimension.

3.4.1.1.2 Uncertainty Avoidance

The statements used for the dimension of uncertainty avoidance are shown in table 3.2.

Table 3.2: Statements to Test Perceptions of Uncertainty Avoidance

Statement Number	Statement
Statement no. 1:	It is easy to adapt to new software, such as Cost X or AutoCad, in carrying out taking-off.
Statement no. 2:	Technical accuracy in measurement is very important.
Statement no. 3:	Tenders can be issued electronically.
Statement no. 4:	It is easy to work with other consultants of different nationalities.
Statement no. 5:	It is easy to adapt to project team members from a different country with different cultures.

After reliability analysis was done, the statements were narrowed down to statements no. 1 and 2 to accurately measure this cultural dimension.

3.4.1.1.3 Individualism and Collectivism

The statements used for the dimension of individualism and collectivism are shown in table 3.3.

Table 3.3: Statements to Test Perceptions of Individualism and Collectivism

Statement Number	Statement
Statement no. 9:	Working overtime is acceptable when many people involved in the project are also working overtime.
Statement no. 10:	Working overtime is expected of you if colleagues on the same team are also working overtime.
Statement no. 11:	Members of the project team will normally agree to carry out tasks that are not their responsibility when the client asks them to.
Statement no. 14:	It is normal to voice out opinions that are different from people of more senior position.

After reliability analysis was done, the statements were narrowed down to statements no. 9 and 10 to accurately measure this cultural dimension

3.4.1.1.4 Masculinity and Femininity

The statements used for the dimension of masculinity and femininity shown in table 3.4.

Table 3.4: Statements to Test Perceptions of Masculinity and Femininity

Statement Number	Statement
Statement no. 18:	Women working in your profession are common and normal.
Statement no. 19:	There is a balance of men and women working in top level positions in your profession.
Statement no. 20:	More women are needed in your profession. (Strongly disagree (1) would mean more men are needed in your profession)
Statement no. 21:	Women are better at your profession than men.

After reliability analysis was done, all of the statements above were used to measure this cultural dimension.

3.4.1.1.5 Universalism versus Particularism

The statements used for the dimension of universalism versus particularism are shown in table 3.5.

Table 3.5: Statements to Test Perceptions of Universalism and Particularism

Statement Number	Statement
Statement no. 8:	The tender should be awarded to the lowest tenderer, provided the tender complies with the tender requirements.
Statement no. 15:	The tender may be awarded to a contractor that the employer has good relations with even in a competitive tendering situation where the awarded contractor is not the lowest tenderer.
Statement no. 16:	Hospitality and gifts sent by a contractor is impersonal and seen as just a sign of goodwill.
Statement no. 17:	Hospitality and gifts from a contractor do not sway important decisions made by consultants.

After reliability analysis was done, the statements were narrowed down to statements no. 8, 15 and 16 to accurately measure this cultural dimension

3.4.1.1.6 Humane Orientation

The statements used for the dimension of humane orientation are shown in table 3.6.

Table 3.6: Statements to Test Perceptions of Humane Orientation

Statement Number	Statement
Statement no. 6:	Worker's safety is very important and treated seriously, with the rules adhered to.
Statement no. 7:	The contractor is seen as a trusted member of the team in traditional procurement scenarios.
Statement no. 8:	The tender should be awarded to the lowest tenderer, provided the tender complies with the tender requirements.
Statement no. 22:	Deaths of workers may occur in the process of construction and it is regretted but accepted.

After reliability analysis was done, all of the statements above were used to measure this cultural dimension.

3.4.1.2 Question 2 of Part A: Testing Differences in Practice of Different Cultural Dimensions

The statements below are the statements used to test the behaviour of the respondents in the cultural dimensions.

The statements in this chapter are numbered according to questionnaire located in appendix A.

3.4.1.2.1 Power Distance

The statements used for the dimension of power distance are shown in table 3.7.

Table 3.7: Statements to Test Practice of Power Distance

Statement Number	Statement
Statement no. 6:	I view the contractor as a trusted member of the team in traditional procurement scenarios.
Statement no. 11:	I normally agree to carry out tasks that is not my responsibility when the client asks me to.
Statement no. 12:	I always check tasks done by a junior (such as measurement done by a graduate quantity surveyor or intern).
Statement no. 13:	I will correct the client if he/she makes a mistake.
Statement no. 14:	I frequently voice out opinions that are different from people of more senior position.

After reliability analysis was done, the statements were narrowed down to statements no. 6, 13 and 14 to accurately measure this cultural dimension.

3.4.1.2.2 Uncertainty Avoidance

The statements used for the dimension of uncertainty avoidance are shown in table 3.8.

Table 3.8: Statements to Test Practice of Uncertainty Avoidance

Statement Number	Statement
Statement no. 1:	I easily adapt to new software, such as Cost X or AutoCad, in carrying out my work.
Statement no. 2:	I carry out measurement very accurately.
Statement no. 3:	I feel comfortable issuing tenders electronically.
Statement no. 4:	I work easily with other consultants of different nationalities.
Statement no. 5:	I adapt easily to project team members from a different country with different cultures.

After reliability analysis was done, the statements were narrowed down to statements no. 4 and 5 to accurately measure this cultural dimension.

3.4.1.2.3 Individualism and Collectivism

The statements used for the dimension of individualism and collectivism are shown in table 3.9.

Table 3.9: Statements to Test Practice of Individualism and Collectivism

Statement Number	Statement
Statement no. 9:	I usually work overtime as well when many people involved in the project are also working overtime.
Statement no. 10:	I am expected to work overtime if colleagues on the same team are also working overtime.
Statement no. 11:	I normally agree to carry out tasks that is not my responsibility when the client asks me to.
Statement no. 14:	I frequently voice out opinions that are different from people of more senior position.

After reliability analysis was done, the statements were narrowed down to statements no. 9, 10 and 11 to accurately measure this cultural dimension.

3.4.1.2.4 Masculinity and Femininity

The statements used for the dimension of masculinity and femininity are shown in table 3.10.

Table 3.10: Statements to Test Practice of Masculinity and Femininity

Statement Number	Statement
Statement no. 18:	I think women working in my profession are common and normal.
Statement no. 19:	I find there is a balance of men and women working in top level positions in my profession.
Statement no. 20:	I think more women are needed in my profession. (Strongly disagree (1) would mean more men are needed in your profession)
Statement no. 21:	I think women are better at my profession than men.

After reliability analysis was done, all of the statements above were used to measure this cultural dimension.

3.4.1.2.5 Universalism versus Particularism

The statements used for the dimension of universalism versus particularism are shown in table 3.11.

Table 3.11: Statements to Test Practice of Universalism and Particularism

Statement Number	Statement
Statement no. 7:	I recommend/ award the tender to the lowest tenderer, provided the tender complies with the tender requirements.
Statement no. 15:	My team sometimes award the tender to a contractor that the employer has good relations with even in a competitive tendering situation where the awarded contractor is not the lowest tenderer.
Statement no. 16:	I view hospitality and gifts sent by a contractor as impersonal and just a sign of goodwill.
Statement no. 17:	I am not swayed in making important decisions by hospitality and gifts sent from a contractor.

After reliability analysis was done, all of the statements above were used to measure this cultural dimension

3.4.1.2.6 Humane Orientation

The statements used for the dimension of humane orientation are shown in table 3.12.

Table 3.12: Statements to Test Practice of Humane Orientation

Statement Number	Statement
Statement no. 6:	I view the contractor as a trusted member of the team in traditional procurement scenarios.
Statement no. 7:	I recommend/ award the tender to the lowest tenderer, provided the tender complies with the tender requirements.
Statement no. 8:	I treat worker's safety as very important and it is treated seriously, with the rules adhered to.
Statement no. 22:	I regret but accept that deaths of workers may occur in the process of construction.

After reliability analysis was done, the statements were narrowed down to statements no. 7, 8 and 22 to accurately measure this cultural dimension.

3.4.1.3 Question 3 of Part A: Testing Company Performance

Question 3 of part A asks the respondents to grade their company's overall performance. The question posed is shown below:

On a scale of 1 to 5, how do you grade your company's overall performance?

3.4.1.4 Part B: Questions on Attributes of the Respondents

The attributes questions are located in the last section of the questionnaire. This section helps provide information on the respondents such as gender, age, education level, type of company activity at the firm that they are working at, and years of experience.

The answers for the attributes are divided into checkboxes for the respondents to check the correct box. These attributes were used to test for variations in cultural dimension among the respondents.

3.5 Data Analysis Method

In this study, the types of analyses done are:

- Comparison of means
- Reliability test
- Testing variances in cultural dimensions due to different respondents' attributes
- Testing differences between belief and behaviour
- Correlations between cultural dimensions

3.5.1 Comparison of Means

One of the data analysis method used was comparing the means of cultural dimensions. The means were counted for each cultural dimension in terms of belief and behaviour.

The means were then analysed. The means were analysed in terms of whether they are above or below the median of 3. A median of 3 shows that the respondents are neutral about the cultural dimension.

3.5.2 Reliability Test

A reliability test was done to check whether the statements in a dimension reliably represents that dimension. This was done using Cronbach's Alpha through SPSS.

A value of 1 means that the individual items are correlated, the items are measuring the same thing; a value of 0 means that the individual items are not correlated, the items are not measuring the same thing (Norušis, 2005).

In this study, the items are considered reliable if they are above a value of 0.7.

3.5.3 Testing Variances in Cultural Dimensions due to Different Respondents' Attributes

A test was done to analyse differences in the values of the dimensions when compared with the attributes of the respondents. For example, we can test the differences in the scores of the respondents in terms of age. This can be scores for individual statements or for a dimension. The Kruskal-Wallis test is used for this test.

This test uses mean rank. The Kruskal-Wallis test is able to test the null hypothesis that all the groups have the same scores; this test can be used to reject the null hypothesis (Norušis, 2005). When the significance is less than 0.05, we can reject the null hypothesis that all groups have the same scores.

3.5.4 Testing Differences between Belief and Behaviour

Differences can be tested between belief and behaviour of the respondents. In some cases, the respondents may not behave the same way as what they believe people ought to be. Therefore there is a difference between belief and behaviour.

The Wilcoxon test was used in this case. It is an alternative to the Paired-Samples T Test. It is used for non-parametric tests which is suitable for Likert Scales (Norušis, 2005). In using the Wilcoxon test, the null hypothesis is rejected when the difference between belief and behaviour does not equal to zero (Norušis, 2005).

In the case of this study, a negative rank means that the score of the behaviour of the respondents is lower than the score of the belief of the respondents.

A positive rank means the score of the behaviour is higher than the score of the belief of the respondents.

A tie means that the score for the behaviour equals the score for the belief and vice versa.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

The results and discussion chapter are divided into sections according to the cultural dimensions. In each cultural dimension section, the meaning and interpretation of scores for each cultural dimension is stated first. The comparison of means are then discussed. Next, the reliability of the surveys are reported. After this, the differences in results of the cultural dimension compared to attributes, if any, are reported and discussed. Lastly, any differences between belief and behaviour found are also shown and discussed. A conclusion for each cultural dimension can be found at the end of its section. This structure is similar for every cultural dimension section.

4.2 Power Distance

A score of 5 means a low power distance. A score of 1 means a high power distance.

4.2.1 Comparison of Means

From table 4.1, we can deduce that power distance for both belief and behaviour is slightly above the median of 3. Therefore the respondents have lower power distance.

Table 4.1: Results of Power Distance for Belief and Behaviour

No.	Cultural Dimension	Mean
1	Power Distance (Belief)	3.4517
2	Power Distance (Behaviour)	3.4471

Hofstede's results for power distance were that Malaysia had the highest power distance as it was ranked no. 1 (refer to section 2.5.1.1). This difference from might be because the Hofstede's study was carried out many years ago in the 1970s and might not fit the current Malaysian situation. Besides that, the study conducted by Hofstede was based on respondents from IBM. Therefore, the sector is different as this study focuses on respondents from the construction industry. The surveys collected for this survey is also from many companies and not just one.

4.2.2 Reliability of Surveys

To test reliability of surveys, the result of Cronbach's Alpha must be more than 0.7 to be reliable. Table 4.2 shows the results of Cronbach's Alpha.

Table 4.2: Reliability of Power Distance Results

No.	Cultural Dimension	Cronbach's Alpha
1	Power Distance (Belief)	0.747
2	Power Distance (Behaviour)	0.722

From the table above, it can be seen the both power distance of both belief and behaviour are reliable.

4.2.3 Comparing Differences in Results for Power Distance with Attributes

The differences in the results for power distance compared to attributes are shown. The attributes are age, education level and location of work.

4.2.3.1 Comparing Differences between Respondents in Terms of Age

The mean rank of the respondents are compared with of age. From table 4.3, it can be seen that respondents from the age of 30 and below voice out their opinion in terms of behaviour less frequently as compared to the respondents aged 31 and above.

Table 4.3: Power Distance Results (Individual Statements) for Respondents of Different Ages

Behaviour Statement	Age	Number of Respondents	Mean Rank	Significance
I frequently voice out opinions that are different from people of more senior position (Behaviour)	Below 25	19	31.18	.031
	25-30	24	29.33	
	31-40	12	43.00	
	41-50	6	51.42	
	51 and above	9	40.44	
	TOTAL	**70**		

This can be because respondents from a younger age are not as experienced as the older aged respondents. This causes them to have less confidence and thus they will speak out less in expressing their own opinions.

4.2.3.2 Comparing Differences between Respondents in Terms of Education Level

The mean rank of the respondents are compared by way of education. Table 4.4 shows that in terms of belief, the contractor is seen as most trusted by the industry among Diploma holders and least trusted among people who have a Master's degree.

In terms of behaviour, it can be seen from table 4.4 that Bachelor's degree holders view the contractor as least trusted and people with a Master's degree view the contractor as the most trusted with Diploma holders close behind.

Table 4.4: Power Distance Results (Individual Statements) for Respondents of Different Education Level

Belief/ Behaviour Statement	Education	Number of Respondents	Mean Rank	Significance
The contractor is seen as a trusted member of the team in traditional procurement scenario (Belief)	Diploma	17	45.50	.039
	Bachelor's	42	33.11	
	Master's	11	29.18	
	TOTAL	**70**		
I view the contractor as a trusted member of the team in traditional procurement scenarios (Behaviour)	Diploma	17	42.24	.018
	Bachelor's	42	30.35	
	Master's	11	44.77	
	TOTAL	**70**		

Therefore, in terms of perception, members of the construction industry have higher trust for contractors with lower levels of education. However, in terms of practice, members with a Master's degree have the highest level of trust for the contractor and members with a Bachelor's degree have the lowest level of trust for the contractor.

4.2.3.3 Comparing Differences between Respondents in Terms of Location of Work

From table 4.5, the power distance in terms of behaviour is lowest in Bangsar and the highest in the CBD area.

This can be due to many reasons. Race of the respondents could play a part. Another reason could be the size of the company. However, as the race of respondents and size of company were not recorded during the survey this cannot be proven as yet.

Table 4.5: Power Distance Results for Respondents of Different Location of Work

Behaviour Dimension	Location of Work	Number of Respondents	Mean Rank	Significance
Power Distance (Behaviour)	Bangsar	19	42.94	.023
	Wangsa Maju	24	34.45	
	CBD	12	27.31	
	TOTAL	**66**		

From table 4.6, respondents working in Bangsar believe most strongly that the client shall be corrected and believe least strongly that the client shall be corrected in the CBD area. This is also reflected in the behaviour of the respondents. Respondents from Bangsar trust the contractor more and trust the contractor the least in the CBD area.

Table 4.6: Power Distance Results (Individual Statements) for Respondents of Different Location of Work

Belief/ Behaviour Statement	Location of Work	Number of Respondents	Mean Rank	Significance
The client shall be corrected by the consultants if he/she makes a mistake (Belief)	Bangsar	19	43.03	.030
	Wangsa Maju	24	32.55	
	CBD	12	28.57	
	TOTAL	**66**		
I view the contractor as a trusted member of the team in traditional procurement scenarios (Behaviour)	Bangsar	19	45.41	.005
	Wangsa Maju	24	31.05	
	CBD	12	28.21	
	TOTAL	**66**		

Therefore, power distance is generally lowest in Bangsar and the highest in the CBD area.

4.2.4 Comparing Differences between Belief and Behaviour

This section reports any difference between the belief and behaviour of the respondents. From table 4.7, respondents hold a higher belief than behaviour that the client is to be corrected if he/ she makes a mistake. Therefore, the respondents believe that the client shall be corrected, but are less likely to correct the client if they were in that situation.

Table 4.7: Differences of Power Distance Results (Individual Statements) between Belief and Behaviour

Belief/ Behaviour Statement	Analyses	Results
The client shall be corrected by the consultants if he/she makes a mistake (Belief) – I will correct the client if he/she makes a mistake Behaviour)	Negative Mean Rank	16.00
	Positive Mean Rank	15.32
	Negative Ranks	22
	Positive Ranks	8
	Ties	40
	Significance	.018

There are 22 negative ranks. This means that 22 out of the 70 respondents scored lower in their behaviour compared to their belief. Positive ranks number at 8 which is the number of people who scored higher in behaviour compared to belief. The remaining are 40 which are tied which means the results for both belief and behaviour are the same.

Therefore, members of the construction industry hold a higher belief than behaviour that the client is to be corrected if he/ she makes a mistake.

In summary for power distance, construction industry practitioners have a low power distance. Members of the construction industry generally voice out their opinion more as they get older. Bangsar has members of the construction industry with the lowest power distance; the CBD area has members of the construction industry with the highest power distance. Also, members of the construction industry

hold a higher belief than behaviour that the client is to be corrected if he/ she makes a mistake. The results for this cultural dimension were reliable. All these differences in levels of power distance are substantiated by the level of significance which are all less than 0.05.

4.3 Uncertainty Avoidance

A result of 5 would mean a low uncertainty avoidance. A result of 1 means a high uncertainty avoidance.

4.3.1 Comparison of Means

From the table 4.8, the result for the respondents' belief and behaviour in uncertainty avoidance is above the median of 3. Therefore the respondents have weak uncertainty avoidance.

Table 4.8: Results of Uncertainty Avoidance for Belief and Behaviour

No.	Cultural Dimension	Mean
1	Uncertainty Avoidance (Belief)	3.1215
2	Uncertainty Avoidance (Behaviour)	3.4071

The results are similar to those from the Hofstede study which showed a weak uncertainty avoidance (refer to section 2.5.1.2).

4.3.2 Reliability of Data

Table 4.9 shows that both belief and behaviour are above .700. Therefore, both the data are reliable.

Table 4.9: Reliability of Uncertainty Avoidance Results

No.	Cultural Dimension	Cronbach's Alpha
1.	Uncertainty Avoidance (Belief)	.774
2.	Uncertainty Avoidance (Behaviour)	.799

4.3.3 Comparing Differences between Belief and Behaviour

From table 4.10, members of the construction industry have a higher uncertainty avoidance in belief compared to behaviour. They adapt to and work with project team members and consultants of different nationality more easily compared to their perception of adapting to and working with project team members of different nationality

Table 4.10: Differences of Uncertainty Avoidance Results (Individual Statements) between Belief and Behaviour

Pairs	Belief/ Behaviour Statement	Analyses	Results
1	**Uncertainty Avoidance (Belief) – Uncertainty Avoidance (Behaviour)**	Negative Mean Rank	9.40
		Positive Mean Rank	20.88
		Negative Ranks	10
		Positive Ranks	24
		Ties	36
		Significance	.000
2	**It is easy to work with other consultants of different nationalities (Belief) – I work easily with other consultants of different nationalities (Behaviour)**	Negative Mean Rank	14.31
		Positive Mean Rank	15.26
		Negative Ranks	8
		Positive Ranks	21
		Ties	41
		Significance	.017
3	**It is easy to adapt to project team members from a different country with different cultures (Belief) – I adapt easily to project team members from a different country with different cultures (Behaviour)**	Negative Mean Rank	13.50
		Positive Mean Rank	16.60
		Negative Ranks	6
		Positive Ranks	25
		Ties	39
		Significance	.000

In summary for uncertainty avoidance, members of the construction industry have a low uncertainty avoidance. They also have a lower uncertainty avoidance in behaviour compared to belief.

4.4 Individualism and Collectivism

A result of 5 means a collectivist belief and behaviour from the respondents. A result of 1 means an individualist belief and behaviour.

4.4.1 Comparison of Means

From table 4.11, the respondents show a belief and behaviour that is collectivist. Both the results for belief and behaviour are above the median of 3.

Table 4.11: Results of Individualism and Collectivism for Belief and Behaviour

No.	Cultural Dimension	Mean
1	Individualism and Collectivism (Belief)	3.4714
2	Individualism and Collectivism (Behaviour)	3.4574

The results for this study is similar to the study conducted by Hofstede (refer to section 2.5.1.3) which shows that Malaysia is collectivist.

4.4.2 Reliability of Survey Questions

From table 4.12, it can be deduced that both the belief and behaviour of the individualism and collectivism dimension are reliable as they are both above 0.7.

Table 4.12: Reliability of Individualism and Collectivism Results

No.	Cultural Dimension	Cronbach's Alpha
1.	Individualism and Collectivism (Belief)	.797
2.	Individualism and Collectivism (Behaviour)	.767

4.4.3 Comparing Differences in Results for Individualism and Collectivism with Attributes

The differences in the results for individualism and collectivism compared to attributes are shown. The attributes are gender, education level, years of working experience, type of company activity and location of work.

4.4.3.1 Comparing Differences between Respondents in Terms of Gender

Table 4.13 shows that male respondents are more likely to carry out tasks that are not their responsibility compared to females.

Table 4.13: Individualism and Collectivism Results (Individual Statements) for Respondents of Different Gender

Behaviour Statement	Gender	Number of Respondents	Mean Rank	Significance
I normally agree to carry out tasks that is not my responsibility when the client asks me to (Behaviour)	Male	46	38.98	.033
	Female	24	28.83	
	TOTAL	**70**		

4.4.3.2 Comparing Differences between Respondents in Terms of Education Level

Table 4.14 shows that the lower the education level, the more collectivist the respondent is. This can be because people who are more individualist prefer work that is challenging and being able to fully utilize their skills in the workplace (refer to section 2.5.1.3). Therefore, construction industry practitioners who are more individualist would prefer to further their education to fully challenge themselves and have the extra education to fully utilize their skills in the workplace.

Table 4.14: Individualism and Collectivism Results for Respondents of Different Education Level

Cultural Dimension	Education Level	Number of Respondents	Mean Rank	Significance
Individualism and Collectivism (Belief)	Diploma	17	43.82	.031
	Degree	42	35.24	
	Masters	11	23.64	
	TOTAL	**70**		
Individualism and Collectivism (Behaviour)	Diploma	17	41.15	.032
	Degree	42	36.89	
	Masters	11	21.45	
	TOTAL	**70**		

From table 4.15, the respondents' with lower education level feel more strongly that they are expected to work overtime when others are also doing so.

It also shows that the respondents are more collectivist with a lower level of education in terms of working overtime when their colleagues are also working overtime.

Table 4.15: Individualism and Collectivism Results (Individual Statements) for Respondents of Different Education Level

Belief/ Behaviour Statements	Education Level	Number of Respondents	Mean Rank	Significance
Working overtime is expected of you if colleagues are also working overtime (Belief)	Diploma	17	41.97	.023
	Degree	42	35.74	
	Masters	11	24.59	
	TOTAL	**70**		
I usually work overtime as well when many people involved in the project are also working overtime (Behaviour)	Diploma	17	41.50	.044
	Degree	42	36.38	
	Masters	11	22.86	
	TOTAL	**70**		
I am expected to work overtime if colleagues are also working overtime (Behaviour)	Diploma	17	39.65	.037
	Degree	42	37.40	
	Masters	11	21.82	
	TOTAL	**70**		

Therefore, members of the construction industry are more collectivist when their level of education is lower. This can be seen from their willingness to work overtime with lower levels of education.

4.4.3.3 Comparing Differences between Respondents in Terms of Working Experience

From table 4.16, the behaviour of the respondents are the least collectivist when they have 2-5 years of working experience. Therefore this group is the most individualist.

The most collectivist group have working experience of below 2 years. This can be because people who are not as experienced are usually more eager to learn more. They are also more anxious to impress and be accepted as part of the group.

Middle to senior level staff with more than 6 years of experience such as managers tend to be more collectivist because they prefer conformity from the staff. Overall results from this study show that members in the construction industry are collectivist. Collectivist cultures value conformity in staff (refer to section 2.5.1.3). Therefore, if they value collectivism they are more likely to practice it.

On the other hand, respondents with 2-5 years of working experience are the most individualist. This can be because these are the years where they have past the fresh graduate level but they are not yet at management or more senior levels. Therefore, the group with 2-5 years of working experience which do not fit into any of these categories are considered more individualist.

Table 4.16: Individualism and Collectivism Results for Respondents of Different Years of Working Experience

Cultural Dimension	Experience	Number of Respondents	Mean Rank	Significance
Individualism and Collectivism (Behaviour)	Below 2 years	25	43.22	.027
	2-5 years	16	22.19	
	6-10 years	7	32.79	
	11-20 years	10	37.95	
	Above 20 years	12	36.71	
	TOTAL	**70**		

From table 4.17, the respondents who are most expected to work overtime are respondents with less than two years of experience. This can be because as they are the most junior staff members, they are expected to conform to the needs and wants of the staff that are higher level. This is typical of the collectivist behaviour that can be seen in members of the construction industry (refer to section 2.5.1.3). The most individualist respondents in expectation to work overtime are again the group with 2-5 years of experience.

Table 4.17: Individualism and Collectivism Results (Individual Statements) for Respondents of Different Years of Working Experience

Behaviour Statements	Experience	Number of Respondents	Mean Rank	Significance
I am expected to work overtime if colleagues on the same team are also working overtime (Behaviour)	Below 2 years	25	45.06	.032
	2-5 years	16	27.22	
	6-10 years	7	31.21	
	11-20 years	10	35.50	
	Above 20 years	12	29.13	
	TOTAL	**70**		

Therefore, the most collectivist members of the construction industry have less than 2 years of working experience; the most individualist members have 2-5 years of working experience.

4.4.3.4 Comparing Differences between Respondents in Terms of Type of Company Activity

From table 4.18, construction business is the most individualist and consultancy is the most collectivist in terms of behaviour. It could be because working for construction business is usually more challenging but the salary is usually higher, therefore, it would attract people who are more individualist as the work is

challenging but rewarding (refer to section 2.5.1.3). This is in reverse for people who prefer to work in consultancy companies.

Table 4.18: Individualism and Collectivism Results for Respondents of Different Company Activity

Cultural Dimension	Company Activity	Number of Respondents	Mean Rank	Significance
Individualism and Collectivism (Behaviour)	Property Development	11	33.41	.026
	Consultancy	41	38.32	
	Construction Business	15	22.63	
	TOTAL	**67**		

From table 4.19, it can be seen that respondents working in consultancy companies are the most collectivist, they are most willing to work overtime and are expected to do so. Employees of construction businesses on the other hand are the most individualist. People who are more individualist feel comfortable having thoughts and opinions that are different from the majority (refer to section 2.5.1.3), therefore, employees of the construction business who are least expected and least willing to work overtime when others are doing so reflects this individualist view.

Table 4.19: Individualism and Collectivism Results (Individual Statements) for Respondents of Different Company Activity

Behaviour Statements	Company Activity	Number of Respondents	Mean Rank	Significance
I usually work overtime as well when many people involved in the project are also working overtime (Behaviour)	Property Development	11	30.86	.043
	Consultancy	41	38.29	
	Construction	15	24.57	
	Business			
	TOTAL	**67**		
I am expected to work overtime if colleagues on the same team are also working overtime (Behaviour)	Property Development	11	30.91	.005
	Consultancy	41	39.38	
	Construction	15	21.57	
	Business			
	TOTAL	**67**		

4.4.3.5 Comparing Differences between Respondents in Terms of Location of Work

Table 4.20 shows that respondents from Bangsar are least expected to work overtime; respondents from the CBD area are most expected to work overtime. This could be because certain races of the respondents could be more concentrated in different locations, or due to the different sizes of companies in these different locations. However, as these information were not recorded in the surveys they can't be further analysed.

Table 4.20: Individualism and Collectivism Results for Respondents of Different Location of Work

Behaviour Statement	Location of Work	Number of Respondents	Mean Rank	Significance
I am expected to work overtime if colleagues on the same team are also working overtime (Behaviour)	Bangsar	19	23.74	.035
	Wangsa Maju	24	35.70	
	CBD	12	37.71	
	TOTAL	**66**		

In summary for individualism and collectivism, construction industry practitioners are collectivist. One of the differences compared to attributes is the lower the education level, the more collectivist the members of the construction industry. Besides that, members of the construction industry are most collectivist when they have a working experience of below 2 years and they are most individualist when they have working experience of 2-5 years. In terms of behaviour, employees of the construction business are the most individualist and employees of consultancy companies are the most collectivist. Lastly, members of the construction industry who are male are more likely to carry out tasks that are not their responsibility compared to females.

4.5 Masculinity and Femininity

A result of 5 means that the respondents are feminine. A result of 1 means that the respondents are masculine.

4.5.1 Comparison of Means

Respondents scored above the median of 3 for this dimension. Therefore, they are feminine. The scores are tabulated in table 4.21.

Table 4.21: Results of Masculinity and Femininity for Belief and Behaviour

No.	Cultural Dimension	Mean
1	Masculinity and Femininity (Belief)	3.3286
2	Masculinity and Femininity (Behaviour)	3.2786

The results for this study shows a higher femininity compared to Hofstede's results (refer to section 2.5.1.4). Hofstede's results showed that respondents are on the borderline between masculinity and femininity. This can be due to a host of reasons. These reasons were previously discussed in the power distance section (refer to section 4.2.1).

4.5.2 Reliability of Survey Questions

As can be seen from table 4.22, both the belief and behaviour did not score above 0.7.

Table 4.22: Reliability of Masculinity and Femininity Results

No.	Cultural Dimension	Cronbach's Alpha
1.	Masculinity and Femininity (Belief)	.526
2.	Masculinity and Femininity (Behaviour)	.625

4.5.3 Comparing Differences between Belief and Behaviour

Table 4.23 shows that the respondents are more feminine in terms of belief compared to behaviour in thinking women working in their profession is common and normal.

Table 4.23: Differences of Masculinity and Femininity Results (Individual Statements) between Belief and Behaviour

Pair	Belief/ Behaviour Statement	Analyses	Results
1	**Women working in your profession are common and normal (Belief) – I think women working in my profession are common and normal (Behaviour)**	Negative Mean Rank	19.42
		Positive Mean Rank	18.00
		Negative Ranks	26
		Positive Ranks	11
		Ties	33
		Significance	.009

This can be because the construction industry is traditionally a more appealing line of work for males than females. There might be more males than females that the respondents actually encounter in their line of work, even if they belief females working in the construction industry is a normal thing. This is apparent from table 4.24. It can be seen that there are more male respondents with

65.7% compared to female respondents with just 34.3%. This shows that there is an imbalance of males and females in the construction industry.

Table 4.24: Frequency of Male and Female Respondents

Gender	Frequency	Percentage (%)
Male	46	65.7
Female	24	34.3
TOTAL	70	100

Therefore, members of the construction industry believe that women in general are common in the construction industry, but might not actually encounter as many women in their industry.

In summary for the cultural dimension of masculinity and femininity, construction industry practitioners are feminine. They are most feminine in viewing females as common and normal in their profession. However, the belief that females are common and normal in this profession is stronger than what the members actually encounter in reality as can be seen in the lower score of behaviour compared to belief.

4.6 Universalism versus Particularism

A result of 5 shows a high universalism and a result of 1 shows a high particularism.

4.6.1 Comparison of Means

From table 4.25, it can be seen that the respondents scored just below 3 in their belief. However, the score for behaviour is above the median of 3. Therefore, the respondents are universalistic in behaviour and particularistic in belief.

Table 4.25: Results of Universalism versus Particularism for Belief and Behaviour

No.	Cultural Dimension	Mean
1	Universalism versus Particularism (Belief)	2.9434
2	Universalism versus Particularism (Behaviour)	3.4250

The results from this study show a lower universalism compared to the results of the study conducted by Trompenaars (refer to section 2.5.2.1). Trompenaars's study showed that Malaysian respondents scored high in universalism. This difference can be due to many reasons. Malaysia's construction industry may have a higher particularism compared to the other industries in Malaysia. This can be because the tendering process plays a main role in the construction industry. Therefore in recommendation of tenders especially, a higher particularism might show as the contractor will try his/her best to be awarded the contract and may use means such as establishing a good relationship or giving gifts or hospitality (refer to section 2.5.2.1).

4.6.2 Reliability of Survey Questions

As can be seen from table 4.26, both belief and behaviour of universalism versus particularism have a result of above 0.7 which means that they are both reliable.

Table 4.26: Reliability of Universalism versus Particularism Results

No.	Cultural Dimension	Cronbach's Alpha
1.	Universalism versus Particularism (Belief)	.711
2.	Universalism versus Particularism (Behaviour)	.747

4.6.3 Comparing Differences between Belief and Behaviour

From table 4.27 it can be seen that the positive mean rank is higher than the negative mean rank in pair 1. This means that the respondents are more universalistic in behaviour compared to belief. Following the same vein, this can also be seen in pair 2, 3 and 4.

In summary for universalism versus particularism, construction industry practitioners are universalistic in behaviour and particularistic in belief.

Table 4.27: Differences of Universalism versus Particularism Results (Individual Statements) between Belief and Behaviour

Pair	Belief/ Behaviour Statement	Analyses	Results
1	**Universalism versus Particularism (Belief) – Universalism versus Particularism (Behaviour)**	Negative Mean Rank	33.20
		Positive Mean Rank	36.42
		Negative Ranks	20
		Positive Ranks	50
		Ties	0
		Significance	.001
2	**The tender should be awarded to the lowest tenderer, provided the tender complies with the tender requirements (Belief) – I recommend/ award the tender to the lowest tenderer, provided the tender complies with the tender requirements (Behaviour)**	Negative Mean Rank	22.94
		Positive Mean Rank	28.23
		Negative Ranks	17
		Positive Ranks	35
		Ties	18
		Significance	.005
3	**The tender may be awarded to a contractor that the employer has good relations with even in a competitive tendering situation where the awarded contractor is not the lowest tenderer (Belief) – My team sometimes award the tender to a contractor that the employer has good relations with even in a competitive tendering situation where the awarded contractor is not the lowest tenderer (Behaviour)**	Negative Mean Rank	24.90
		Positive Mean Rank	28.27
		Negative Ranks	20
		Positive Ranks	33
		Ties	17
		Significance	.046
4	**Hospitality and gifts sent by a contractor is impersonal and seen as just a sign of goodwill (Belief) – I view hospitality and gifts sent by a contractor as impersonal and just a sign of goodwill (Behaviour)**	Negative Mean Rank	19.97
		Positive Mean Rank	25.57
		Negative Ranks	17
		Positive Ranks	29
		Ties	24
		Significance	.023

4.7 Humane Orientation

A result of 5 would mean the respondents are more humane orientated. A score of 1 means the respondents are not humane oriented.

4.7.1 Comparison of Means

From table 4.28, the mean for humane orientation in terms both belief and behaviour are above the median of 3. Therefore the respondents are humane oriented.

Table 4.28: Results of Humane Orientation for Belief and Behaviour

No.	Cultural Dimension	Mean
1	Humane Orientation (Belief)	3.2429
2	Humane Orientation (Behaviour)	3.6570

This is in line with the results of the GLOBE study that also shows that the Malaysian respondents are humane oriented (refer to section 2.5.3.8).

4.7.2 Reliability of Survey Questions

In table 4.29, it can be seen that both the belief and behaviour scored more than 0.7 for the dimension of humane orientation. Therefore, they are both reliable.

Table 4.29: Reliability of Humane Orientation Results

No.	Cultural Dimension	Cronbach's Alpha
1.	Humane Orientation (Belief)	.753
2.	Humane Orientation (Behaviour)	.794

4.7.3 Comparing Differences between Belief and Behaviour

From table 4.30, it can be seen that the positive mean rank is higher than the negative mean rank. Therefore respondents are more humane in behaviour compared to belief. Following this vein, respondents are also more humane in behaviour compared to belief in recommending/ awarding the tender to the lowest tenderer.

Table 4.30: Differences of Humane Orientation Results (Individual Statements) between Belief and Behaviour

Pair	Belief/ Behaviour Statements	Analyses	Results
1	**Humane Orientation (Belief) – Humane Orientation (Behaviour)**	Negative Mean Rank	29.27
		Positive Mean Rank	37.74
		Negative Ranks	26
		Positive Ranks	42
		Ties	2
		Significance	.012
2	**The tender should be awarded to the lowest tenderer, provided the tender complies with the tender requirements (Belief) – I recommend/ award the tender to the lowest tenderer, provided the tender complies with the tender requirements (Behaviour)**	Negative Mean Rank	22.94
		Positive Mean Rank	28.23
		Negative Ranks	17
		Positive Ranks	35
		Ties	18
		Significance	.005

Therefore, members of the construction industry are more humane in behaviour compared to belief.

In summary for humane orientation, members of the construction industry are humane oriented. They are more humane oriented in behaviour compared to belief.

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter concludes the findings of the differences in cultural dimensions analysed in this study. Implications of this research are discussed in section 5.2. Reflection on limitations of the study such as response rates and location of study can be found in section 5.3. Further research to expand the study to cover a wider region and deeper analysis into the cultural dimension differences are recommended in section 5.4.

5.2 Differences in Perceptions and Practices of Cultural Dimensions in the Malaysian Construction Industry

Generally, construction industry practitioners in Malaysia have low power distance and weak uncertainty avoidance. They are collectivist, feminine, universalistic in behaviour but particularistic in belief and humane.

Differences in collectivism can be seen between differences in gender, education levels, years of working experience, type of company activity and location of work. These are summarised in table 5.1.

Table 5.1: Summary of Differences in Individualism and Collectivism

Collectivist (Belief)	Collectivist (Behaviour)	Carrying out tasks that are not their responsibility (Behaviour)	Expects to work overtime (Behaviour)	Works overtime when others are doing so (Behaviour)
-	-	Male	-	-
Lower education level	Lower education level	-	Lower education level	Lower education level
-	Less than 2 years working experience	-	Less than 2 years working experience	-
-	Works for a consultancy company	-	Works for a consultancy company	Works for a consultancy company
-	-	-	Works in the CBD area	-

It can be seen that members of the construction industry tend to be particularly collectivist when they have lower levels of education. They will behave

as more collectivist if they have less than two years of working experience or work for a consultancy firm.

Male construction practitioners are more likely to take on work that is not their responsibility compared to their female counterparts. Members who have lower levels of education or who are working for a consultancy company are expected to and does work overtime when others are also doing so. In addition, members who have less than two years of working experience or works in the CBD area are also expected to work overtime if others are doing so.

Therefore, a manager in the construction industry who wants to hire an employee who is collectivist, or vice versa, would have a higher chance of doing so if he were to filter the applicants by level of education rather than gender.

Differences in power distance appear when it is compared with attributes which are level of education and location of work. This is summarised in table 5.2.

Table 5.2: Summary of Differences in Power Distance

Low Power Distance (Behaviour)	**Voicing out their own opinions frequently (Behaviour)**	**Views the contractor as a trusted member (Belief)**	**Views the contractor as a trusted member (Behaviour)**	**Client should be corrected if he/she makes a mistake (Belief)**
-	Aged 31 and above	-	-	-
Works in Bangsar	-	-	Works in Bangsar	Works in Bangsar
-	-	Lower education level	Master's degree	-

Members of the construction industry tend to have a lower power distance if they are working in the Bangsar area. This is the opposite for members working in the CBD area.

Levels of trust for the contractor and correcting the client if he/she makes a mistake is higher in members of the construction industry working in the Bangsar area, and the opposite is the case for members working in the CBD area. Besides that, construction industry practitioners who are aged 31 and above voice out their opinions more frequently, members who perceive the contractor to be trusted by the industry have lower education levels and members who actually trust the contractors themselves are Master's degree holders. However, these differences are only seen in individual statements. Therefore, the most prevalent attribute, showing most differences in levels of power distance, is location of work. Members of the construction industry who work in the Bangsar area have the lowest power distance, this is opposite for members working in the CBD area. However, it cannot be ascertained why this is so. It could be due to race of the respondents or size of company that the respondents are working for, but these cannot be confirmed as these data were not recorded in the survey.

Through comparison between belief and behaviour, it was found that some of the cultural dimensions show differences between belief and behaviour. This is summarised in table 5.3.

Table 5.3: Summary of Differences between Belief and Behaviour

Uncertainty Avoidance	**Universalism versus Particularism**	**Humane Orientation**	**Women working in their profession is common and normal (Masculinity and Femininity)**	**Client should be corrected if he/she makes a mistake (Power Distance)**
Lower uncertainty avoidance in behaviour than belief	More universalistic in behaviour than belief	More humane in behaviour compared to belief	Belief higher than behaviour	Belief higher than behaviour

Members of the construction industry show a lower uncertainty avoidance in behaviour compared to belief. They are better at working with and adapting to consultants and project team members of other countries than they perceive themselves to be. Construction industry practitioners are also more universalistic in behaviour compared to belief. This can be seen in awarding the job to the lowest tenderers and also how hospitality and gifts are viewed: members are both more universalistic in behaviour compared to belief. Members are also more humane in behaviour compared to belief. Besides that, members perceive women working in their profession as common and normal more than how they actually behave. Construction industry practitioners also believe that the client should be corrected if he/ she makes a mistake more than they actually practice it.

Therefore, it can be seen that location of work and level of education are where there are more variations in cultural dimensions. Years of experience also shows variations in cultural dimensions. Gender, age and company activity are where there are less variations in cultural dimensions. Furthermore, differences can be seen between belief and behaviour mainly in uncertainty avoidance, universalism versus particularism and humane orientation.

5.2.1 Implications of Research

Culture has many implications on the construction industry. It affects how people react to one another and how they carry out activities in their work.

The construction industry can benefit from this study in many ways. First and foremost it can help to ease interactions and task division between members of the construction industry. Employers can know better how to treat employees or what tasks is better suited for which employee. For example, a manager who prefers collectivist employees will have a better chance of doing so by filtering his/ her potential candidates by their level of education.

Policy makers can make sure that the culture of the Malaysian construction industry is made known to people of different nationalities, especially expats, coming to Malaysia to work in the construction industry. This can be done in a briefing session. The cultures in Malaysia can be vastly different from the cultures of the countries these people are coming from. This will enable expats and other people coming into Malaysia to work to understand our culture better and to be able to work more efficiently and smoothly here.

5.3 Limitations of Study

There are a few limitations to the study. Firstly, the study only focuses on areas in and around Kuala Lumpur and it only focuses on members of the Malaysian construction industry.

Besides that, the samples obtained at the beginning of the study were also not a sufficient enough sample size to be studied. Therefore, the study was widened to include the Wangsa Maju area.

5.4 Recommendations

The reasons for why the cultures in the construction industry vary as they are needs to be further explored. This can be done especially to the cultural dimension of individualism and collectivism which varies the most compared to attributes of the respondents. It can also be done on the attribute of location of work to find out why people working in different locations vary in levels of cultural values.

The research can also be widened to include other states in Malaysia and even different countries to compare how the cultures vary. This can show how the construction industry's culture in Kuala Lumpur compare with other states in Malaysia or how it compares to other major cities in other countries. An area to focus

on could be Singapore. This is because Singapore is a country that is closely related to Malaysia, it was even once part of our country. However, as Singapore and Malaysia progressed individually, there may be significant differences between the two countries. This research will also be useful to the construction industry as this industry in both countries are closely related. Many Malaysians end up working in Singapore in the construction industry. There are signs of Singaporean companies investing in Malaysia such as CapitaLand Limited which headquartered in Singapore investing in shopping complexes in Malaysia such as the Mines Shopping Mall and also development in the state of Johor. Therefore, a research in finding out the differences in culture between these two countries may shed light and insight on cultural values for members of the construction industry in these two countries.

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APPENDICES

APPENDIX A: Interview Questions