

THE IMPACTS OF CULTURAL BACKGROUND ON PROJECT
COMMUNICATION MANAGEMENT IN INTERNATIONAL
CONSTRUCTION PROJECTS

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THE IMPACTS OF CULTURAL BACKGROUND ON PROJECT COMMUNICATION MANAGEMENT IN INTERNATIONAL CONSTRUCTION PROJECTS

ABSTRACT

This thesis aims to explore intercultural communication in the international construction project in the implementation phase and to examine the responses of international construction projects to cope with the challenges that arise from intercultural communication. A guideline for international construction projects, especially Chinese construction companies, to conduct construction projects in another cultural background is developed in this thesis.

There have lots of literature in the project communication field, and there also exist lots of researches related to cultural impacts in the business field. While there has been few of them considered the impacts of cultural factors to project communication in international construction projects or examined the impacts of intercultural communication in intercultural construction projects. This thesis based on this situation, trying to develop insights from the intercultural communication and project management literature to bridge the knowledge gap between cultural background and international construction project communication in term of challenges and the results of their responses to cope with challenges.

This thesis adopted a case study research method within the qualitative methodology, semi-structured interviews, documents analysis and observation when the author worked at international construction project A in Tanzania as a human resource manager. A grounded theory approach was applied in the analysis of data .this thesis

examined a series of factors that affect intercultural communication in international construction projects and the responses of the project at the organization and individual level to cope with challenges.

This thesis revealed the impacts of cultural background to intercultural construction projects by revealing more challenges than opportunities caused by intercultural communication; identifying responses in international construction projects to cope with challenges; revealing the neglect of intercultural communication in international construction projects. all of these aspects make a theoretical contribution to the communication management in international construction projects.

Keywords: International Construction, Project Intercultural Communication, cultural background, challenges

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THE IMPACTS OF CULTURAL BACKGROUND ON PROJECT COMMUNICATION MANAGEMENT IN INTERNATIONAL CONSTRUCTION PROJECTS

CHAPTER1: INTRODUCTION

1.1 Research background

The trends of globalization encouraged cross-country economic cooperation in which the international construction project implemented involving different participants from different parts of the world working together with their different cultural backgrounds. At the same time, many local constructors seek for their opportunities in the international market. Utama et al. (2014) stated that an international construction project is deemed as a construction project located in one country while conducted by a company from another country. The global operations contribute to workforce diversity in the project, multicultural construction project teams are becoming more common.

1.2 Communication in project management

At the same time, In the process of implementation of the international construction project, communication plays an important role in project management. According to Zulch (2014), communication is considered to have a fundamental function in project management. Communication connects the cost, scope, and time of the project management area to achieving the goal of quality products or outcomes. Axley (1984) argued that communication is just like a metaphorical pipeline, through the pipeline information can be transferred or exchanged from one person to another.

1.3 Communication in construction project management

Hoezen et al. (2006) stated that communication in the construction industry can greatly determine the effectiveness of the construction process. according to the study of Pheng and Chuan (2006), team relationship is the most significant variable which can affect project manager performance further affecting project performance in the construction project. Therefore communication can affect a project's performance by affecting relationships among team members. As a fundamental factor that affects the process of the project, communication can indirectly influence the performance of the project.

The importance of communication was identified by Loosemore and Muslmani (1999) that the Communication problem is becoming the significant contemporary challenge to which construction project managers need to put the most attention. Pardu (1996) pointed out that the lack of communication can be regarded as the major problem which contributes to the failure of meeting stakeholders' expectations. Meanwhile, Loosemore and Muslmani (1999) said that the wide concern communication problem by industry would be the most critical issue facing the international construction project team, since the diversity components of construction organizations.

Meanwhile, He and Liu (2010) noted that communication among project participants is rather complex, keeping effective communication can hardly be achieved. communication can be affected by various factors such as disputes, different cultural environments, lack of feedback and proper insufficient communication channels (De Nadae & Carvalho, 2019). Although communication in the international project is deemed as a critical role in achieving project goals, However, Dieckmann (1996) mentioned that communication was always neglected in international construction projects.

1.4 Problem statement

Loosemore and Muslmani (1999) stated that there is little to know about the impacts bring by intercultural communication on international construction projects. Liu (2009) noted that there is little research that concerns communication at the project construction stage, let alone the impacts of influenced factors on construction project communication performance.

Although there is a lot of researches has done referring to communication in the construction project, there were few studies that have investigated communication in an international construction project, Which the conclusion is coherent with Tone et al. (2009). Meanwhile, Ochieng and Price (2010) also pointed that there has been little study referring to construction multicultural teams in international projects and the cultural factors which influence project teams have not been identified yet.

According to Dadfar and Gustavsson (1992) that the early stage of researchers on project management is mainly from the industrial field and always focus on technical aspects of projects and is less concerned with the social portrait of project management. Hence, there has been no sufficient study on cultural or social factors in project management research. In addition, different participants within the project and the overlap of the work process in a construction project can lead to communication failure, Various and complex information often arise communication problems among participants as well. The participants of international projects are from different places of the world, they have different cultural backgrounds which add the complexity of communication in the project management process among team members.

Therefore, achieving effective communication would be more difficult compared to

communication in the domestic project.

Project performance always is the essential concern in the construction sector, which is always deemed as a standard to measure the success of the construction project (Cheung et al., 2013). Communication can greatly affect the performance of the project by affecting stakeholder's engagement, the trust between employer and employee (Alligood, 2019; Cheung et al., 2013). Therefore, it is important to understand the impact of communication factors. Effective Communication plays a role as a broker who connects different project management areas and helps to achieve a quality and objective-fulfil result (Zulch, 2014).

Olanrewaju et al. (2017) insisted that lack of communication in a construction project will arise dispute and issues, which can be more severe than thought, such as the poor communication of design always contribute to delay and quality problems in a construction project; the production of construction also requires effective communication on site. Considering the various cultural background of workers in the international construction project, all these effects brought by communication problems can also be applied to the international construction project.

In this situation, this research aims to explore the impacts of cultural background on communication in international construction projects and try to establish guidelines for intercultural communication in international construction projects.

1.5 Thesis overview

This research started with discussing the definition of communication and culture, trying to deliver a deeper understanding of these two conceptions.

Communication in the organization can be divided into different types: interpersonal communication, small-group communication, multi-group communication, each type of communication play different roles in the organization (Kreps, 1986). The procedure of communication can be more complex than people thought; there are different models be used to describe the process of communication. Based on procedure, communication type is categorized into a linear model, sample interactive communication model and intercultural communication model.

Hollingsworth (1986) noted that the end of the communication process is defined as the message already received by the receiver and the message being understood by the receiver. In addition to the communication model, the components of communication will help people have a better understanding of the impacts of intercultural communication; the main components of communication are the message sender and message receiver (PMI, 2017).

The message sender is deemed as the one who initiates the process of communication and decide the purpose and the content of the communication; the senders' cultural backgrounds, current emotional state and personality biases can significantly influence the result of communication. (Done & Semmens, 2005; Thomas et al., 1998). There are lots of communication types that can be affected by cultural differences. Non-verbal communication and verbal communication are different among different cultures.

There are nine types of nonverbal communication such as facial expression, gesture, Paralinguistics, body language, proxemics, eye contact, haptics, appearance and even artefacts (Kendra, 2020). while verbal communication mainly includes spoken language, what should be noticed is that verbal communication also includes written language and

sign language.

Generally, Culture be deemed as a complex concept in definition. Pires and Macêdo (2006) insisted that culture refers to values and customs and how it expresses, culture can help people form a consensus among people. Culture can be categorized at the national level. According to Hofstede et al. (2005) that the national culture is people with different ethics, values, model of action from different nations. He also mentioned there is existing different culture dimensions, factors in culture dimension which can vary in different cultures. Hofstede's Cultural Dimensions theory provided a different perception to explain the difference between cultures. There are a total of 6 dimensions which be used to describe the different cultures within these dimensions.

According to Allen (2017), The conception of intercultural communication is considered as the communication among people from a different culture.

When it comes to the relationship between culture and Communication, Gudykunst (2003) insisted that culture is just a component of communication, that is to say, communication creation culture. Whereas culture also shapes and affect communication. Giri (2006) insisted that Communication be affected by culture. Culture can determine the way of communication, which includes talking and behaviour style.

Understanding how culture will affect communication, different cultural dimensions and the barriers between intercultural communication can provide a deep insight into intercultural communication, which can help the project management team to establish a systematic perception towards intercultural communication and have a better understanding of cultural differences, further promote the effectiveness of intercultural communication. The barrier occurs in intercultural communication. Factors that

contribute to barriers main include language, ethnocentrism, geographical distance, prejudice, nonverbal communication.

Communication in international projects always means communication will be conducted in a different cultural environment involving people from different places with different languages, customs, values etc. Tone et al. (2009) investigated the human and cultural influence on the international construction project management process concluded the finding that intercultural communication can influence all areas of project management.

Understanding the critical factors, the communication process in intercultural communication and the impacts brought by intercultural communication for improving project team communication effectiveness is essential. Knowing the impacts brought by intercultural communication and the underlying reason for the barriers is critical for managing the project team and enhancing the understanding between team members, and further improving the performance of the whole project.

Considering the context of communication in the international construction project, this research aims to find the impacts that culture bring to communication, including the barriers and positive effect. During the exploration, the factors that influence intercultural communication will be identified.

1.6 The research aim and objectives of this research

Research aim

This research aims to establish guidelines for intercultural communication in the international construction project.

Research objectives

1. To explore intercultural communication in the international construction project.
2. To identify factors that affect intercultural communication in the international construction project and explore how these identified factors affect intercultural communication.
3. To investigate how international construction projects respond to the impacts of intercultural communication in the construction phase.

1.7 The scope of research

This study focuses on exploring the impacts that bring by cultural differences to communication under the context of the international construction project. Considering the role that culture play in communication in the construction project, this research focuses on the cultural background of people with its impact on international construction project communication via communication activities among construction participants; identifying good practice of intercultural communication in the international construction project, providing guidelines for intercultural communication in the international construction project.

Considering there are different phases during the construction project and the changing project participants and project teams in the whole project life cycle, this research will focus on exploring the cultural impacts on communication among stakeholders of the international construction project at the construction phase.

1.8 Significance of the research

This research will provide a view to reconsidering individual and the whole management

process. Studying the relationship between culture and communication can help us to gain a better understanding of the function of communication. Understanding how culture affects communication can assist us in enhancing management performance and improving the effectiveness of communication in the international construction process, enabling us better fit in the local working environment and improve team cohesive.

1.9 The structure of this research

This thesis will be divided into nine chapters, and each chapter will discuss and resolute the problem mentioned in the chapter. The content of each chapter is listed down:

Chapter 1

This chapter will include the research background, research objective, research aim, scope of this research and contribution of this research.

Chapter2

This chapter discussed the definition of culture and theory developed by different scholars. Besides, intercultural communication was also explored and discussed to further distinguish intercultural communication and intercultural communication. The comparison was also made in this chapter. Cultural background is discussed at the end of this chapter.

Chapter 3

This chapter main pays attention to the definition of the communication process, the process of communication and the relationship between communication and culture. This chapter aims to provide a review of communication and try to explore the relationships

between culture and communication. The review of concepts of communication will provide a theoretical basis for the further explanation of intercultural communication.

Chapter 4

Identifying the situation of intercultural communication under the construction project, explored the participants with different cultural backgrounds in the international construction project, in addition, the impact of intercultural communication also identified, to handle with negative impacts from the intercultural communication, the measures for improving intercultural communication concluded.

Chapter 5

Representing the research methodology and steps used in this study. The qualitative research method of the case study will be introduced. The analysis of qualitative data the theory adopted in data analysis will be presented in this chapter.

Chapter 6

Presenting the exploring on the factor of culture affecting communication in the international construction phase, identifying the impacts, illustrate the responses to cope with challenges, which bring by the intercultural communication.

Chapter 7

List down all the findings and analysis results based on the interview and data from two projects and discuss the impacts of culture on the project communication. Propose guidelines for project communication for further improvement in international projects.

Chapter 8

Presenting the finding of this research. evaluating the results and related to literature in international construction project communication management

Chapter 9

This chapter mainly comments on the possible implication of this research and points out the limitations and recommendations for future study.

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CHAPTER 2: LITERATURE REVIEW PART I: CULTURE AND CULTURAL BACKGROUND

2.1 Introduction

The literature of this thesis is divided into three parts. The first part of the literature starts by discussing culture definition and cultural theory proposed by Hofstede and Edward Hall, in addition, the cultural background is also explained. The second part of the literature review in chapter three discussed the concepts of communication. The process of communication and the relationship between communication and culture be explored and discussed; meanwhile, the review in chapter 4 regards the concepts of international construction projects and discusses intercultural cultural communication in international construction projects.

By the literature review, the impacts of intercultural communication are identified, which further facilitated the clarify of impacts of cultural background on project communication. Besides, the review also considers the mutual relationship between culture and communication. The interrelated relationship among international construction projects, cultural background and communication is clarified. This thesis aims to establish a guideline for project managers to identify the influence of culture and take corresponding measures. Therefore, the review of guidelines is also presented at the end of the literature review.

2.2 Definition of culture

Culture is considered as a” vague conception”, according to Culture is related to anthropology and ethnography and cannot give out preciseness definition, and there have greatly different perspectives between researchers Chan and Tse (2003). It is also noted

by Zein (2012) that culture is a concept that combines outlooks, specifications, beliefs, conditional customs and the way of expression which reflects the thinking, beliefs, behaviour and habits of people.

The definition of culture is given around the perception of people and the society they live in. therefore, the concept of culture is relatively complex; it involves the different dimensions of social activities. The definition below represents differently the concept of culture from different researchers.

Obikunle (2002) noted that culture is a point to sharing nature of any group since the group shaped their ways in dealing with problems and shaped their lives and the social environment they lived in. Pires and Macêdo (2006) pointed out that culture can show the values of members in a group sharing, the shared value be spread or expressed by cultural symbol, for instance, language, stories and ritual etc. All these can influence individuals in aspects of behaviour, thoughts, style in coping with things. At the same time, Culture can help the group form consensus through people; it can satisfy the diversity of society. Hofstede and Hofstede (1984) insisted that culture possess the function of distinguishing different groups of people, which approved the base for communication barriers.

Culture is regarded as a grand and broad concept. Many scholars try to give the definition of culture from different aspects and emphasize dynamic process of culture. For example, Godwyn and Gittell (2011) noted that culture should be viewed from a dynamic perspective. Culture is considered to be derived from a specific group, and is considered to be the result of adapting to the external environment and internal integration. At the same time, new group members are taught to accept such a specific adaptation model;

Walsham (2002) believe that cultural refers to shared norms, values in a specific society. culture can also be in the form of a physical thing, such as clothing, objectives and so on; In the social level, it always connected to laws, economies.

Others view culture as knowledge sharing and formulation of common sense. For example, culture is deemed as a shared common sense, and inter-cultural management can be considered as knowledge management, and also culture can be a resource that is used (Holden, 2002). Therefore, different cultures formed different cultural groups of people, and in a certain group, they will share the common experience which helps form the way of understanding the world;

In this way, culture also can be the underlying factor that brings divergence, since different groups of people with certain cultural backgrounds, culture brings a difference in the aspect of the way people approach the environment around them, the way people participate in a group or communities. Different cultural backgrounds and their impacts are the concern of this thesis; before the impacts of cultural background in the international construction project, the theoretical background of culture will be further introduced to gain a deeper understanding of culture.

2.3 Hofstede's cultural dimensions theory

It is considered that the cultural dimension theory developed by Hofstede categorized culture in different dimensions as the most widely used cultural framework (Soares et al., 2007). The framework can help to understand cultural differences between different nations and further guide the strategies or measures that should be taken to refer to a specific culture.

Cultural dimensions are developed since the 1980s and expanded into six dimensions

which are Power distance, collectivism versus individualism, uncertainty avoidance index, femininity versus masculinity, short term versus long term orientation and restraint versus indulgence (Hofstede et al., 2005). In this section, the explanation of all six dimensions developed by Hofstede is listed below:

1. Power distance

The power distance index shows the tolerance of people toward inequality and power. The higher the power distance index, the more acceptance of power difference and inequity or rank.

2. Individualism and collectivism

Individualism shows societies attach more importance to achieving individual goals, while collectivism is perceived as there is more attention put on the group's goal.

3. Uncertainty avoidance index

Uncertainty avoidance indicates tolerance to the uncertainty and puts importance on how to cope with unexpected events. The higher the uncertainty avoidance index, the lower the tolerance to risk-taking and uncertainty. Whereas the lower uncertainty avoidance, the more open-minded to embrace risk.

4. Masculinity and femininity

This dimension shows the preference of society for sexual equality and behaviour. Masculinity shows the characteristics of the assertive and different roles of gender, and femininity indicates the characteristic of modest, nurturing and so on.

5. Long-term orientation and short-term orientation

This dimension shows the extent to which societies consider their future. Long-term orientation culture tends to focus on the future and pursues long term success. Short-term orientation indicates the concern with the near future and more concern with the present.

6. Indulgence and restraint

This dimension indicates the tendency of societies to demand their desires. Indulgence shows the extent to which needs to be satisfied without much depression, while restraint shows there is suppressing on need satisfaction.

However, Although the cultural dimension is be deemed as a pioneer work that opens a door for various behavioural science disciplines, there is still lots of criticizing from scholars (Blodgett et al., 2008). For example, the criticism from Blodgett et al. (2008)said that there is a lack of sufficient validity of Hofstede's cultural instrument when adopted in the individual unit of analysis; McCroskey (1992)suggested that the data collecting and sample size vary between different nations, there exist bias in the data collecting, For example, the sample collected in South Africa and Pakistan be considered small and narrow, which may not represent the national culture.While knowing the differences or the impacts brought by cultural dimensions can help a project manager to make a better decision in the international construction project.

In this thesis, the cultural dimensions can help to know better about culture among a different nation before the guideline is developed for international construction projects.

2.4 Edward Hall's cultural framework

Compared to Hofstede's cultural dimension theory, Edward Hall divided culture into two

main categories based on the situation of communication, namely are low-context culture and high-context (Hall, 1989).

According to Hall (1989) the conception of low-context and high context regarding the way people communicate in different cultural backgrounds, what makes sense is the extent to which meaning be expressed by actual words used or implied by the situation.

The definition of high context culture and low context culture are listed below:

High context culture

High context culture means that enormous information will express in an unspoken way, in which information is transmitted implicitly when communicating; there are lots of high context culture countries such as Saudi Arabia, Japan and Greek.

Low context culture

Low context culture indicates that the information is transferred directly by the actual words, and there are few situations in which the message is transferred implicit or hidden. There are also lots of countries under the low context culture structure, such as North America, the UK etc. (Würtz, 2017). It is deemed that the meaning and the cultural context are highly bound up; In order to draw out understanding in communication, it is necessary to consider meaning, context and code. In context, the factors include situations related to an event (Würtz, 2017). Under the high-context culture and low-context culture theory, communication have a different way of communication within the different cultural environments.

2.5 Trompenaars' Seven-Dimension Cultural Model

In addition to the cultural theory developed by Hofstede and Edward Hall, Trompenaars and Hampden-Turner (2011) identified seven dimensions of culture, the discussion on the

seven dimensions will enhance the understanding of different cultures. The seven dimensions are discussed and listed below:

1. Universalism Versus Particularism

Universalism emphasizes rules and applies rules to everyone without exception. On the contrary, specialists emphasize that it varies from person to person and analyzes specific situations.

2. Individualism Versus Communitarianism

This dimension can be related to Hofstede's dimension; in this dimension, individualism holds the view that people can make their own decision and believe in personal freedom, while people of Communitarianism consider the group is more important than the individual.

3. Specific Versus Diffuse

People of specific believe that work is separate from personal lives, and a good relationship is not necessary for work. However, diffuse people may view the relationship as a very important aspect in work, and there is overlap between work and personal work.

4. Neutral Versus Emotional

Neutral people are not used to revealing their thoughts or feeling of themselves, while the emotional people prefer to express themselves, and in their cultural environment, it is also encouraged to express their emotions.

5. Achievement Versus Ascription

People of achievement value performance instead of titles or power, while people of

Ascription value more about title and power. They will show their respect to authority people when making challenging decisions.

6. Sequential Time Versus Synchronous Time

People of Sequential Time follow the schedule and underline punctuality, while people of Synchronous Time view the schedule and plans as flexible.

7. Internal Direction Versus Outer Direction

Internal direction people believe that they can change or control the environment to realize goals, while outer direction people hold the view that environment change them and it is wise to work with the environment to realize goals. This model explained people from different cultures have different ways of thinking, which can help people understand the difference and reduce misunderstanding; it can also help establish a better working relationship between team members.

2.6 Cultural differences

According to DuPraw and Axner (1997), there are six fundamental patterns of cultural differences: different communication styles, different attitudes toward conflict, different approaches to completing tasks, different decision-making styles; a different attitude toward disclosure, and different approaches to knowing.

In the aspect of communication style, which refers to the usage of words or phrases in language and the different importance extent of non-verbal communication ways; the way or attitude treats conflict is different mainly in viewing it as a positive thing or trying to avoid the conflict, which has great difference between eastern country and western

country. While at the workplace, the approaches that completing the task is different, it mainly resulted from the different access to reach the resource, different ways that appraise the rewards of work completion, a different attitude towards time and how the relationship should be established during the task and how to collaborate. These aspects can connect to the cultural dimension theory of Trompenaars.

As for the decision making, it depends on the role that individuals plays in the decision making progress, which also differs from culture to culture, especially differ from eastern country to western country. The attitude to disclosure, which means the different way to express emotion, since some culture does not encourage frankly talking about conflicts or personal information, show the emotions behind the misunderstanding; considering on the attitude to disclosure is different from one culture to another is important. Approach to knowing that mainly regarding the way people get to know things, there is difference between western and eastern culture in cognition.

2.7 Definition of Intercultural communication

It is easy to mix up the meaning of these two terms, namely are intercultural communication and cross-communication, when communicating across cultures. However, the emphasis of these two terms is totally different. Compared to cross-culture communication which underlines the comparison of communication among different cultures, intercultural communication refers to the communication that occurs between members from different cultural backgrounds (Ting-Toomey & Dorjee, 2018).

Furthermore, Lustig et al. (2006) also distinguished intercultural communication from cross-communication. Intercultural communication occurs when there are huge cultural differences that generate different explanations and anticipating towards how to

communicate effectively. While cross-cultural communication stresses the study of certain ideas among many cultures, Therefore, cross-cultural communication refers to the comparison of the interaction between people with different cultural backgrounds.

It was defined by Gudykunst (2003) that intercultural communication refers to communication that occurs among people with different national cultures.it is also be deemed as an endeavour that people from different cultural backgrounds are trying to communicate. Cross-cultural communication is concerned with how people with different cultural backgrounds work together, meet deadlines, develop relationships etc. (Varner & Beamer, 1994).In the globalization background, an organization must develop and maintain good relations with its employees from different countries with different cultural backgrounds (Harvey & Griffith, 2002).

To further understand intercultural communication, the goal of intercultural communication should also be clarified. Ting-Toomey and Dorjee (2018) noted that the general goal of intercultural communication is to generate a shared meaning between persons from different cultures.

2.8 Comparison between cross-cultural communication and intercultural Communication

There is a different underline point between cross-cultural communication and intercultural communication. Before further exploring the relationship between communication and culture, it is necessary to distinguish intercultural communication from cross-cultural communication.

Intercultural communication stresses the interaction of people from different cultural background the interpersonal communication across cultures .intercultural communication pay more attention to the engagement of people from the different cultural background (Lustig et al., 2006).

Cross-culture communication puts more importance on the comparison between different cultures. Cross-cultural communication can also be regarded as the study of certain ideas and concepts in a different culture(Ting-Toomey & Dorjee, 2018).

Therefore, intercultural communication refers to the interaction among people of different cultural backgrounds; the cross-cultural communication regards the comparison of interaction among people from the same cultural background between those from different cultural backgrounds.

2.9 Cultural background

Cultural background is deemed as a factor that affects human behaviour in different aspects; many scholars investigated the impacts of cultural background on various aspects of human life(Rienties et al., 2013).

What is the cultural background of people? Keengwe (2015)defined cultural background as a collection of beliefs, values and stereotypes of a person from a society, which distinguish him or her from other societies.

Different kinds of cultures have their characteristics towards beliefs, values, norms which shape people. Meanwhile, the imprint of culture is not only in the mind of people but also represent peoples' behaviour since the shared perspective over beliefs, values, and norms

can also influence the behaviour of people from certain kinds of culture (Lustig et al., 2006). Therefore, people from different parts of the world with different cultural backgrounds can be very different either in thoughts or behaviour.

Universiti Malaya

CHAPTER 3: LITERATURE II : CONCEPTS OF COMMUNICATION

3.1 Introduction

Effective communication is highly appreciated since a successful project can be delivered by effective communication (Sonnenwald, 1996). This chapter discussed the definition of communication, communication types in the project, and the process of communication also explored. In addition to concepts of communication, The process of communication and the relationship between intercultural communication and cultural background are also discussed.

3.2 Definition of communication

Communication is described as the possible ways that send or receive messages or information via communication activities and artefacts, a process of exchanging ideas and information (Anumba & Evbuomwan, 1999). Osgood et al. (1957) defined communication as the mutual influence between different systems by various media which connect them.

Meanwhile, Theodorson and Theodorson (1969) pointed out that communication can be described as the ways for transmission, which includes thoughts and values among individuals and groups. Generally, Communication is a process in which messages, beliefs and understanding will be exchanged during the process between individuals. However, communication is not only a process but a more complex mechanism.

Researchers such as Pietroforte (1997) said that communication is a mechanism to achieve the common understanding of agreements by conveying various ideas and thoughts. Communication has the function of transmission in which knowledge and

information be exchanged (Anumba & Evbuomwan, 1999).

When it comes to the field of construction, communication plays the role of combining knowledge and information. Communication is constantly process carried out by project participants, and there is an overlap of different departments and disciplinary in the process (Fischer, 1989). Therefore, the communication process can exchange knowledge and information during the process of communication in the construction project.

Moreover, Hoezen et al. (2006) stated that at the construction process, the effectiveness of the construction process is greatly lean on the communication efficiency; quality communication can contribute to an improved decision-making process in the construction project, poor communication in a construction project will waste time and money, while better communication can lead to stakeholders' satisfaction and less delay and expense.

For this research, Communication in the background of the international construction project is focused on; the conception of this study is derived from basic human communication definition and developed to explore intercultural communication in international construction projects.

1.3 Communication process

Done (2004) said that the communication is initiated by the message sender's intended to convey information and end when the information understands by the message receiver. Thomas et al. (1998) further summarized that the message sender decides the contents of the message, encode the message, chooses media and channels to be used in

communication, make sure the message can transmit to the receiver. Basically, the senders determine what should be conveyed and the purpose; the intention should also encode in the message that is going to convey(Done, 2004).

Thomas et al. (1998) noted that the sender encodes the message in the form of a phrase, picture or non-verbal ways which refer to the tones emotion; the sender should also consider proper communication tools or media which enhance the understanding of the message from the receiver. Hollingsworth (1986) also mentioned that the message given out should be received by all aimed receivers, and the measure taken by the sender to convey information can also manifest the importance of the message or the extent of urgency the sender intends to inform.

Hollingsworth (1986) also noted that the Communication process can only be finished when the receiver receives and understand the message. Gibson and Hodgetts (1990)suggested that understanding and decoding of the message is greatly determined by the receiver's knowledge, comprehension of the message, the relationship between the senders and message receivers. The opinion conveyed by the sender and the receiver's ability to comprehend the information in the message is important in the communication process.

He and Liu (2010)also added that the ability of the receiver to understand the message varies from the knowledge experience, which can shape their receptivity. Culture can also affect the opinion of the receiver on the message. The difference between sender and receiver on attitudes, habits, and perspective may lead to disputes and conflicting between the communicator, and the different opinions will also cause incoherent communication; the environment and the media chosen by the sender will also affect the ability of the

receiver to accept or receive the message.

In order to clarify the message or understand the information given by the sender, the receiver can ask the sender for further information. This is the feedback in the communication process. The form of the feedback can be verbal or non-verbal; all the feedback is important for the communication process since the feedback can reflect the information be understood or not.

3.4 Communication models

PMI (2017) mentioned that there is a basic linear model of communication, just the message sender and receiver. This basic model can also evolve and include feedback elements and further develop into a complex one that is intended to show possible communication processes between people. The different communication models are explained in this part.

3.4.1 Basic communication model

This basic model is also a linear model which focuses on the message or information that is being delivered but does not care much about if the understanding of the sent message; in this model, the process is combined with encoding, transmitting the message and decoding.

3.4.2 Sample interactive communication model

This model consists of the message sender and receiver and consider the necessity that the message needed to be understood. Meanwhile, the noise during the procedure is considered; the noise could be the distraction of the message receiver, such as different opinions of the message receiver, or without relevant knowledge or interest in the

message. The factor that adds to the sample interactive communication model is feedback. Acknowledge is the message receiver giving out a signal that already received the message but has nothing to do with understanding the message. Feedback is a comprehension encoded message from the recipient; if the sender considers the feedback matches the original message, it is deemed as a successful communication.

3.5 Types of communications

PMI (2017) classified different types of communication; internal and external, formal and informal; internal communication, which is the information exchanged among the project's internal stakeholders. External communication mainly involves stakeholders outside the project, such as customers, government and other projects or organizations. Formal communication is a type of communication based on formal meetings, stakeholder briefings and presentations. In contrast, informal communication is conducted by email, social media and informal meetings.

Guevara and Boyer (1981) noted that the three areas of communication, which is interpersonal communication, communication between interpersonal and inter-departmental, communication connect external and organizations which can be divided into two parts, which are the inter-organizational and organization-environment communication. Different areas of communication have different effects, such as interpersonal communication have its effects on cognitive phenomena.

This study is concerned with the international sub-constructors and is dedicated to exploring four different dimensions of communication in a project, which include internal, external, formal and informal communication.

3.5.1 Interpersonal communication

Interpersonal type is mentioned by Kreps (1986) that interpersonal communication can contribute to relation establish and maintain, he also pointed interpersonal communication can assist with the transmission of information, small-group communication enables team members to coordinate working activities. Multi-group communication is on the work group level and stresses communication among different groups.

3.5.2 Internal and external communication

Verčič et al. (2012)said that internal communication is defined as all kinds of communication that happen within the organization, and it is the process that information exchange among the organization's participants aimed to make consensus; it can control the distribution of information and internal media; meanwhile, internal communication can help with inspiring employees and further improve company's competitive and create value to the company and can also assist employees in combining their goal with organizational goals, from this aspect, internal communication can be seen as aspiration and build a strong culture to the company.

Gillis (2006) noted that Internal communication be divide into three area s which is hierarchical communication, mass media communication, the non-formal network of communication; in the hierarchical communication pattern ,the information remove from the top manager to every employee; mass media communication is evolved to cope with inconsistency of the information transmission from the managers of the organization, form the newsletters ,magazines, bulletin boards to the electronic delivery mechanism, and the content of the internal communication also has developed as well , from the simply introduce to organizational activities to professional strength and weakness

analysis of organization, the channel of internal communication form is greatly influence by technology; non-formal communication networks is always be called ‘the rumor’ or the ‘grapevine’ and this kind of internal communication is will be seen as a quick, efficient way and connect communicators with other employee in efficient and inexpensive way.

Welch and Jackson (2007) mentioned that Internal communication is happening coherently and continuously in an organization and can be divided into two parts, including the informal part over grapevine and the managed communication, and he also interpreted internal communication from the stakeholder approach that the internal communication is considered as a kind of strategic management in terms of mutual relations and interaction within all levels of stakeholders in an organization.

Good internal communication can contribute to the success of one organization. In this information era, there are two assets knowledge and interrelationship from the employees (Ruck & Welch, 2012); Internal communication is the critical factor in the process that helps an organization produce value from information by using intellectual and innovation of the employee(Quirke, 2017).

3.5.3 Verbal communication and non-verbal communication

McDuffie (2013) noted Verbal communication as a type of communication through spoken language, which conveys intentional information from sender to listener. Verbal communication can also be deemed as a kind of oral communication; all the information is conveyed by spoken words, the sender contains feeling, ideas, perspective, thinking within his words and convey them depending on different situate in forms such as speeches conversation. Verbal communication or oral communication is based on language.

Krauss (2002) point out that human is unique in using language in communication. During oral communication, the verbal message carries meanings and intentional information the sender encodes into the spoken words, while the receiver can understand the spoken words goes beyond the literal meaning and capture the potential meaning that the sender intends them to know. To accomplish this procedure, the communicator must consider the opinion of the conversation participants in the communication process; language enables humans to communicate with displacement, semanticity and generativity, which further lead to innovation, an unlimited message that is not bound to the present situation. What should be noticed is that although language is the basis of oral communication, Verbal communication includes not only spoken language but also written language and sign language. The difference and categories of oral and not oral communication between nonverbal and verbal communication are shown as follows:

	Verbal Communication	Nonverbal Communication
Oral	Spoken Language	Laughing, Crying, Coughing, etc.
Not Oral	Written Language/Sign Language	Gestures, Body Language, etc.

Figure 3: The category of verbal communication and nonverbal communication (Source: Luman Learning, n.d.)

Verbal and non-verbal communication both play an essential role in communication in a multicultural environment; this research focuses on the language factors in intercultural communication and explores the effects that bring by language competence in an international construction project.

3.5.4 Non-verbal communication

In order to understand the difference between cultures, this section aims to explore the different aspects of a culture to find the points in a culture that are different from one to another. There are different types of nonverbal communication that can be divided into nine types; these types can vary between cultures and gender.

Facial expressions take the biggest part since facial expressions can be noticed at first sight; although nonverbal communication differs from one culture to another, there are four expressions that share the same meaning, which is the facial expression of happiness, sadness, anger and fear (Frith, 2009). The gesture means to convey meaning by consciously movements or signals, gesture can vary between cultures and the main gesture are waving, pointing and figures to show certain amounts (Goldin-Meadow, 2014). Paralinguistics is a kind complementary to language, in the form of tones and pitch of voice. There is a different mean to one sentence when taking a different tone or voice (Rankin et al., 2009). Body language and posture can convey a great amount of information, which is related to the attitude of one person towards something and convey the feeling of people (Sokolov et al., 2011). Proxemics means the 'personal space' notion to different people, which can differ between culture and personality, it shows the distance that people need and space consider as theirs in social life (McCall & Singer, 2015). Eye Gaze can show the feeling and emotion of one person, it is important non-verbal communication, it includes looking, staring, and blinking, which show different meanings. Haptics, as a kind of non-verbal communication, can convey different emotions and willingness; it differs between gender; women always use touch to convey care and concern, while men will tend to use touch to show their status and power of control (Sekerdej et al., 2018). Appearance can affect the first impression of people, and this is also be considered as a kind of nonverbal communication in social life. Appearance

does not only include the choice of clothing but also include colour and hairstyle chosen by people, all these factors can change people's emotion or even their physiological reaction, the judgment to someone and the judgment is affected by different cultures (Gilroy et al., 2002). Artefacts in the picture or image are used by people to express different information that is important to them, especially through social media.

Nonverbal communication plays an essential role in cross-culture communication. People convey through gestures body language can differ between cultures. No-verbal communication includes facial expression and gestures and includes some aspects of social activities, which include the arrangement of the seat, individual distance and perspective towards time (DuPraw & Axner, 1997). Nonverbal communication also includes the sound made by people to express their emotions and feelings, such as laughing, crying, coughing etc.

It can clearly see that the difference between culture in nonverbal communication in expression, gesture and post, tones and voice, personal space, artefacts, eyes contact etc., these differences in culture will influence communication in a subtle way, sometimes cannot be noticed easily. In light of the theory of Edward Hall, non-verbal communication is more expressed in a high-context culture, in which the communication will assist by non-verbal communication, knowing non-verbal communication is essential in understanding cultural differences in intercultural communication.

3.6 The relationship between Culture and communication

Culture be deemed as a portion of the communication process. Meanwhile, culture is considered to create a culture, and the conception developed in one culture can be summarized to another culture (Gudykunst, 2003). It is also mentioned that culture is

created in communication. In contrast, communication is also be shaped, created and transferred by culture, generally speaking, communication continuously shapes culture, at the same time, culture is continuous shapes communication.

Through literature review, there are a few factors that can be identified between communication and culture: Language inferred from verbal communication; communication style can be inferred from nonverbal communication, since there is various nonverbal communication differ from one country to another, the behaviour in the communication of people from different culture also vary from one to another.

For this research, understanding the communication process and cultural factors in intercultural communication and their mutual relationship can help identify key factors that impact intercultural communication and understand the impact of intercultural communication itself. All of these procedures will help to establish a guideline referring to intercultural communication in the international construction project.

3.7 Cultural factors affect individual

According to Dadfar and Gustavsson (1992), From the perspective of observation, the elements of any kind of culture can be divided into two categories, one is the observable elements that constitute the surface culture, the another the hidden element of deep culture.

Surface culture includes customs, clothing, diet, technology and other elements that are easy to observe. However, the Profound culture contains factors that are not easy to understand, such as values, beliefs and thinking systems, but these elements can be observed in surface culture. All of these aspects can affect people in a certain cultural environment. The impact of culture on the organization and the behaviour of people from different aspects, Culture can affect people's thinking and behaving, which further cause

different understandings of the same thing(He & Liu, 2010).

Through all these literature reviews, it is clear that there is a difference between culture, and cultural differences will affect communication since there are various dimensions that exist in culture, and there is a different communication style that also varies from one culture to another.

Connecting all these aspects with the communication process model from PMI (2017), the communication style and the perception of the sender is affected by culture, which will affect the receiver's understanding of the message if the receiver is from another culture. To specify the cultural factors that influence communication between different cultures, further discussion will be made on this sector.

Therefore, The assumptions we bring to a conversation are formed from our worldview, which in turn is shaped by the culture we were raised in. Generally, culture can affect the way people think, express and decision making, the way of collaborating in the workplace and communication style, all the behaviours and thought in social life is shaped by culture through the cognition of people.

3.8 Communication in low-context and high-context cultures

Low context communication is kind of explicit and leaves little place to inference in communication, and the message receiver will understand the information conveyed by the sender, even if the receiver is not familiar with the cultural context, while in the high-context communication, lots of information is in the form of implied but not directly or explicit way. To understand the message, knowing the cultural background or cultural context is necessary for this situation.

CHAPTER 4: LITERATURE III : INTERCULTURAL COMMUNICATION IN INTERNATIONAL CONSTRUCTION PROJECT

4.1 Introduction

This chapter connected intercultural communication with the international construction project, the international project is a trend worldwide, while the research on intercultural communication based on an international construction project is insufficient, it is meaningful to connect intercultural communication with an international project, this chapter discussed the impacts of intercultural communication on an international project, suggested measures which can improve communication in international construction project and discussed theory background of guidelines.

4.2 International Construction project

An international project is deemed as a project characterized by multiple locations involving multiple entities and organizations (Lientz & Rea, 2012). The International construction project is a typical stand of an international project; According to Tonry and Farrington (1995), the conception of international construction projects is derived before the twentieth century at the colonial period, as the development of the economy and the process of globalization, the international construction project industry further developed and expanded.

Chan and Tse (2003) defined international construction projects as a project located overseas involving multinational participants from different political, legal, economic, and cultural backgrounds. Meanwhile, Stebbings (1998) said that an international construction project indicates that within the contractor, the employer or consultant does not belong to the same country.

Therefore, a construction project can be considered as a project involving global project teams which contain employees or firms from different countries or cultural backgrounds. According to Chan and Tse (2003), An international construction project may locate in Singapore, which involves a Russian plant, a Japanese management team, a labour force that forms throughout Asia and other stakeholders from different countries. Hence, cultural factors in the international construction project have become an essential consideration for project managers. The next section will intrude on the knowledge background.

4.3 Communication in the Construction process

The understanding procedure of a construction project is useful to identify the communication background in the different construction phases.

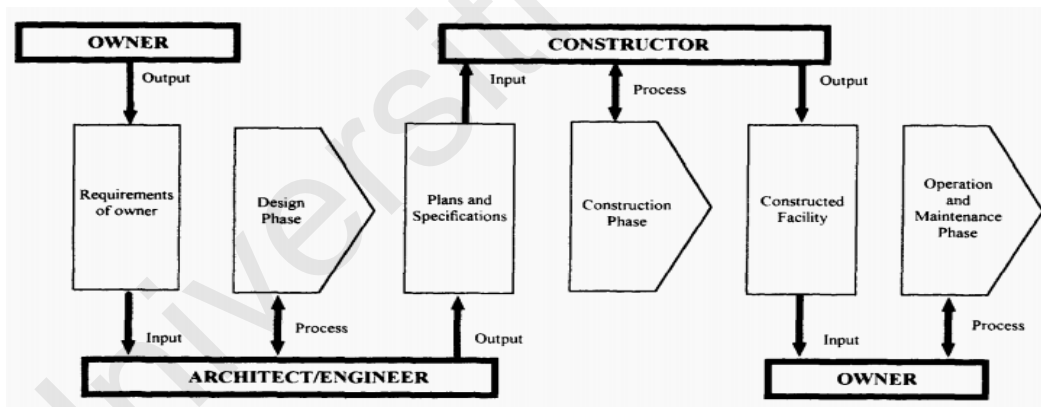


Figure 4.1 The general construction process (Source: Arditi & Gunaydin, 1997)

According to Arditi and Gunaydin (1997), a construction process comprises six phases(see figure 2.2). The construction process starts with an owner who wants a constructed facility, requirements from the owner conveyed to an architect. The architect then transforms these requirements into a design plan; This plan is contracted by a contractor and then enters the construction phase; after successfully completing the facility, the constructor will deliver the completed facility to the owner, and the operation

and maintenance shall start.

The construction process described by Arditi and Gunaydin briefly show the major phase of construction. This research will explore communication among Project participants at the construction stage.

4.4 Communication in the construction phase

There is a call for effective communication in construction, and it is believed that the project manager plays an essential role in communication at the construction stage, and the choice of communication tool also affect the communication effectiveness in the construction phase (Carlsson et al., 2001). it is also suggested by Liu (2009) that the frequency of communication problems that occurred in the construction stage is the most frequent compared to other construction stages; the main contractor is a key part of the communication project during the construction stage. There are different communication factors that contribute to the communication effectiveness at the construction stage, such as the complexity of construction and the capacity of the project manager.

4.5 Construction project stakeholder

Project Stakeholder communication can have a great impact on the success of a project (Naqvi & Aziz, 2011). the stakeholders of the construction project and the relationship between them are discussed in this part. Butt et al. (2016) suggested that the Consensus and satisfaction of the Project can only be achieved by communication among stakeholders. Instead, lack of communication and stakeholder integration is the drivers which lead to uncontrolled changes to the project (Zou, 2006). Meanwhile, it is noted by Prajogo and McDermott (2005) that the different nationalities and different organizational cultures will influence the project communication. Obviously, effective communication

will contribute to the mutual trust between stakeholders (Turner, 2009). however, keeping an effective communication routine is not easy to achieve, it needs continuous effort in communication(Butt et al., 2016).

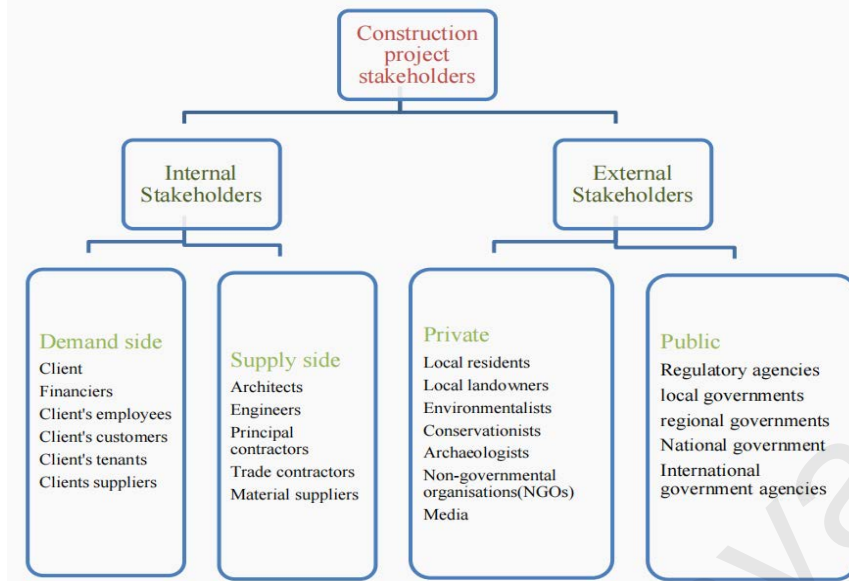
4.6 Identifying and Classifying stakeholders of the construction project

Stakeholders are deemed as those people who impact the project and are affected by the project(PMI, 2017). There is different kind of stakeholders in a different project, for a typical construction project, the major stakeholders include the design team, clients, sub constructor and project manager(Jin et al., 2017).

There are different ways to classify stakeholders, such as classify based on stakeholders' attributes, classified based on the interest-impact index and classified by contractual relationship and classified by stakeholders' attitudes to the project(Bourne & Walker, 2005; Olander, 2007).

Classifying stakeholders by a contractual relationship can divide the stakeholder into external and internal stakeholders(Winch, 2009). Based on the division, the internal stakeholders have a formal contractual relationship with the project owner, who are further divided into the demand side and supply side. In contrast, the external stakeholder does not have a contractual relationship with the owner, who is further divided into private and public stakeholders.

Figure 4.2 classified stakeholders of a construction project(Source: Winch, 2009)



On the demand side stakeholder, there is client, financiers and other stakeholders related to the client by contractual relationship; while on the supply side, there is engineers, contractors and suppliers connected to the project owner by contract; the external stakeholders refer to the local authority and other parties which have interests with the project.

4.7 The relationships among stakeholders

Mead (1999) noted that the contractual relationship established communication linkages among stakeholders and underlined who should control important informants' flow.

At the same time, the ways of procurement applied will affect the organization design and how construction will be organized, even decide what kind of communication channels will be applied(Xie et al., 2000). According to Liu (2009), it is crucial to recognize the contract type used in the project before identifying the relationship between stakeholders.

4.8 Multicultural background of construction project participants

Under the context of globalization, It is inevitable that the construction project team s comprised of participants with multi-cultural backgrounds. While the challenges and problems arising during intercultural communication are because of cultural differences,

the challenges and issues raised in this process also must be addressed.

According to Ely and Thomas (2001), the different cultural backgrounds of project participants will bring a variety of perspectives, knowledge and thinking to problems resolution. This means the advantages of the multicultural project team can facilitate a project or company. While the different values and norms may also be a challenge.

It is identified by Elron (1997) that managing cultural differences is a challenge to multicultural teams, the cultural problems that exist among team members can lead to conflict and poor performance (Shenkar & Zeira, 1992). people in the project with different cultural backgrounds with a different opinion on the environment, intentions which may lead to negative impacts; and this difference may cause low team performance.

There are five cultural challenges concluded by Pearson et al. (2017), which face project managers, namely, are the cohesiveness development, coordination and issue control; dealing with distance problems and dispersion of teams; cultural diversity management; communication maintenance and conflicts management.

To cope with challenges, Ghoshal (1989) argued the necessity to develop cultural sensitivity and abilities; Ochieng and Price (2010) also mentioned the establishment of a cohesion team to faster respond and efficient to challenges and changes. Ochieng and Price (2010) also noted that the intercultural communication on constructing project teams with different cultural backgrounds is underdevelopment.

Furthermore, the construction industry pays not sufficient attention to the cultural problems facing the project team. However, the environment is more complex than before, it is necessary for construction project teams to enhance their competence to handle the

cultural challenges brought by the multicultural background of construction project participants.

4.9 Factors that affect intercultural communication in international construction project

Different factors that affect intercultural communication have been explored in previous research work, there are many researchers who explored factors affecting intercultural communication. These factors are discussed and listed below:

Cultural identity

People's sense of belonging to a certain cultural group is formed in the process which formed in the process of membership in a specific culture. It involves learning and accepting tradition and many other cultural aspects of the particular cultural group (Lustig et al., 2006). Therefore, different people with different cultural backgrounds will have a different cultural identity, which distinguishes them from other cultural groups.

Personal identity

Personal identity refers to different characteristics which people assure it is different from others, such as people view them as studious or sociable; personal identity also affects intercultural communication, according to Johnson et al. (2006), the personal characteristics will greatly affect the competence of intercultural communication when engaged in cultural training.

Language

Language is deemed as the most obvious factor in intercultural communication (Lustig et al., 2006). noted that language is an important factor that affects the relationship between

different cultural groups since language plays an important role in the cultural identity between different cultural groups.

Furthermore, The degree of complication in communication is affected by language, since if communication with inaccurate language or misinterpreted, the effectiveness of communication will be greatly influenced(Tone et al., 2009).

Language is the basic communication skill. Considering the culture is embedded in language, culture will affect the way people expressing; therefore, different cultures have different communication ways which may cause misunderstanding during the communication process.

Ethnocentrism

The values within people refer to the ways how they live life and how to interact with others. Generally, it is the things that people take for granted (Jones & Quach, 2007). Ethnocentrism happens when people believe the way they do or see things is the right or only way, which negatively result in judging things if things don't conform to their world value, and tend to consider others' behaviors as odd or not proper.

Cognition

They are the underlying cultural values and assumptions embodied in our communication with others. These values are so deeply rooted in our hearts that we often don't know them, which can lead to the dangerous assumption that the people with who we communicate have the same basic values as us(Glorianna, 2020).

However, there are different values, norms between different cultures, the assumption that people with the same values may lead to misunderstanding.

Geography distances

As a global virtual team develops, the geography distance is considered to be a factor in intercultural communication, since people sometimes can not interact with each other in the real world because of geography factors, which causes limitation on the choice of communication tools(Jones & Quach, 2007). By information technology, people can arrange an online meeting or send email; However, compared to face to face communication, less information will be shared between them.

Prejudice

According to, prejudice is a negative attitude against other people since faulty and stereotypes. Prejudice refers to the biased or intolerant attitudes to another person or groups just because they may be a part of another group or race; Prejudice includes the assumption of a person or group based on their own attitudes or perceptions. There is a total of 6types of prejudice that can be found in intercultural communication(Jones & Quach, 2007).it is also noted by Gordon Allport that prejudice will cause distort people's viewpoints. Based on this prejudice, intercultural communication can also be greatly influenced.

Stereotypes

Stereotypes also are viewed as an obvious factor that impacts intercultural communication. Stereotypes are the opinion referring to groups of people based on previous perceptions and formed over some time by culture. Negative stereotypes can be harmful to intercultural communication, especially when people be in a strange environment facing people from a different culture(Jones & Quach, 2007).

While the consequence of stereotyping is that the difference in one cultural group will not be considered in the interpretation of the message(Lustig et al., 2006). Therefore, the

communication between different cultural backgrounds will affect by stereotyping.

4.10 Impacts of intercultural communication on international construction projects

This part of the contents discussed the negative and positive impact of intercultural communication on the international construction project; all the impacts were drawn out by literature review. Based on the negative impact brought by intercultural communication, a guideline will be drawn out to handle the negative impact.

4.10.1 Negative impacts of intercultural communication in international construction project

Cultural issues are expected to contribute to conflicts among parties to an international project and increase difficulties in the management of the project(Fellows et al., 1994). Cultural barriers can influence project management systems. The degree of this influence depends on the team members' skill and environmental aspects and the strategies involved(Tone et al., 2009).

Intercultural communication may also lead to misunderstanding, and the greater the culture difference, the more possibility of communication barriers and misunderstanding will be. Cultural differences can do substantial damage to the organization of an international construction project (Chan & Tse, 2003).

Chevrier (2003)noted that intercultural communication is based on a diversified world view which can result in vague, complexity and confusion in team process and further pose potentially damages to the effectiveness of the team. The difference between competing values and expectations will bring an impact on the flexibility and application of appropriate management strategies(Laroche, 2012).

Without understanding, there can be no friendship. If one wishes to understand a people one must identify oneself with them. One must study their language, customs and culture. And they will be one's friends (Broster, 1976). Culture be viewed as an important part of the international construction process, referring to the relationship between culture and communication, communication under a specific cultural environment may bring conflicts and further cause management problems to the project.

4.10.2 Positive impacts of intercultural communication in international construction project

Cultural diversity communication may bring lots of benefits too. Such as bringing diverse perspectives, proposing more problem-solving skills and promoting innovation and creativity (Kamales & Knorr, 2019).

Intercultural communication plays a key role in promoting the rules in the formal organization, especially in information sharing and experience dissemination. The international team can share knowledge and skills among team members who can help them outperform teams that lack diversifying skills in decision making. Intercultural communication can also prompt consistent improvement since diversified cultural groups tend to question each other compared to groups working only within their home country. Frequent questioning and challenge for the status quo lead to continuous improvement. Intercultural communication can help promote the work of organizations to the international level; it will impact the outputs of the organization. Cross-culture can also affect the presence and availability of information.

Through a series of literature reviews, the impacts may occur, including bad and good aspects in intercultural communication. The main problems that arise in intercultural communication include conflicts, misunderstanding, low working effectiveness, affecting the implementation of strategies. The main benefits bring by intercultural communication include organizational innovation, various problem-solving skills, knowledge sharing and promoting continuous improvement.

Table 4.1 : The good and bad impacts of intercultural communication

Identified good impacts	Identified bad impacts
More problem-solving skills	Conflicts
Promote innovation and creativity	Misunderstanding
Sharing knowledge	Low working effectiveness
Promote consistent improvement	Affecting the implementation of strategies
Spur pursuit for higher level	Influence project management system

4.11 Measures to improve intercultural communication in international construction projects

There are any factors identified by researchers to facilitate communication in an intercultural environment. For example, Hofstede et al. (2005) noted that there are three aspects that should be considered in communication improvement, namely, are attitude, skills and knowledge. The measures proposed here can generally be classified into these three aspects. The proposed measures are listed below :

Cultural Training

According to Johnson et al. (2006), the participants of intercultural communication can be trained to get the necessary skills for intercultural communication. For example,

language skills, strategies and cultural knowledge can be taught and learned, which can facilitate intercultural communication. Meanwhile, learning different concepts in intercultural communication is more likely to create understanding between people from different cultural backgrounds.

Proper choice of communication tools

According to Whitworth and De Moor (2009), the communication tool have different forms and generally refers to electronic communication, such as email and discussion groups; there are also many applications used as communication tools; for example, online meeting room which can help team members communication, helping vital project data transmission and sharing files. All these factors can create collaboration between team members.

Proper organizational structure arrangement

According to Liu (2009), the approaches of project organization management can significantly impact communication among team members. Such as the measures of controlling relationships among participants and project procurement strategies can impact communication from management structure since the procurement strategies will define the responsibilities between different participants, which will establish communication lines and information flows.

Using proper language

It was suggested by Ting-Toomey and Dorjee (2018) that it is more proper to use inclusive language but not an exclusive language, using situational language but not polarized language to facilitate intercultural communication. Since inclusive language means the care of the use of verbal messages in an intercultural environment, make sure the

expression of comments to an in-group and out-group on an equitable basis. It is necessary to ensure effective communication by viewing people from different cultural backgrounds in the same and not to overemphasize the difference between different cultural backgrounds.

Trust building

Trust is essential to an intercultural work team since trust can affect the integration of the intercultural project. Trust play an essential role as glue in the multicultural project. It combines different project teams together. Meanwhile, trust will facilitate an open and honest environment among people in the multicultural project. In order to achieve trust, it is necessary to conduct team building and training, and it is also important to address any problem which may break the trust in the project(Ochieng & Price, 2010).

4.12 Guidelines

4.12.1 Definition and types of guideline

According to Cambridge Dictionary, the word guideline means the information which aims to suggest people on how something should be done or what something should be, while the definition given by the National Institute for Health and Care Excellence (2014)that a guideline is an evidence-based recommendation over various of topics, the aim is to improve individual awareness .in addition to make recommendations, the guideline also need to abstract the evidence behind the suggestion or recommendations and illustrate how the recommendations were developed from the evidence.

According to WHO (2014), there are four main types of guidelines, depending on the characteristic of guidelines, such as purpose, scope and the timeline etc. The four types of guidelines are standard, consolidated and interim and emergency guidelines. Therefore,

the guideline of this thesis aims to provide suggestions on intercultural communication in international construction projects through the research result drawn out by this thesis.

4.12.2 Contents of guideline

While the contents of all guidelines main contain an executive summary, the main body of the guideline and appendixes. Recommendation and evidence for the recommendation are the main contents of the guideline (World Health Organization, 2014). The contents in the guideline should identify the problem which is concerned by the guideline, and the solutions correspond to the problems and other information which support the solutions.

For this thesis, the guideline was developed to provide some recommendations or suggestions based on the research results to help project managers who are involved in international construction projects to make decisions referring to intercultural communication. Considering the general format of guidelines, The guideline of this thesis follows the general guideline format, containing the recommendations and necessary evidence to support the recommendations.

4.12.3 Developing guidelines

According to World Health Organization (2014), the steps to develop a guideline can be divided into planning, development, publishing and updating. The steps in the development stages include questions review and evidence quality evaluating, formulating recommendations using the Grading of Recommendations Assessment, Development and Evaluation framework and drafting the guideline documents.

While for this research, formulating of recommendation will through the identifying the impacts of cultural backgrounds to the international construction project, and through

conducting semi-structured interview and documentation research method explore the good practice in intercultural communication under international construction projects to draw out the guidelines.

.4.12.4 It The necessary to develop a guideline toward the impacts of cultural differences in international construction project

The study from Tu (2012) analyzed the failure and success reason of a multi-nation company and found that lack of good communication between staff from different cultural backgrounds was the main reason for the failure of the company, which means effective intercultural communication is an essential factor for the success of the company.

The cultural diversity will affect the performance of the project and contribute to frequent changes in project management, which will cause delays to the project; Furthermore, different aspects such as religion, nationalities, language problems, politics among the employees in an organization may arise conflicts in terms of team orientation, verbal and non-verbal communication, time zone. All these aspects will influence the execution of the team (Dadfar & Gustavsson, 1992).

Arising awareness of cultural differences among project team members and understanding the cultural diversity factors in the project can be successful factors to a construction project (Ramírez-Pagán, 2009). To avoid the problem or conflicts caused by cultural diversity, it is suggested by Miller et al. (2000) that the project manager should discuss the cultural difference in an informal meeting, valuing the difference between cultures and knowing more about cultural differences. All these measures will contribute to the cooperation and enthusiasm working environment building. At the management level, it is important for the project managers to learn to interpret the cultural sign and

find the sign of problems caused by cultural differences, and develop communication skills in a diverse cultural environment.

Therefore, it is necessary to establish a guideline for intercultural communication in international construction. Which can help the project find cultural issues and resolve cultural issues in correct measures, which further maximizes the advantages brought by the people with different cultural backgrounds in intercultural communication.

Universiti Malaysia

CHAPTER5: RESEARCH METHODOLOGY

5.1 Introduction

This chapter focuses on the research methodology choice and explains the reason for choosing these research approaches were explained. The Philosophical position of this research was identified at the start of this chapter, and then the reason to choose the qualitative method was given. The case study as one kind of qualitative research strategy be applied in this research, then the methods of sampling are discussed, the data collection methods are presented. For the collected data, the grounded theory be applied to analyse the findings.

5.2 Philosophical assumption

It is also suggested by Creswell and Poth (2016) that philosophical assumptions are the first step in the research design process. These philosophical assumptions are comprised of a series of conceptions, and researchers should keep asking themselves what the nature of reality is; how they know what they know; what roles value play in research; the language of research and what kind of method will be applied in the process of research. These five questions correspond to five different assumptions, which are ontological, epistemological, axiological and methodological.

5.2.1 Ontological assumption

For qualitative researchers, ontological assumption means a stance of multiple and subjective reality, which means reality is subjective in nature, and the individual participants of the research hold their own view on realities.

5.2.2 Epistemological assumption

As a qualitative researcher, it is intended to close the relationship between the researcher

and research participants, which also means the researcher should stay and spend time in the research field with research participants to obtain the primary information.

5.2.3 Axiological assumption

The research is value-laden for researchers, which derive from the close interaction with the research participants to obtain information; they attempt to report clearly and positively on the values and biases incorporated into the study. Therefore the axiological assumption is implemented in practice.

5.2.4 Rhetorical assumption

Researchers intended to write in an informal style; they may use the personal voice and use the language of qualitative research.

5.2.5 Methodological assumption

In the research process, Qualitative researchers need to share the understanding of others and understand how people structure and give meaning to their daily lives in the interaction with research participants (Lune & Berg, 2017).

5.3 Inquiry paradigms

After the researchers determine the philosophical assumptions stances for qualitative research, researchers should forward to the inquiry paradigms which frame their research. Paradigms shape the inquiry nature and determine what researchers look for and how will they interpret the phenomenon they see (Babbie, 2020). A paradigm is used to conclude and develop findings related to the phenomenon (Rashid et al., 2019). Two different types of paradigms, positivism and interpretivism, will be discussed in this section.

5.3.1 positivism

The world exists as an objective reality for a positivist, and it can be independently measured by the researcher(Rashid et al., 2019). Meanwhile, Crotty and Crotty (1998) also noted that positivism intends to explain the world accurately and aims to understand the phenomena scientifically.

5.3.2 Interpretivism

Unlike positivism, researchers under interpretivism intend to take a close look at social actors, concerned with the human being rather than objects, and try to understand and interpret participants' perception towards the researched circumstances (Saunders et al., 2009).compering to the positivists who prefer reliable and rigorous data, interpretivism intended to interpret how participants construct the meaning of the research circumstance, the interpretivism acknowledges the effect of their own social and historical background in the interpretation, but the ultimate goals of the interpretivism are to distinguish how participants make sense of the world(Creswell & Poth, 2016).

Combined with the question proposed by this research, it requires exploration of participants' thought, comprehension and perception regarding social reality and the international construction project context. The experience of participants in the international construction projects will give them an understanding of the impacts of cultural differences and the practice of communication.

The knowledge derived from the participants' perception of the situation can not be scientifically measured by natural science research, which positivism and quantitative applied. Therefore, the philosophical assumption of this research paves the way to the interpretive paradigm.

5.4 Qualitative research approach

According to Silverman (2020), qualitative research is one kind of research approach that tries to discover people's experiences. Compared to quantitative research, it is more concerned with the subjective meaning rather than the facts pursued by quantitative research.

The case study is a kind of qualitative research approach, which enable the research to explore a bounded system or more by detailed information collection and try to find out the experience of people to understand how they make sense of the world(Creswell & Poth, 2016).

5.5 Case study research

Case study is a common measure be widely applied in social science research and it can help adding knowledge in the social research field(Yin, 2009). Case study research do not have the requirements to the number of cases, which means the researcher can investigate one case or multiple cases based on the problem the researcher intends to explore(Creswell & Poth, 2016). Case study including a series of data collection tools, such as interviews, observations and documents, when there is not much to know about the problem, using case study method will provide the research detailed and abundant information (Lune & Berg, 2017; Yin, 2017)

What can be known From the literature review is that there is little to know how the impacts from different cultural backgrounds to project communication in the background of the international construction project and how international construction project copes with these impacts.

According to Yin (2017), it is more suitable to apply a case study when the research is about 'how' and 'why' problems. For this research, what intends to explore is how international construction project participants structure the understanding of the impacts from cultural background and values they put on the measures to cope with impacts. Therefore, this research considers a case study as the most appropriate approach to implementing here.

5.5.1 Limitation of case study

Although the case study approach is suitable for this research, there are also have some limitations of the case study approach that should be noticed. The ability of generalisation of case study approach was questioned since there is just one or few cases are studied (Yin, 2017). It is defended by that the case study concern more about particularization but not the generalisation. What emphasis by case study is the understanding of the uniqueness of each case while the care about generalisation may distribute the researchers from the characteristics that case itself is important (Denzin & Lincoln, 2011).

Another limitation to the case study approach is that it does not adopt a scientific approach like the natural sciences do, which contribute to subjective bias (Diamond, 1996). While considering the case study approach underlines the interpretation of participants' views through the researcher's own social and historical experiences, the case study can help correct the researcher's prior wrong views (Flyvbjerg, 2006).

5.5.2 The unit of analysis

Based on the research of Yurdusev (1993), the Unit of analysis is to identify what to study, the object or actor the research concern. There are three units of analysis, namely, are individual, groups of individuals and the whole of humanity. However, these three units

are not mutually separate but interconnected. Therefore, it is necessary to clarify the focus of the unit of analysis.

For this research, considering the object of this project is to develop guidelines towards the cultural background impacts on an international project, the unit of analysis should be the project, which comprises a group of individuals.

5.6 Conducting the research

Before conducting the case study research, it is necessary to conduct preparation and a pilot case study to make sure the researcher is fully prepared for the case study research(Yin, 2017).

5.6.1 Conducting Pilot case study

The pilot case study started in December 2020. The data was comprised of two parts:

- The pilot interview with stakeholders works in an international construction project, including project manager, engineer and site workers.
- The understanding from participants' perception of cultural impacts on the international construction project.

The purpose to carry out pilot interviews including to provide improvisation to the major work before a massive interview is conducted and helping to select proper research participants (Abdul Majid et al., 2017). Through conducting the pilot interview, the researchers can also see if the question of the research is appealed to the research participants to make sure this research can draw out good contributions.

There was a total of 8 individuals from international construction sites attended the interview, all of them were Chinese since construction projects in this research were all

conducted by the Chinese company, which four of them were from the construction project located in Dar es Salaam, Tanzania and the other four people is from construction project located in Mtwaran, Tanzania. They were divided into different categories based on their occupation(see table 3). All of them were invited to join online semi-structured interviews, which lasted about 30-40 minutes.

Table 5.1 : Participants of pilot interview

Occupation of the interviewee in the pilot interviews	Number of interviewees
Project manager	1
Civil engineer	2
Site workers	2
Staffs from other department in construction project	3
Total	8

The pilot interview did not consider as a formal interview and just preparation for better understanding the research question and used for developing an optimized inquiry. Therefore, the pilot interview will not include in the research finding analysis.

5.7 Sampling

Considering this research is not develop generalisation but to provide an understanding of social problems. According to Creswell and Poth (2016), compared to including a great number of individuals in the research, the characteristic of qualitative research is to gather detailed information from individuals.

Taherdoost (2016)suggests that Sampling techniques be divided into two kinds of types, one is probability sampling, the other is non-probability sampling. each type of sampling

has its range of various types (see figure 3.1).comparing to probability,non-probability sampling focuses on an in-depth study which is more proper for the small range of samples for a specific purpose(Saunders et al., 2009).as a kind of judgement sampling in non-probability sampling, criterion sampling is the most widely used sampling in qualitative research(Palinkas et al., 2015).

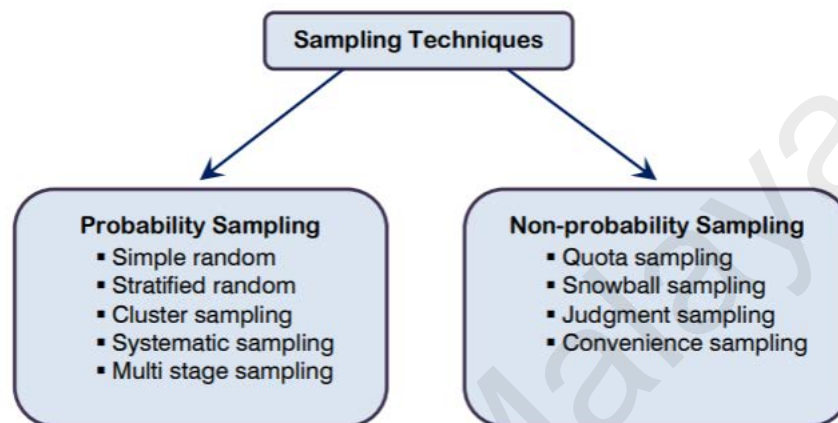


Figure5.1: categories of sampling

This research applied criterion sampling to select proper cases regarding the phenomenon of interest.

5.8 Data collection

Gill et al. (2008)noted that there are different types of data collection ways applied to qualitative research, such as observation, interviews and textual analysis. Data collection of this research was applied, including semi-structured interviews and document analysis.

5.8.1 Selection of the two case projects

This research adopted criterion sampling method, the criteria of sampling to choose proper projects is listed below:

Criteria 1. The project should fit the conditions of international construction projects.

Reason: according to the definition of international construction projects, these chosen two projects is typical international construction projects. Project A was conducted by two Chinese construction companies, and the project location at Dar-es-Salaam, Tanzania. Project B also involved participants from different countries and cultural backgrounds. The participants in these two projects have various cultural backgrounds. For example, in project A, the site workers are from China and Tanzania, and the management level comprises people from China, Tanzania and South Korea.

Criteria 2. The project was constructed in Tanzania

Reason: Tanzania's construction industry is dominated by foreign companies. Until 2014, there were 3958 registered construction companies, of which 60% of them were comprised of foreign companies(Waziri, 2014). Considering the situation, the construction industry situation of Tanzania can provide a Productive background to investigate the impacts of cultural background on construction projects.

Criteria 3. The operation of international construction project more than two years

Reason: This condition is due to the consideration of the depth and the richness of data the project can provide. As mentioned in the previous chapters, the impacts of culture can be positive or negative.it is considered suitable to investigate international construction projects which have a long duration of operation to explore the profound impacts of cultural backgrounds on the project.

Criteria 4. There are different cultural backgrounds people exist in different management levels.

Reason: This condition is to ensure full communication between people with different

cultural backgrounds. Considering there were various participants in the international construction, it is deemed to be proper to explore the intercultural communication occurring between different management levels of participants.

5.8.2 Case descriptions

Two international construction projects A and B, were selected for the case study, project A, located in Dar es Salaam, Tanzania. The construction duration lasts from 15 October 2018 to 1 November 2021. the contractor is a Korean construction company; the sub-constructor is a construction company from China, the owner of this project is Tanzania National Roads Agency. The subcontract price between the contractor and sub-contractor is about 65 million dollars. The peak number of people working at the site is 656, which includes all the workers, engineers and managers at the construction stage. Most of them are local people.

The second project B is located in Mtwara, Tanzania. The construction project is commenced on 27 May 2018 and ended on 31 December 2021. the contract was signed between Tanzania Port Authority and Chinese construction companies, and the contract price is 5.9 million dollars. The average amount of workers were 322 workers at the site during the construction stage. For the information on the two cases, see table 5.2

The interviewee was picked from the two projects, and project A picked 8 individuals, while project B picked four individuals.

Table 5.2 : Summary of two case study project

Construction project	Location	Nationality of project stakeholder at construction stage	Duration of the project	NO. of Interviewee
Project A	Dar-es-Salaam, Tanzania.	South Korea, China, Tanzania	15/10/2018-1/11/2021	8
Project B	Mtwara, Tanzania	China, Tanzania	27/5/2018-31/12/2021	4

5.8.3 Interview

It was noted by Saunders et al. (2009b) that qualitative interviews are comprised of unstructured and semi-structured interviews. Freely talk is encouraged in unstructured interviews; semi-structured interviews refer to the implementation of a series of predetermined questions, and the adjustment of the research question is dependent on the interviewee.

Through qualitative interviews, researchers can get abundant and detailed information provided by interviewees. Semi-structured interviews were applied to every interviewee to avoid misunderstanding some conception like cultural background and impacts from a cultural background in the interview since in ways asking the question will influence the information the researchers can collect, the list of predetermined questions will help interviewees have a better understanding during the interview (Silverman, 2013).

The interview included interviewees from the different positions at the construction site. The interview was conducted through online video calls and recorded after the interviewee's approval.

5.8.4 Documentation

According to Yin (2017), there are six sources that can help provide evidence for case studies, in which Documentary information is applicable to most case study topics. There are many forms of documentation, such as letters, agendas, administrative and other forms of documentary information; Applying documentation in the case study can provide a series of advantages, based on the characteristic of documents, the information provided can be repeatedly reviewed, and most formal documents contain exact information such as name, date and detail of an event, and there is also different kind of documents which provide broad coverage.

Documentation was used except for semi-structured interviews, for this research, documentation can provide lots of information regarding these case projects, the documents included company website files which have detailed information introducing to the construction project, local press reports from where the construction project be built, project documents, reports and Meeting minutes from the construction site. Besides, there also contain information from Wechat applications and other kinds of social media.

5.9 Data analysis

To extra assumptions, patterns from a series of material by interpreting and systematic examination is the contents analysis definition proposed by Lune and Berg (2017), as a kind of contents analysis, the data collected from qualitative research has no particular analysis start point(Miles & Huberman, 1994), which means the analysis occurred when the data was collected, the interview was being held.

According to Miles and Huberman (1994), to analyse data collected, there are a few steps that can be applied in this stage. The first step is to category information into different items, and then a matrix should be made to place support information within these

categories; create flowcharts and other kinds of graphics to display data; record the events and calculate its frequency; check the relationship between these categories ; list information in a chronological way. By conducting these steps, some stalling problems will be overcome at an early stage in the research(Yin, 2017).

For this research, although the researcher possesses some knowledge related to cultural impacts to the construction project, it is not sufficient to explain the data. The abductive approach helps the researcher to link the literature and data to provide a new understanding of the impacts of cultural background on the international construction project.

5.10 Coding

The interview audio recording was transformed into word, using the qualitative analysis software named NVivo facilitated the coding process while an Excel sheet was developed to help make cross-case analysis. Information from documentation provides information helpful to gain an understanding of the semi-structured interview. The information from interviews served as a key point to resolve research questions. Based on two different cases, there two different NVivo profiles were created to correspond to these two cases, which intended to ensure each case will contribute meaning to the research.

The all coding process adapted the grounded theory, which has three phases of coding(Corbin & Strauss, 2014).as the first coding step, open coding, means the text transferred from audio will break down into different categories. According to Babbie (2020), open coding is the start point of logistic analysis, and open coding aims to find out different conceptions related to the research question; axial coding utilizes the result from the open coding, which aim to find the core concepts related to the research;

selective coding aim to find out relationships between different categories.

For the researcher of this thesis, the second stage of the coding means merges similar codes derived from open coding in two different projects cases. To have a direct view of the categories, an Excel sheet is used to list codes. After the data was divided into categories, the finding chapter started.

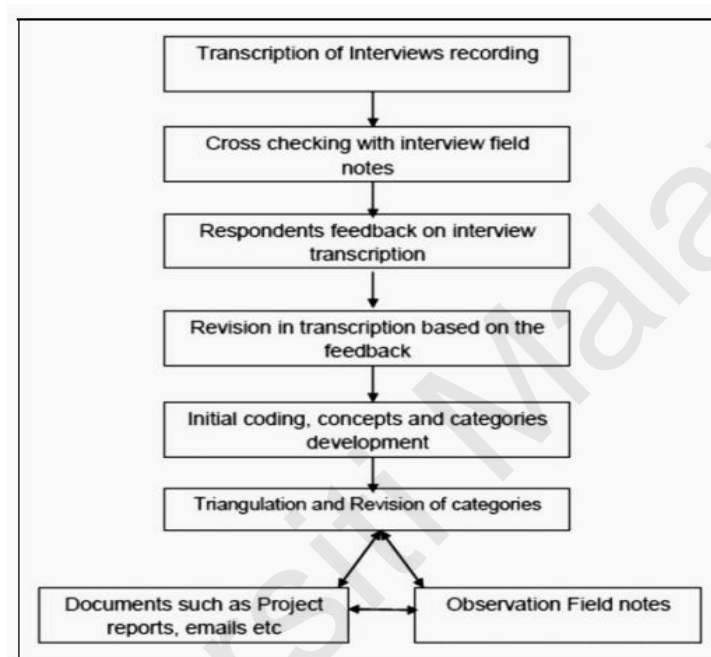


Figure 5 .2:Raw data interpretation process(Source: Rashid et al., 2019)

5.11 Research ethics

Ethics play an essential role in any research, in research, it is necessary to let participants fully know about the role they play, which aim to protect their rights and information of the company(Rashid et al., 2019).

In this research, the research took a range of steps to safeguard those research participants, such as the company and construction project name was disguised, due to the project connected with a series of departments, including government and other organizations, the privacy and confidentiality of individual were protected in the research and after the

research, the research participants be given the consent forms and research information collecting sheets through the email. In the consent forms, the explanation was made to research explaining the way data be collected and how these data be handled and the measures to keep confidential(see appendix 1). Information collecting sheets aimed to collect some basic information about interviewers. There was no fraud and enforcement at any phase of the research, and research participants fully understood what they were doing and expected(Babbie, 2020).

5.12 Chapter summary

Methodology of the research has been discussed, and the whole chapter begins with the philosophical assumption related to the development of knowledge, which derives from the people's understanding of the multiple realities, then regarding the qualitative approach, a justify made to show its suitable for this research. A multiple case study comprised of two cases has been viewed as a proper choice to illustrate the questions proposed in this research.

This chapter also shows the implementation of research, the research implemented by conducting a series of semi-structured interviews with stakeholders from an international construction site. Two projects as two case study organizations were

It also discussed data collection and analysis, which followed grounded theory under the help of NVIVO and Excel software. At the end of the chapter, the ethical problem of this research was also discussed. The next two chapters of this research will show the findings and further discussion on the impact of cultural background.

CHAPTER 6: RESULTS I: AN INTRODUCTION TO THE CASE STUDY

PROJECTS AND INTERVIEWEES

6.1 Introduction

This chapter aims to address the research questions of this thesis and show the findings process derived from the empirical study.

In this chapter, the background of interviewees who comes from two different international construction project will be introduced, and the two case study projects also are introduced. By elaborating data from interviews and documentary analysis, the project's perception of intercultural communication in two international construction projects will be represented. The intercultural communication process in two international projects has been drawn out from the data. This chapter helps to set the tone of this study before the analysis of different opinions on the impact of intercultural communication, impacts of intercultural communication, different measures to improve communication efficiency and effectiveness of response in international construction projects represented in chapter seven.

6.2 Project A

6.2.1 Background of project A

Project A is a project which aims to build a bridge to alleviate the traffic congestion of the Sar city by connecting the northern and southern coastline and expanding the existing road from two lanes to four lanes. The project is located in Sar city, the eastern coast of Tanzania, near the Indian ocean.

82.9% of the project cost was funded by the government of South Korea, while the rest of the cost was funded by the government of Tanzania. The developer of this project is

Tanzania national roads agency; the contractor is a South Korean construction company G. There are two main subcontractors. one is construction company MB from China, which is responsible for the construction of the bridge and cleaning the field. While the other construction company named RC, also from China, is responsible for the seven-kilometre connecting road construction, which connects the bridge with the central business area and other places in the city.

Project A be deemed as a place to promote the working skills and capacity building for locals. There have been many visits from the stakeholder of this project since the beginning of this project. Meanwhile, the Architects and Quantity Surveyors Registration Board (AQSR) of Tanzania announced that local experts who have done a minimum of two years of practice in any big local projects then be eligible for the registration (AQSR, n.d.). Project A be deemed as a big local project. Therefore, there are many local experts or professionals intent to work on the project.

Meanwhile, both subcontractors, Chinese company MB and Chinese company RC, employed hundreds of workers and many local technicians, assistants, and engineers to help complete the construction and enhance communication efficiency.

As the subcontractor responsible for the main body of the bridge, the Chinese company MB employed many local young graduates to work as civil engineers in the technical department. Some of these engineers work at the site during the construction process, while the other part of the engineers works at the office. Engineers who worked at the construction site were responsible for collecting construction processing data, helping with conducting project process control and quality inspection before requests for inspection (inspection from consultant), and offering safety supervision. For those

engineers who work at the office, they should make verification and comparison between the main structure design documents and construction drawings. And communicate with main constructors in terms of design change. At the same time, they should collect technical data, norms and specifications for the change and construction process.

All these engineers work with local workers and Chinese engineers. Sometimes they should communicate with South Korean represent from the main contractor. Many local assistants employed by company MB also worked at project A to help with dealing daily work in different departments.

6.2.2 Stakeholders of project A

With the corporation and the assistance of stakeholders in the project, the project can be implemented successfully. The main stakeholders of project A comprise of constructors, which is come from South Korea, the sub-constructor from China and Tanzanian clients and consultants. There were many local people hired by Chinese company MB to help with the construction of the bridge and assist with daily work.

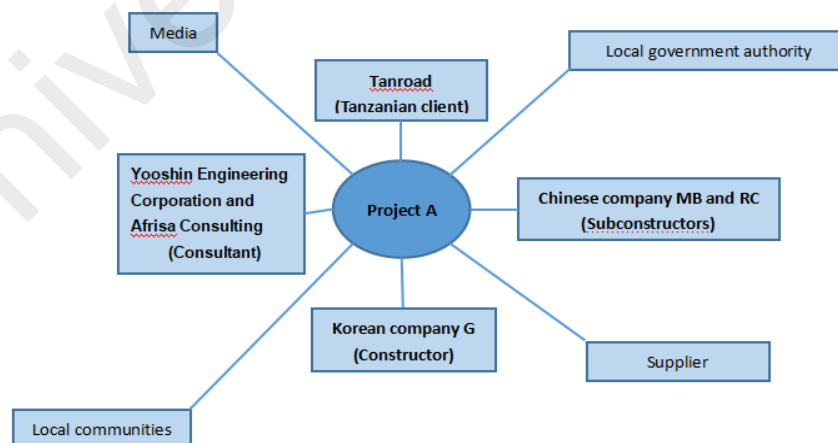


Figure 6.1: The main stakeholders of project A

Under Tanzania's strategy of minimizing the dependency of foreign technology and experts and capacity building for locals, there were many local professionals involved in

the project, many young local graduates have been involved in Project A since the beginning of the project, these graduates be distributed in different sectors. For example, they work in the consultancy section, contractor section and subcontractor section in project A.

On account of this thesis is focusing on the intercultural communication in the construction process of project A, Chinese company MB responsible for the main part construction. Therefore, The main concentration of studying intercultural communication is put on the project management team of Company MB for project A.

To understand the mutual relationship between different departments and how the communication was conducted in the project, the organization structure of company MB project A management team be explored.

6.2.3The organization of project A

MB company project A management team have set up eight functional sectors; Each department has its manager and engineer or assistant. They are QA/QC department, HSE department, planning department, equipment and procurement department, technical department, site construction management department, financial department and administration department(see figure 6.2)

Almost all departments have employed local professionals, engineers or workers to assist daily work with Chinese employees.

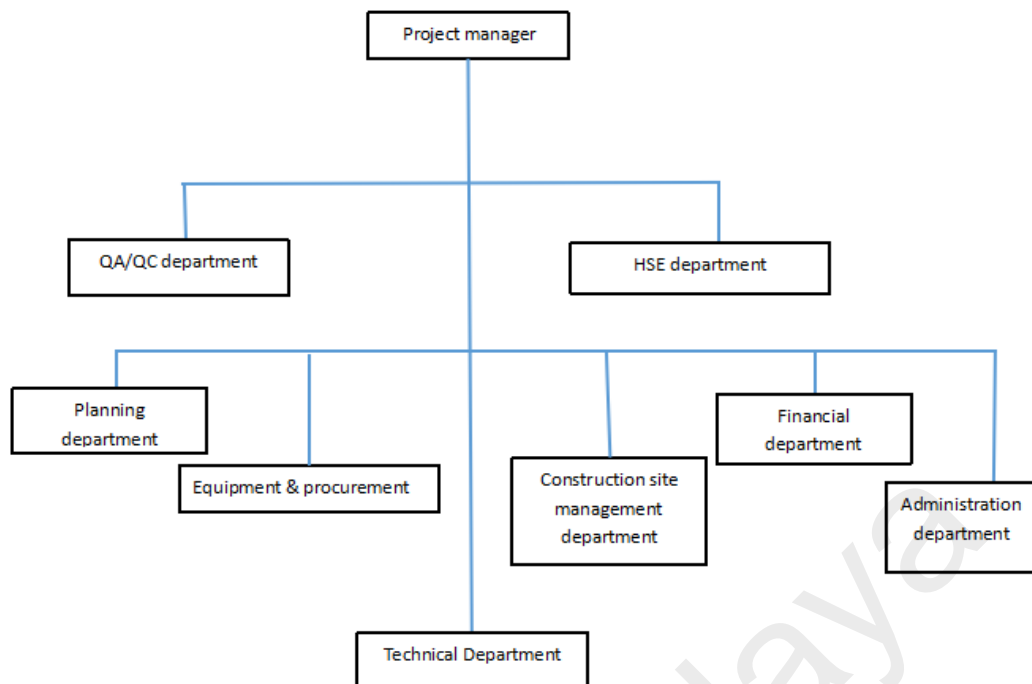


Figure 6.2: The organization structure of MB company Project A management team

6.2.4 Background of interviewees from project A

Although there are lots of countries involved in the project A construction process, the concentration of this research is mainly on the communication between Chinese people and local people(Tanzanian). One reason is that there have different cultural dimensions among different countries; and considering the time and money, the research concentrate on communication between Chinese people and Tanzanian.

Meanwhile, the construction process is mainly conducted by Chinese people and Tanzanian, which can provide abundant intercultural communication information for this research to study the factors which influenced communication and provider useful practices guidance to Chinese companies who conducted constructions in Tanzania.

Therefore, many of the interviewees of this research came from Chinese employees who worked in the project A work team of company MB.

In this research, there is a total of eight interviewees from project A involved in the interview, who mainly come from MB company. While there is one interviewee who comes from RC company, And there was only one local assistant who works on project A of the MB company joined the interview. The rest of the interviewees were all Chinese people. This is because the author of this research can only connect to one person who works for RC company in project A, and Only one Tanzanian who worked for company MB in project A work team agreed to join in the interview.

This research involved 13 interviewees from project A, and they were all employed by Chinese construction company MB or company RC as project work team members, responsible for conducting the construction process and in which only one local person was involved, this is because:

1. There are more and more Chinese construction companies conducting construction projects in other countries; this research can provide some guidance to similar international construction projects.
2. The author of this research once worked on project A. Therefore, the author is familiar with those employees who worked on the project A. they can help with the interview,
3. Considering the limited time and money. The interviewee involved most of them were Chinese who were employed by company MB and worked in project A work team. Before the interview was conducted, the author of this research connected to 12 employees who worked in project A, including one female. The contact was through email or social media application, the author of this research invited people from different departments of this project, including the project manager, the chief engineer, people from the procurement department, financial department, quantity surveying and Chinese foreman or supervisors who worked at the construction site.

Two of them can not be reached, there is no response from them, and another two-person showed their interest in this research while they say they are busy working can not attend the interview, but can provide some profile regarding project communication if there is any necessary. The author received some profiles from them, and these profiles helped the author further know about the organizational structure of project A. The profile also helped with the understanding of the work contents of most Chinese employees at Project, A. the only female who worked on project A rejected the author's invitation.

Therefore, there are a total of 8 people involved in the interview, with no female involved. All of them are males. The reason cause this situation is Most are the Chinese employees from Project A are males; 6 Chinese female employees once worked in project A during the whole construction process. However, most of them left their job gradually; only one female stayed at the project when the interview was conducted. And the invitation sent out by the author to attend the interview is not replied to by the female employer. Therefore, the author thought maybe this female employee didn't want to attend this research.

The author of this research managed to contact a local employee who works for the Chinese company MB and work as an assistant at the planning department.

All the interviewees were aged from 26 to 50, and most of the interviewees were graduates, of which 4 of them once worked at other international construction projects.

Among all the interviewees, Mr X once worked in Zambia for two years, Mr L once worked in Saudi Arabia for one year is employed by company RC. Mr. R is the local assistant. the basic information of these interviewees are shown in table 6.1

Table 6.1: The basic information of interviewees from project A

NO.	Name	Position	Have ever stayed at other international construction sites	age	Years of work
1	Mr.Li	Chief engineer	YES	36	13
2	Mr. X	Planning manager	YES	30	6
3	Mr.L	Administrator	YES	28	5
4	Mr.Q	Civil engineer	NO	27	4
5	Mr.Z	Equipment manager	NO	50	29
6	Mr.R	Local Assistant	NO	28	5
7	Mr.WQ	Equipment assistant	NO	26	4
8	Mr.WH	Human resource assistant	NO	24	2

6.2.5 Intercultural communication in Project A

Many local employees(Tanzanian)are working at Project A, and it can be divided into main two parts, major local employees worked as workers at the construction site. For example, they worked as foremen, welders, helpers, steelworkers, engineer truck drivers, helpers, cleaners and most of the local workers were led by Chinese supervisors or Chinese managers. Another part of the local employee working at the office, take the engineering department as an example, there are 11 local engineers assist daily works in the department and assist work at the site as construction technicians. Hiring so many local employees is because the Chinese company MB wants to facilitate communication and enhance the work efficiency in construction site, and according to the Manager from quantity surveying department Mr X:

The employees consist of local workers and engineers can save a lot of time and money since there are a handful of Chinese workers who can speak English or Kiswahili(a local official language), and compared hiring Chinese workers, the cost of hiring local workers is much less. Meanwhile, the skilled Chinese workers can help the local workers to learn how to conduct a specific work process and after those local workers will familiar with these work processes and don't need lots of time to teach them, and they can do well (Planning department manager, Mr. X).

Besides the construction site and office, there are also many local people employed by Chinese construction company MB working at the canteen, which provide food for Chinese employees, while some locals are responsible for door keeping at the construction site or work as safety guards. In addition to local people and Chinese people involved in this project, there were also have many people from other countries involved in this project during the construction, such as people from South Koreans, British, Indian.

As the main constructor of Project A, the project team set by the South Korean company G mainly consisted of South Koreans, they guided the construction work of the project A. while the project work team set by Chinese company MB was responsible for the conducting of the construction. Communication is essential for both sides to finish the bridge in time. Therefore, there are many meetings, site visits in the construction site and lots of information transmitted through email, messages, meetings and formal notice between project A work team set by South Korea company G and company MB project A work team.

At the beginning of the construction, the meeting with local authorities, Tanzania local authorities, managers from South Korean companies have become important work content of the Chinese conducting team's work contents of the project A.

We have meetings with the engineering team of South Korean company G every week; almost all of them are Koreans; we use English during the meeting, we also often have meetings with consultant companies which are local authorities, and we also use English during the meeting. (Planning department manager, Mr. X)

During the construction, the piling testing is an essential phase before the pilling work start, and the Geo-data was collected and analyzed by a company from the Netherlands that major in the piling testing, while the employee responsible for the whole work is from England. With the help of local workers, employees from Korean company G and staff from subcontractors Chinese company MB, The entire process just lasted for one week. The contact with the British man impressed Mr. Q, a Chinese civil engineer who was responsible for the piling work at the construction site.

We always communicate with the British through the Whatsup application, and They used to send emails to talk about work, but we Chinese used to use WeChat or use QQ to communicate and arrange work. (Civil engineer, Mr. Q)

In addition to these daily technical communications with people from different cultural backgrounds, Chinese people who work on the project also need to spend a lot of time communicating with local government authorities, local suppliers, local communities, especially some departments such as the administration department, the planning department, procurement department.

Mr L is One interviewee from the administration department employed by Chinese Construction company RC said that the most frequently contacted people were local government departments, such as police stations, immigration departments and other local departments related to their work contents. At the same time, the procurement department always needs to contact Tanzania Revenue Authority and Tanzania customs. Local people work very closely with Chinese people in project A construction process, and communication is very important to manage daily work, while the challenge of communication also exists. The cultural factors affecting communication in project A is identified and the impacts of these cultural factors on communication and clarified the response to challenges brought by intercultural communication will be explored in detail in chapter seven.

6.3 Project B

6.3.1 Background of project B

Project B is a harbour expansion project located in southeastern Tanzania, and this project is driven by the discoveries of natural gas in this area. To demand increasing cargo in this area due to the offshore oil and gas drilling activities, the Tanzania government has decided to improve and expand the original harbour. The Tanzania government plan to extend the berth with the length of 300 meters, the depth of 13.5 meters and extend the cargo storage yard. The extension will increase the capacity of the harbour to accommodate ships weighing from 40000 tonnes to 65000 tonnes, and also enhance the capacity of cargo handling from 400000 tonnes to 1000000 tonnes per year.

The preliminary survey was financed by the Japanese, and the whole construction was financed by the local government. The developer of this project is TPA (Tanzania Ports Authority), the designer of this project and the contractors were all from China, and the

consultant is from Germany. A joint venture of two Chinese construction company MB and the company CE, is the constructor of this project, which is responsible for the implementation of the project, in which Chinese Company MB is responsible for dredging works and the construction of the berth, wharf and its ancillary works. While Chinese company CE is responsible for the works of Port lighting and power supply, water supply, sewage treatment and fire fighting system, port boundary fence and access gate system, etc.

To facilitate daily work at the construction site and enhance the efficiency of daily work at the project work team office, the joint venture of company MB and company employed many local people, In which many local engineers and local workers were involved the construction process. most of them were led by the Chinese manager in the office or Chinese supervisor at the site.

6.3.2 The stakeholders of project B

The stakeholder in the construction stage of project B main consist of clients, consultants, constructors, local government authorities, suppliers and local communities.

Local government authorities main consist of the Worker Compensation Fund(WCF), National Social Security Fund(NSSF), Ministry of Labour and Employment, local police station, Tanzania immigration department, Tanzania Electric Supply Company Limited etc. these government authorities will conduct inspections and conduct site visits irregularly. The subcontractor of project A and the constructor of project B is the same company.

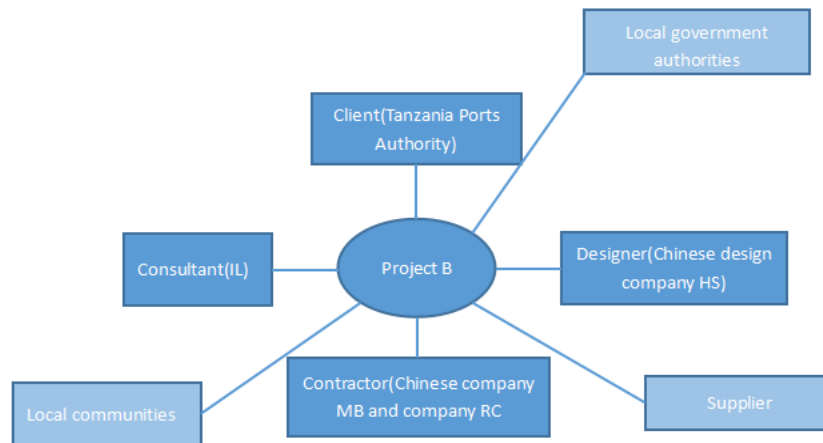


Figure 6.3: The main stakeholders of project B

6.3.3 The organization of project B

The organization of project work team of project B set up by the joint venture of company MB and company CE been divided into eight different function department. there are planning department, technical department, financial department, QA/QC department, site construction department, administration department, engineering department, procurement department. Each department employed local engineers or assistants to help Chinese employees with the department's daily work.

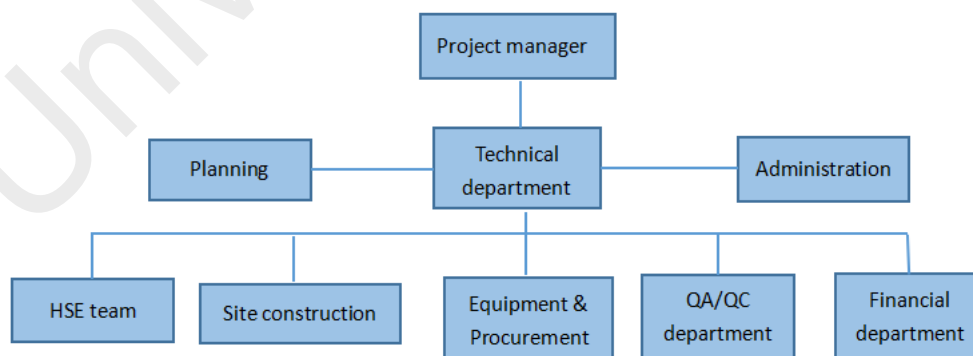


Figure 6.4: The organization structure of MB company Project B management team

6.3.4 The interviewee of project B

All the interviewees were interviewed through a chatting application online. There was a total of 10 Chinese people who worked at project B was connected, including the project manager and managers of different departments. However, the author only received replies from 8 Chinese employees, in which only 4 Chinese employees agreed to attend the interview. Three of the 8 Chinese said that they did not have time, one did not agree to conduct conversation through online video call. And can only reply to the interview question by typing through chatting applications, considering the information requirement of this research. And video calls provide more instant information than only text through chatting applications. Therefore, typing to answer interview questions was not considered. Only four Chinese employees agreed to conduct an online video call interview. All the interviewees are males aged 26-40. Three of them worked at the office, one of which is the manager of the planning department, one is a planning engineer. The rest two of them are from the technical department, in which one is a construction site manager who supervises the construction work at the site. Another is a civil engineer in the technical department. None of them once worked on other international construction projects.

Table 6.2 : The information of interviewees from project B

NO	Name	Position	Age	Have ever stayed at other international construction sites	Years of work
1	Mr. Y	Construction site manager	51	NO	17
2	Mr.WG	Planning department manager	28	NO	5
3	Mr. J	Planning engineer	26	NO	3
4	Mr.W	Administration assistant	34	NO	11

6.3.5 Intercultural communication in project B

All these interviewees are Chinese employees who have been working or working at project B for more than one year. To accomplish the construction, working with local people is an essential part of their job. They need help from local employees to communicate with local authorities to gain their support from them, and knowing the local social and market environment is essential to accomplish the project.

For example, the administration department needs to connect to the immigration department of Tanzania and the local environmental protection department. Meanwhile, they need to cope with visa and passport problems for Chinese employees and also need to be regularly reviewed by the supervision from the immigration department, arranging for the visiting of local government authorities and arrange logistics for all the Chinese employees in the construction project in Tanzania. To finish their routine work, Other departments also need to connect to different local government authorities and cooperate with local communities.

'As an employee working in the administration department, we need to assist Chinese employees with their Visa and passport problems and connect to various local authorities, such as local police stations, making prepare for supervision of local government authorities.' (Administration assistant, Mr. W)

Chinese employees work with local workers and engineers in the construction site and project office. In most situations, the local engineers play the role of translator to assist the Chinese employee to communicate with local authorities. Another important role they play is the technical learner, since the project employed lots of local graduates, and the Tanzania government also hope these graduates can learn from the construction project

B and further applies their knowledge learned from project B to other similar construction projects and reduce the reliance on foreign technologies and foreign expert.

For Chinese employees in project B, communicating with local government authorities, local workers, and local engineers is an essential part of their work. Considering each department in project B has local engineers or assistants. And those Chinese site managers or supervisors who need to coordinate and instruct hundreds of local workers. Efficient communication plays a vital role for Chinese employees to finish the work in time, while efficient communication is related to the efficient communication process with their local people. In addition to local engineers and workers, Chinese employees also need to communicate with people from different countries—for example, the consultant from Germany and local suppliers and merchants who come from India.

Meanwhile, there are lots of meetings held by a local government agency. The meeting is an important aspect of communication for Chinese employees and local people. Meetings held aim to supervise the construction process and solve problems. There were meetings held by TPA(Tanzania port agency), National Social Security Fund, Workers Compensation Fund, local government, etc. These kinds of meetings would involve project stakeholders on a large scale; the representative from the client, constructor, the consultant will all attend this kind of meeting. While there were also small scale meetings that involved local people and Chinese people held on the construction site.

'We have lots of different local government agencies need to communicate with, NSSF, WCF, TPA and other local government departments, they will come to the construction site and would supervise the construction process and local workers' situation. In this situation, We would communicate with them through meetings. speak of meeting, we always involved in different meetings, from monthly held meetings which include most of

the main stakeholder of this project to small short meetings held in the construction site during implementation, we aim to solve problems.'(Planning department manager, Mr.WG)

6.4 Chapter summary

This chapter mainly introduced the organizational information of the two case study projects and the interviewees' background. The findings concluded in three aspects. First, intercultural communication is an essential part involved in their daily work, and many departments spend a lot of time on communication and contact with local authorities. Different departments have corresponding main local authorities which need to be contacted. Second, the department's arrangement of construction projects will affect the efficiency of the whole organization. Both project A and project B indicate that the project organization department arrangements used in China can not be directly used in other countries, it decreased the communication efficiency.

However, when most managers from China and going to set up a project work team, these managers were not realized it. This is because some Chinese construction companies lack management experience when conducting a project in another country and the field research is not enough before the start of the project. Not enough attention was put on organization structure design when the project was conducted in another culture. Third, the communication applications used in the communication process is different from China. Email and 'WhatsApp' is not widely used. This chapter has clarified the organizational arrangement of two case study projects and basic information about interviewees. In the next chapter, the communication challenges and problems faced by these two projects will further be explored, and the responses of the case projects will also be discussed.

CHAPTER7: RESULT II: FACTORS AFFECT INTERCULTURAL COMMUNICATION, ITS IMPACTS AND RESPONSES OF PROJECT

7.1 Introduction

This chapter will continue exploring the findings from two case projects regarding the factor that affect intercultural communication and the impact of intercultural communication on international construction projects. Most importantly, the response and solutions made by these projects will also be explored.

This chapter presents different factors that affect intercultural communication in these two international construction projects, and the impacts of intercultural communication are also listed. This chapter aims to explore the good practice and solutions in intercultural communication projects in two case study construction projects. Meanwhile, exploring the effectiveness of these solutions is also an important part of this chapter; the solutions are divided into two levels, one on the project management level, while another on the project employee's communication skill level.

This chapter starts with listing the factors which impact intercultural communication and explores the influence of intercultural communication on the management process, and then it will explain the responding strategies at the individual and project level and the result of these strategies.

Among all the factors, language is the most important factor that influences intercultural communication, and informal communication is also deemed as an important factor in intercultural communication in terms of enhancing understanding and trust. At the same time, it was also explored how various strategies to cope with negative impacts from intercultural communication arise at the employee and project organization level.

Culture can be broadly defined or narrowly defined. According to Cihai (2019), culture, in a broad sense, refers to the survival mode of human society and the value system based on it. It is the sum of material wealth and spiritual wealth created by human beings in the process of social and historical development(Cihai, 2019).in a narrow sense, culture regarding the ideology of society, as well as the corresponding system and organization.

And the concepts of culture in this thesis is based on a narrow sense. It is similar to the definition given by Zein(2012)that that culture is a concept that combines outlooks, specification, beliefs, conditional customs and the way of expression which reflects thinking, beliefs, behaviour and habits of people.

7.2 Factors that affect intercultural communication, its impact and responses

The factors which impact intercultural communication can be concluded in nine aspects according to the interview on interviewees from project A, and project B. Language is a direct factor that affected the intercultural communication process in these two case projects. Therefore, the next section will present the impact of language, the response of Chinese employees to cope with the challenge from the language in case projects and the results of the response. The rest factors will be analyzed in order in the rest section.

7.2.1 Factor: Language capability

NO.	Factor	Impact	Response	Result
1	Language capability	1. Reliance on translator/translation applications 2. Affect the technology transfer process	1. Organizing language training. 2. Learning a language by language application or language booklet. 3. Encouraging mutual construction technical teaching between Tanzanians.	1. Low language learning efficient in the training class. 2. Learning through language application and language booklet was chosen by most people. 3. Mutual teaching was widely applied in the site and office.

The biggest challenge that affected intercultural communication proposed by most of the interviewees was language capacity. Although the official language of Tanzania includes Swahili and English, there were still quite a lot of people who don't speak English, especially the local site workers. The Chinese site supervisor Mr Y said that most workers have low educated levels, few of them can speak English. Therefore, Chinese employees need to study Swahili before conducting site work.

'...most Tanzanian workers can not speak English, and this is because they did not get much education.' (Site supervisor, Mr. Y)

The language problems also exist among Chinese employees in project A, Mr. WH, a Chinese human resource assistant responsible for the local employees' matters, said that 'although most of the local engineers can speak English, they can not speak Chinese, and most older Chinese employees can not speak English, although some of them can speak

Swahili, they are not very good at it.

Meanwhile, Learning Swahili need to spend time. It is not easy to reach a fluent extent in a short time. Mr Z aged 50 and have been working in Tanzania for ten years on the construction site, and he mentioned the tough time of learning Swahili at the beginning of the interview: *we can not speak English either of Swahili; therefore, we learn from zero through the Swahili learning booklet distributed by Chinese people who conduct construction project prior than us in Tanzania, and inquiry Chinese people who can speak Swahili, let them teach us. Before the start of the daily work, we will write all the work contents down and translate it into Swahili and show it to workers*’.

Although Mr.Z already knows how to speak Swahili, he still needs the help of a language translation application to help him with more complex expressions in communication. Mr.Z also stressed in the interview that although those older Chinese employees may have more construction site working experience than younger people, elderly Chinese employees don’t speak English which may cause difficulty in communication.

Impact 1: Reliance on translator or translation applications which may affect the communication efficiency in work

It was noticed from the interview that the poor language capacity caused heavy reliance on translation applications. Meanwhile, the mistake translation of application cause misunderstanding when people do not check carefully on the translation contents.

There were always existed language problems, especially when local workers only spoke Swahili. As an assistant in the human resource department, Mr WH can speak English.

However, when he tries to solve the worker's problem in Swahili, he needs to ask the local engineers for help. Mr Q is a Chinese engineer working at the construction site, who also mentioned that there would have a lot of occasions need to speak to local workers who don't know English, he will ask the local engineers to help him to translate.

'At construction site, when we announce the operation procedure or when we need to explain something to local workers, we would find the local foreman who speaks English to help translate English into Swahili' (Civil engineer, Mr. Q)

Mr. Z found that the translation applications can not convey his meaning precisely, especially when he needs to translate Chinese into Swahili, which means he is not sure whether he can truly be understood.

'...applications can not fully convey what you want to express' (Equipment manager, Mr. Z)

Mr L from the administration department also said when talking to local people who don't know English, and he will find someone who understands English to help him to translate English into Swahili and most of the time, he will work with his local assistant who can speak English

'when I need to talk to local people who don't speak English, I will find someone who understands English and nearby to translation.' (Administration assistant, Mr. L)

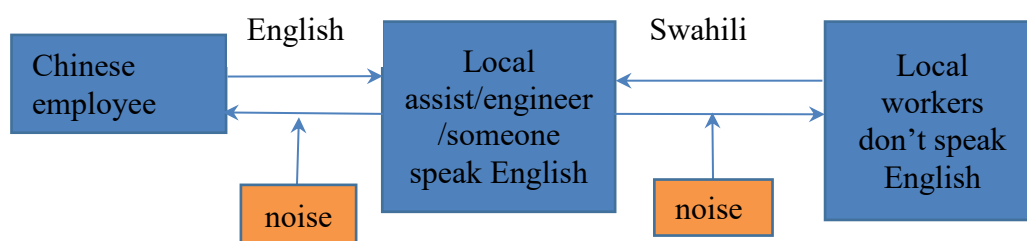


Figure 7.1 The communication process between Chinese English speakers and Tanzania Swahili speakers.

The communication process between Chinese English speakers and Tanzania Swahili speakers was conducted with the help of Tanzania English speakers. During this process, the meaning of a specific sentence can be affected by the noise, which means the communication process will be affected by the status of people in the communication process, such as the emotion, cultural factors, knowledge, gender, etc. (see figure 6.5).

At the same time, it was noticed that translation application is frequently mentioned by Chinese employees in the interview, the application is used for the grammar and vocabulary check, Mr. WH said that he uses language application for grammar and vocabulary checking before sending out the email.

However, The use of translation applications also increased the reliance on language applications. According to Mr. C, he prefers to communicate through message and chatting applications at work because it can provide him enough time to organize his words and check if there were any mistakes in the language during a conversation with the help of language application.

‘Talking through message or Chatting application is an easier way to communicate with local engineers since it gives us time to make a sentence and check the mistakes, which can prevent embarrassing situation especially when our English is poor in the

conversation when talking to each other face to face. '(Surveyor,Mr.C)

Meanwhile, most elderly Chinese employees who don't speak English and can only speak a little Swahili always need help from other Chinese employees. Mr. X sometimes need to help these people deal with worker matters. For example, a local electrician has some questions about his work time; he was not sure if he should work in the daytime or nighttime. The Chinese electrician supervisor can not explain clearly, so he will come to find Mr. X or other Chinese employees who understand English to help to translate. Mr. X was busy too, but he still helped the electrician first before his work finished.

'we are colleagues, Therefore, if there is anyone let me help him to translate Chinese into English, I will help him, but sometimes I also need to finish my own job, especially when you have to deal with a lot of things. you will not have the patience to help him. '(Planning manager,Mr.X)

The finding demonstrated that the reliance on translation applications or someone else could waste lots of time since people need to find helpers when they need help, and using applications also prevent people from getting information instantly, especially the information related to emotions or attitude of speakers. Meanwhile, the translation by helpers also decreased the communication effectiveness because the communication process can be affected by the status of the message receiver and translators.

Impact 2: Affecting the technology transfer process

At the beginning of project A, there are many Tanzania graduates been recommended by the local government to work at project A, most of them were graduated from civil engineering, and the local government views project A as a good place to train these

young graduates and hope they can learn some knowledge from this work experience in project A. through working with Chinese engineers or South Korean engineers. at the same time, there are lots of local workers working at the construction site. However, most of these workers never worked as steelworkers or skilled workers. Therefore, most of them were taught by Chinese supervisors and learned how to complete certain processes of work. For example, they will be taught various construction skills during different stages of construction. While language problems still exist as a barrier that affects communication between Chinese employees, local engineers and workers. Chinese construction site supervisor Mr.Y mentioned the communication experience in the construction site that indicates the language ability may affect the technology transfer process.

'When I want them to finish a certain process on the construction site, I will do it first and let them observe it, at the many situations, they will learn how to do that. However, there are some workers who don't know how to operate even when I have already taught him four or five times, and it is really made me anxious and angry...(Construction site supervisor, Mr.Y)

At the same time, even at the office of project A, there will have a similar situation related to language barriers, the chief engineer Mr. Li said that compared to communication with Tanzania engineers using English, it is easier to communicate with Chinese employees with Mother's tongue:

'since we know each other better and many things don't need lots of additional explanations and we can understand the meaning of certain sentences immediately, while and it always takes time to communicate with local engineers and explain to them the

exact meaning of a certain sentence’.

Meanwhile, it is also be found that when Chinese engineers taught the same contents to new graduates and local engineers who have already worked with Chinese engineers for a time s,it was found that it would spend more time to teach new graduates.

When we teach local graduates, it will take more time to explain the contents to a new local employee when compared to local engineers who already worked with us for a long time although the contents were the same. (The chief engineer,Mr.Li)

The finding demonstrated the technology transfer process in project A was affected by the extent of language fluency. Although English is one of the official languages in Tanzania, Swahili is more frequently used in their daily life. Communication with people’s familiar language will arise communication effectively.

Response 1: Organize language training

Language capacity is essential in the communication process, project A organized an English training course, and the project team members were encouraged to attend the training; the trainer is a Chinese student who studies in a local university. Meanwhile, the English learning booklet was also distributed by the administration department. The author of this thesis also was required to attend this training from the start.

Response 2: Learning a language by language application or language booklet.

The language application also is used to learn English, Mr. C said that he would use language application to learn English and accumulate vocabulary; he thought that the application is a convenient tool compared to learning English in a fixed place and time.

He can check and correct grammar problems and spelling mistakes or learn the pronunciation of words even when he is working on the construction site. While older Chinese employees were used to using English learning booklet to help to learn English:

'We have long time stay at the site, a booklet will be more convenient for us, and already used to read the paper, this habit has been developed for a long time.'(Equipment manager,Mr.Z)

Response 3: Encourage mutual construction technical teaching between Tanzanians

At the same time, to teach local workers technical operation or knowledge and after perceiving the difference in communication effects between Chinese and Tanzania, Chinese employees start to train local engineers or local workers, after teaching them and make sure they already understand construction knowledge or construction skills, they were required by Chinese supervisor to teach other local workers or engineers.

'we will teach a few engineers at first and then make sure they already understand the knowledge, and then we will encourage them to pass the knowledge to other new engineers.'(The chief engineer,Mr.Li)

Except for this kind of practice conducted in the office, the construction site also was led and taught in this kind of way.

I pick those local people who can understand English and the young man who learn fast in construction site, and I taught them until they learned the operation and then I will ask them to teach others in our team'(Construction site supervisor, Mr Y)

Results: Low learning efficiency in language training class, language application or language booklet was chosen by most people

Project A conducted an English training class, and the training lasted for one month. Meanwhile, there were just a handful of Chinese people attending the training class, and the effects of training were not very good. There were many reasons that contributed to this situation. One reason is the training start at 7. pm, and 7 pm is the time when the night shift starts. Therefore, just people who work in day time after work can attend. Meanwhile, the training contents were not related to the daily work contents in the construction site. The trainer just taught the basic daily greeting, daily English. The training contents is not practical. Near the end of the training, most people drop the training class.

Chinese interviewees prefer to learn English or Swahili through language learning applications, and older Chinese employees prefer to learn language through booklets distributed by the project. According to the interviewees, these two kinds of learning method is more flexible, and even they work at the construction site, they can learn vocabulary or phrase at the site, and they can check the phone when they do not know the word.

Result: Mutual learning was encouraged

Meanwhile, by teaching and training the local worker with technology and knowledge letting local workers teach each other, Chinese supervisors provide instant help and supervision, work contents or operation can be finished in time. Therefore, this method was adopted by many sites Chinese supervisors, and this kind of strategy was used when employed new workers or new technical procedures need be conducted.

'some local people learn quickly, some people already know how to deal with steels before they were employed by us since they(local workers) were once worked in other

construction site and do a similar job. they can teach each other within my supervise'(Site supervisor,Mr.Y)

7.2.2 Factor: Different perception towards time

NO.	factor	Impacts	response	results
1	Different perceptions towards time	Annoying and frustrating those who wait for local people in the appointment	Adaptation, Get used to the difference	'unpunctuality, carelessness and lax' Stereotype may develop

Five interviewees expatiated the different perceptions of Chinese employees and local workers or engineers toward time. Mr.WA worked in the equipment department as an assistant; communicating with suppliers and merchants is an essential part of his work. The different opinions to treat time surprised him when he first came to Tanzania:

'I made an appointment with a local supplier that we met at 9:00 am that day, and I arrived at the appointed place, While I did not see the person I made an appointment with. Then I called him and asked him when will he arrive at the appointed place, and he said he was on the road and would arrive within half an hour. However, he did not arrive until 10:30 am...'(Equipment assistant,Mr.WA)

Even the representative from the local government sometimes would not arrive on time, Mr.W said that the representative of the local government sometimes would visit the construction site and check the process of the construction, and the arrival time they give is not reliable:

'They said the representative from local government will arrive at our construction site at 4 pm in the afternoon. Therefore, we prepare the meeting room, water, chair and other devices for them in case they need. However, they do not appear at the site until 6 pm...they kept us waiting...and it is very common...'

Other interviewees also noticed the different notions on time between local people and Chinese people and mentioned the occasion that local people were always late for the appointment or not keep time like Chinese people.

In addition, local people have different lunchtime with Chinese people, Mr.Li said that local people have lunch at 1 pm in the afternoon, while Chinese people have lunch at noon. This difference also leads to the adaptation of project management strategies. Peng (2009) suggested that the notion toward time is different in different cultural backgrounds. This difference depends on people viewing time as a rare resource or an infinite resource. Some cultures view time as an infinite resource that will not control time intentionally, while some cultures will treat time as a rare resource and think it will fly away quickly. Therefore, they believe they should use time as they can. Otherwise, we can not do something meaningful in a finite life. Peng thought this is the reason why people have different reactions or behaviour to treat time.

For Tanzania people, compared to the preservation of relationships and completion of the task at hand, time is not so important. Which often becomes a factor that interferes with the flow of social events compared to the people who are interested in keeping time. Meanwhile, the poor condition and low integrity traffic system in this country also made it difficult to keep punctual at appointments(Otiso, 2013).

Another important reason people have a different attitude toward time depends on the levels of economic development levels. The more developed the economy, the people there would more stress the objective nature of time and think the length of time is fixed while people from less developed places tend to view time in a more subjective way and time can stretch, people also have a different subjective experience of the length of the time(Peng, 2009).

Chinese people tend to treat time as a finite and valuable resource, and this kind of thought influenced the attitude and behaviour of the Chinese. The perception toward time is a learned notion, and everyone learned their time perspective that is suited for their values and needs in one's society(Guerrero et al., 1999). Therefore, When people from different cultural backgrounds say 'see you at 9 am' does not necessarily mean people will meet at 9 am. people have different time expectations. Which mean Tanzanians late for the appointment is not because they did not do it intentionally or because they are lazy. In fact, This is because they were less focused on the accuracy of time, and they are more focused on the relationship or thing at hand rather than schedules or deadlines.

Impact: Annoying and frustrating those who wait for local people in the appointment

Late for an appointment is a phenomenon mentioned by most Chinese employees who once had appointments with Tanzanians or anyone who needed to communicate with local authorities in their work among the interviewee involved in this research. The manager from the planning department Mr. WG said that he experienced several appointments with local people, which all ended with the late arrival of local people, which made him very confused about local people with their time concept and feel

annoyed because they were late.

'They said they would arrive soon, However, things not going go as what they said, they always late, and even do not give you a call or text telling you that they are going be late.'

For Mr. WG , The late is not only means they (local people) do not attach importance to the appointment, let alone the work contents that need to be discussed in the appointment. It also means wasting his time; this is why he was annoyed.

Keeping people waiting to be viewed as impolite behaviour by most Chinese. Therefore, to show their respect to the date and they attach importance to the appointment, the Chinese tend to arrive on time or even prior to the appointed time. However, it is not the way Tanzanians do, which can also lead to frustration of Chinese people, since local people did not follow the social norm of Chinese society which expected by the Chinese.

Response: get used to different notions toward time

Chinese people are used to keeping time and have more time-conscious, Therefore, when there is an appointment with local people, they would arrive there on time, and they will have great possibilities to wait for local people, which makes them confused about local people's perception on time and many Chinese employees try to change their expectation and have more understanding on local people. When the author worked at project A, there were Chinese employees who reminded the author of this kind of difference between Chinese and local people, and the author to be advised that just get used to it. Most interviewees already get used to this kind of behaviour, and most of them will make psychological expectations when making an appointment with local people, which made Chinese more patient to wait for local people.

Result: Developed the ‘unpunctuality, carelessness, lax’ stereotype of Tanzanian

And when describing Tanzania people, Mr.WG will use phrases such as *‘have no time concept.’* And *‘can not arrive on time’* to describe local people, and he will also transfer this kind of recognition to other Chinese employees.

‘after I know local people are most likely late for the appointment, I heard from other Chinese...I will make Psychological preparation for the late arrival of local people, even we do not meet before, since I think he has a great possibility to late for the appointment.’ (Administration assistant, Mr.W)

Not only Mr. WG has this kind of impression and feeling on local people, but also Mr.Li have this kind impression. ‘people do not have much time keep perception’ is one of the impressions he gives to local people. And based on the author’s experience on project A, Chinese employees sometimes will be informed that local people do not have much time concept, unpunctuality, carelessness. Late is not a big deal for local people. This time concept made Chinese interviewees in this study feel confused when they needed to wait for local people. Actually, this kind of concept of time may affect the impression of Chinese employees on most Tanzanians. And this kind of impression can be deemed as a kind of stereotype. According to Allport et al. (1954), stereotype refers to a generalization of the personal attributes or characteristics of a group of people. And the stereotype is not always harmful or bad, and sometimes it may base on the real characteristics in groups.

While considering the possibility of overgeneralizing stereotypes and their negative impact on targets of stereotypes, it is necessary to eliminate misunderstanding between Chinese employees and local people over time concepts by explicit the difference time Perception on the cultural level.

7.2.3 Factor: Informal communication

No.	Factor	impacts	response	results
1	Informal communication	Enhance understanding between Chinese employees and Tanzanian employees	Care about local employees living conditions	Increased trust and relationships to some extend

Informal communication is an important part of work, and it can enhance mutual trust and cooperation between people. Mr. L mentioned informal communication and its impact on his daily work.

'I can't find proper size clothes to wear here, and the wife of a car driver working for the administration office will help me alter clothes into the proper size, and I paid a high price for the clothes altering after considering his family Economic Condition. and this behaviour enhanced the relationship between the assistant and me, and in return, he will also help me in work and life here. (Administrator, Mr. L)

Impact: Enhance understanding between Chinese employees and Tanzanian employees

Mr. R is a local assistant working in Project A, and he thinks that informal communication is important, it can improve work efficiency and encourage cooperation between employees, But what different from Chinese people, Mr. R thought that this informal communication only works to some extent when people have more informal communication, which means things can not be conducted very well considering the relationship between colleagues, it will be affected by the relationship between people, and the rule will not be followed.

‘informal communication facilitates understanding between Chinese employees and local employees. It also makes collaboration easier, enhances trust between each other, it can help each other in and out of work. and I also do not think it always work, it will affect the conduct of work considering the relationship between colleagues.’ (Mr.R, local assistant)

Response: Care about local workers’ living conditions

To facilitate the relationship and communication between local employees and Chinese employees, different Chinese supervisor has their own ways to try to improve the mutual relationship. Mr. Z also said that informal communication is an important part of communication with local workers, it can improve relationships: *local engineer truck drivers sometimes get sick, and I will visit them, and if their home lack food, I will send them some flour, these behaviours sometimes will greatly enhance the relationship between those local workers and me, which also can improve collaboration in daily work.*

Lending money to local workers is a normal experience for almost every Chinese supervisor. Mr. Y will lend money to his workers to buy lunch, Mr. Z also lend money to the worker who claims that they are in difficulties. Besides, informal communication as a kind of communication which unscheduled and rich in content can help cooperate and establish meaningful interpersonal relationships.

‘In addition to work contents, we also talk about the latest news in Tanzanian and talk about local customs, they are glad to introduce local culture to us, we also talk about different opinions. (HR assistant, Mr. WH)

Result: Extend trust and relationship to some extend

Most Chinese employees who work at project A can go back to China every six months and then return to Tanzania. However, most of them can not go back to China on time,

sometimes even years, they did not go back to China. Under this kind of context, the informal communication between Chinese employees and local employees is a kind of replacement of their social life and give a chance to enhance the understanding and trust between local people and Chinese people, and develop friendship between local people and Chinese employees. Informal communication provides the opportunity to let people know each other through work and further build trust, which is essential to collaboration. Mr. Z has stayed in Tanzania most ten years, and project A is the second project he stayed; he has his own local friends, they were workers who once worked with him on the first project in Tanzania, and even the first project is over, based on trust and friendship to these local worker friends, he asked them back to work at Project A.

Some Chinese construction site managers who once worked in other Tanzania projects also have their trusted workers. Some even keep a connection even after all the projects finished. Therefore, at the starting stage of project A, they asked their old friends back to work at Project A. However, not all impacts of informal communication are good. Mr. Z also mentioned in the interview that he should always be careful of oil stealing.

'...although we have good relationship and cooperation, some drivers would steal oil from the construction truck as well. I know it because I know how much oil the machine will run in a full day. Each engine has its rate of work and fuel value, which is based on its power. I added fuel according to the 8-hour working time, but the truck stopped working before the stop time it should have been. It is hard to understand why they have a good relationship with you but still steal from you. (Equipment manager, Mr. Z)

Meanwhile, not every worker in the construction site will cooperate with their manager, and it is impossible to conduct frequent informal communication when there had lots of

workers at the site. In addition, the high turnover of local workers also causes barriers to establishing a meaningful relationship between workers and Chinese employees.

7.2.4 Factor: Values

NO.	Factor	Impact	Response	Result
1	Different values	1. Lacking sufficient understanding and sometimes causing misunderstanding to work attitude. 2. Forming negative judgement on local workers	Management strategies adaption-flexible working hours	Improving work efficiency at the construction site; improved relationships between Chinese employees and local workers.

Before the start of project B, there were no relevant documents that introduced the cultural background information of Tanzania or made any communication strategies to cope with the influence of cultural factors on communication. Under most situations, the employees who were going to work in the Tanzania country would receive some information about Tanzania from their colleagues by chatting or casual talking. Meanwhile, most Chinese employees of company MB and company RC did not receive any training on culture before they arrived in Tanzania.

There are no documents about intercultural communication before the start of this project, no training...we familiar with the people and environment about Tanzania after we came here. Everything here (Tanzania)we know from work with local people and the information from the internet. (Mr. J, planning department assistant).

Most Chinese employees do not know local people's values, norms and ways to see things. Before coming to Tanzania. Mr.L working at company RC said that *'we did not receive any cultural training before we worked in Tanzania, let alone different value between us'*. Mr.X, who comes from company MB also mentioned that *'no cultural training, we just had training about Business Etiquette, no training related to Tanzania culture.'*

Language training is mentioned here is because most Chinese construction site supervisors who worked at company MB and company RC can not speak fluently English either of fluently Swahili, although they have decades year of construction site work experience. And langue is learned in the construction site by themselves, not from company training.

Meanwhile, communication strategies were not mentioned in MB company's project management manual(MB company project management manual), let alone the intercultural communication strategies that should be conducted in the overseas project. Actually, communication in the project management process is not be deemed as important as other project management processes.

Impact: lack of sufficient understanding and sometimes cause misunderstanding in work attitude and develop negative judgement on local workers

People from different cultures have different values. According to Hofstede (2021), masculinity as a dimension of Tanzania's culture has a relatively low score, which is 40 compared to 66 in China. This means the people in Tanzania value equality ad quality in working life. The focus of people on incentives is more about free time and flexibility; while people in China are more success-oriented and they can sacrifice their leisure time to get better pay, leisure time is not very important to them. And many Chinese people will leave their families in order to get a better job in cities.

These differences in values also can be observed in construction project A, a local engineer mentioned that Chinese people are too passionate about their work that they (local people) can hardly understand, compared to working a long time and being paid because of overtime time work they prefer to have their own time and spend time with their friends or family.

Most Chinese are so advocating for their job. I don't know why Chinese people are so obsessed with their work. They just work like they don't need rest. (Mr.R, local assistant)

In addition, some Chinese employees also said that they don't understand why Tanzania employees don't want to work even when they were paid high when working overtime. And the difference in the value of work caused misunderstanding. Some Chinese people think Tanzanians don't like to work, which further be considered lazy at work to some extent by some Chinese.

'Some local people don't like to work for a long time, and even the pay is high. I don't know why when I try to let some people stay at the site and work just work overtime for one or two hours, they just don't want to. They are not like us(Chinese employees); we can work for a long time. I think they may be lazy...' (Site supervisor, Mr.Y)

Response: management strategies adaption-flexible working hours

Mr.Y is a site supervisor who responded to the steel structure operation in the construction site. Many workers worked under his instruction. it is an important work content to teach workers technical skills and let them finish work within time and quality requirements. Other Chinese site supervisors who require local workers to work for a fixed hour in a

day when the work contents are not heavy and need they work overtime when the work is heavy. Mr. Y will take a completely different management strategy. The work content is fixed. The earlier the complete the job as required amount and quality, the earlier the time go back home. Which greatly enhanced the work efficiency of local workers.

'the work amount I will clarify to them before the start of the work, and told them the earlier finish as required quality and amount, the earlier they go back home. which accepted by them(local workers), and them faster their work efficiency, most importantly, the quality is up to the standard'.(Site supervisor. Mr. Y)

Result: Enhanced work efficiency and improved relationship between Chinese employees and local workers.

Compared to other Chinese supervisors who stress the fixed work hours, Mr. Y was more concerned about improving their efficiency and avoiding overtime work. In his opinion, this kind of management strategy motivated workers to finish the task in advance and enhanced efficiency and also decreased the complaints from workers.

Another reason why local people may prefer to go back home earlier is that there were lots of people affected by the poor traffic situation on their way back home. It will cost them one hour or more to reach the place where they live. According to Kiunsi (2013) that there exist heavy congestion because of rapid expanded population, cars, poor road infrastructure.

7.2.5 Factor: Cultural sensitivity

NO.	Factor	Impacts	Response	Results
1	Cultural sensitivity	Low communication efficient and work efficient	Sufficient explanation and proactive communication before work conducted	The sufficient communication prompted the work process, also decreased resistance in work.

Many Chinese don't realize the impact of culture on the project management process, or they don't recognise the differences in values, beliefs and thoughts. They are not sensitive to the implications of cultural factors in the communication process. They also do not recognize the low efficiency caused by cultural factors.

'One Chinese employee did not realize that he came to a completely different new place from China, Therefore, after he came to Tanzania, he did not realize the difference in Language, so when I try to ask him why his local assistant can not finish one task on time, he complained to me that he already told him several times, but the local assistant can not understand, so I ask him how he told to that local assistant, he said he uses Chinese communicate with the assistant. and he did not realize that the assistant does not know Chinese.'(Equipment manager, Mr. Z)

Cultural sensitivity emerged by different concepts, which include knowledge, consideration, understanding, respect and tailoring(Foronda, 2008). knowledge is the precondition since one should know the differences in culture and values, and

consideration is the way to cultural sensitivity by considering someone's background, language, and beliefs. While understanding means comprehending the attributes or the significance of the values or experiences from another cultural background. Respect in cultural sensitivity is deemed as the willingness to display appreciation to another culture. The last concept in cultural sensitivity is tailoring which means people considering the opinion of others and altering one's own opinion first based on the foundation of the previous four concepts.

Impact: low communication efficiency and work efficiency

Cultural sensitivity is essential to the communication process in construction site, especially in the conducting of construction, since there were many different types of workers who were led by Chinese site construction managers or Chinese foremen, cultural sensitivity is an important factor that affects the relationship between these local workers and Chinese employees. There were many construction instructions given by these Chinese people in the construction workplace. However, during the communication process, Chinese employees sometimes will ignore the impact of cultural factors between local people and Chinese people. Mr. Li said that *a worker can not understand how to conduct a specific operation, and after a few times demonstrations and explanations, he still can not get what the Chinese supervisor wanted him to do and by just repeating the word he would not understand.*

Further explanation is necessary for communication can make people understand what is going to do and why did it. Only by repeating the sentence is or not considering or tailoring the contents to make it easier to be understood will decrease the efficiency of communication. However, The extra explanation requires not only a good language capacity but also a consideration of different perspectives toward one thing between different cultural backgrounds people. Not every Chinese supervisor is good at English

or Swahili. Based on the author's observation when working at a construction site at project A, older Chinese employees may have limited.

Lack of cultural communication will lead to low work efficiency. Mr. WA is a Chinese equipment assistant working at project A, he complained about the low efficiency when asking a local worker to purchase a kind of screw-on lifting truck' I told him to buy four screws used on the lifting truck, and he knows what kind of screws need to buy, he went to local shops to buy it. What made me confused is that he was back with nothing and explained he just saw two instead of four screws, so he did not buy it.

He thought that the local assistant would buy those two since they need four, and he also reflected in the interview that he should have more precise communication with the local assistant. which mean regarding how many screws there was, he needed the assistant to bring a few screws back.

Response: Sufficient explanation and proactive communication before work conducted

At the same time, Mr L mentioned his work experience with local people. He suggested Chinese employees should show more patience on give instructions and should make a clear explanation on the specific decision, especially explain why it should be conducted :

When I'm going to let them punch in the attendance machine before work and punch out after finishing one day work, they were unwilling to do that and show resistance to record their attendance on that attendance machine. However, some local employees did not record their attendance on the device. To solve this problem, I try to explain why it is necessary to punch in and out on workdays and explain what the attendance can do. And the explanation seems to work since after the explanation, their resistance to the

attendance recording diminished and they started using the machine’.

Mr.L explained the importance of sufficient communication with people from different cultural backgrounds. With an explanation of the purpose, people will understand what they should do and why they should do it, which also help decrease the resistance to a specific task and increase work efficiency.

Result: Sufficient communication prompted the work process and decreased resistance

For many local people, it is hard to understand specific construction processes when they never had any chance to work in a similar environment. Project A is a bridge construction project, and it employed many workers who never have worked on a similar bridge construction site, the same as project B, which is a harbour expansion project. Seldom have local workers had similar working experience. Therefore, communication is a significant factor determining the successful conduct of a construction project. Sufficient explanation and proactive communication are essential to efficient intercultural communication.

7.2.6 Factor: Laws and resource availability

NO.	Factor	Impact	Response	Result
1	Laws and resource availability	1. Resulting in many lawsuits related to labour problems. 2. Challenging the project organization structure as required by Chinese companies 3. Low communication efficiency and chaotic department responsibilities	1. Consult professional law consultant 2. Extend the knowledge of Chinese supervisor by Meeting and law booklet distributing 3. Hiring local professional HR	suits decreased as the preceding of the construction project.

The laws, regulations and resource availability is essential for the Chinese to conduct project here. Without being trained in the local laws and situation of local industry or market statutes also made Chinese employees take a long time to familiar with the local market or the condition of one's professional field. The manager from the technical department who is responsible for machinery maintenance and construction device repair said that he needs to conduct a market price survey for the components of the construction trucks every three months, 'the price is known by conducting market survey'. If there is any necessary, he will do this survey with his local assistant to make sure the price given by the local people is the accurate market price instead of lying to the Chinese since many local merchants will raise their product price when Chinese come to enquiry the price of certain products.

Lack of training or enough knowledge on local laws, policies and social environment can also make a wrong judgement on the decision process, which further causes problems in the management process. The problem is especially prominent in the local worker

management process. Some Chinese employees lack relevant local legal and regulatory knowledge, leading to many lawsuits in the management process. Mr.W recommends that Chinese employers need to know more about Tanzania's labour law since it is entirely different from China.

Impact1: resulting in many lawsuits about labouring problems.

There were different policies and laws on labouring problems in China and Tanzania. Lacking law knowledge was the main problem facing Chinese supervisors. Chinese employees sometimes make mistakes, choices or decisions in terms of worker problems resulting in many issues to projects A and B, such as economic loss to the project. Mr.WG, Mr. L and M.WH were responsible for the worker's problems, such as employment, dismissal, follow-up lawsuits of workers and connecting to the local police station, a legal consulting company, etc.

'there were always have sues from workers, and most of the sues should have been avoided if the supervisor had more local labour law knowledge. and the sue always ended with compensation to the plaintiff(workers)'(planing department, Mr. WG)

According to Mr.L, he insisted that Chinese companies lack experts or professionals to concentrate on local Tanzania workers' workers' problems and help with processing law problems.

'we responsible for many different work contents on the construction site, it distributed our time. And various work contents further prevent us from learning local law knowledge. Since we are very busy, you can not put all your time to deal with worker problems .since knowing about local legal contents, and the legal process needs a lot of time.'

Impact 2:Challenging the project organization structure required by Chinese companies, extended work contents and blurred departments responsibilities, higher work requests to Chinese employees.

Different construction environments, especially the laws and resource availability, also challenged the project organizational structure. In China, the work contents divided into each department can cover all work contents proposed by the situations, which means responsibilities of a specific position and the person in charge can quickly be identified if there was any problem.

While in Tanzania, the work contents extended. It can not identify the person who is responsible for specific work content. Since Sometimes the work contents can be finished by planing department or be completed by administration department. This situation blurred the work scope of each department, and this situation also added difficulties to identify the responsibilities of a specific person. This chaos further decreased work efficiency.

For example, Local worker management is an essential work content. However, no Human resource departments are set in the sub-contractors (company MB)project management team in China. In project B, the employment and management of local workers was conducted by the administration department, while in project A, this task was conducted by the planning department. Company MB did not have any instruction on the local workers' management responsibilities attribution. At the same time, One subcontractor of project A company RC arranged this task to the administration department.

However, the problem is that people responsible for HR work are not professional people. Most of the Chinese employees in the planning department and administration department is from quantity surveyor translation background instead of Human resource background.

Mr.L from the administration department said that his work contents were completely different from the work in China. The work content was extended, even though he still works as an administration manager.

'I need to finish various kinds of work contents. I should be responsible for different matters, including human resource work routine work, following up suing cases related to workers' problems and being a local labour law consultant for the project. and responsible for the visa problems of Chinese employees'. (Administrator, Mr.L)

These works need professional knowledge to cope with challenges, lack of relevant work experience and professional knowledge. Chinese managers who respond to human resources can only learn from law cases related to workers when it happened in project A, which can cause significant loss to the project profit. It is because many Chinese employees have never worked in Tanzania. Meanwhile, they did not get any training or instruction from company MB.' I came here(project A) after I graduated from college, and I need to learn many things by myself. It is an entirely different experience for me.' (Human Resource assistant, Mr.WH)

Mr.L said that one Chinese employee needs to be responsible for different work contents in project A because there is not enough budget for the company to hire more professional people to deal with matters related to workers. Meanwhile, in the construction site, Chinese engineers were also responsible for different construction technical work

contents and did not as South Korean company G, it has different people responsible for a specific part of the construction contents. While a professional person will need to pay a higher salary, as a sub-constructor of project A, considering the profit made from project A, hiring more professional people means less profit since a high salary needs to pay to those professionals. Therefore, a Chinese employee responsible for many different types of work content at the construction site is normal.

Impact 3: low communication efficiency and chaotic department responsibilities

The department setting of project A is the same as it should be in China. However, the work environment is different in China. It is essential to contact the contractor South Korea company G, the communication process between project A conducting team and the contractor mainly by formal letters and meetings. However, there was no one to be arranged to deal with these letters in time, which caused a lot of delay and chaos at the beginning of the project's construction stage.

'the letter is an essential part of the project's daily work contents. However, we did not put so much importance on it. At first, the people of the planning department arranged to manage these formal letters and documents; to distribute these letters to the relevant department. However, most of these letters were intended for delivery to the technical department. Meanwhile, there were many meetings held by the contractor, the technical department brought the letter, and they seldom gave it to the one who managed these letters. the result is the loss of letters; and they may not find an important letter(Planing department, Mr. X)

At the same time, it is also causing a lot of problems for one person responsible for many

different work contents, and it may cause lower efficiency. Mr .W said that when he was doing one thing, he would always be disrupted by another thing, and he had to deal with another thing, which made delay and low efficiency. Meanwhile, Mr.X also mentioned that he could not focus on one thing in one day since there would have different things he needed to deal with in one day, which made him hard to concentrate and feel tired.

'I need to deal with contract problems and electrician problems at the same time, which made me hardly concentrate on one thing and finish it quickly. when I finish one thing and try to focus on another thing, sometimes I will forget where I should start...' (planning manager, Mr.X)

Response: Consult professional law consultant, extend the knowledge of Chinese supervisor by Meeting and law booklet distributing, hiring local professional HR.

To solve the employees' issues, the planning department responsible for worker issues adopted many measures to decrease the sue initiated by local employees. to understand local laws, project A contacted a local law consultant company that intends to attain help from consultants. At the same time, to extend the local law knowledge, a booklet related to Tanzania labour law also be distributed to Chinese employees. Meetings related to workers' sue be held and stress the importance of following local labour law. The author was responsible for these work contents in the project when working at project A. the planning manager Mr.WG in project B, accountable for the workers' issue, had been helped by local HR hired by the project B. Meanwhile, workers employed by project B is not as many as project A. Therefore, the sue is relatively more minor.

'I have a very professional local HR to help with all these matters, he can cope with these problems, and I can put most of my time on planning work at the construction site, I do

not need to worry about it(workers sue), we have been worked together for two years.

(planning manager,Mr.WG)

Response: clarifying responsibilities of each department, hiring a local assistant to help with daily work, adding professional people from China.

The responsibilities of each functional department clarified as the construction processing, the people's obligations also identified as the construction processing: 'at the beginning we can see that there have a significant change from the start beginning to now,(planing manager,Mr.X)

To help Chinese employees with daily work projects A and B employed many local assistants with similar work experience or relevant backgrounds. These assistants helped to deal with daily work. They function more like a translator, a liaison man providing the connection between local people and Chinese. They enhance the communication process and provide information to Chinese employees to make better decisions.

'the Assistant worked with me to assist me in communicating with local people, since I do not speak Swahili, and I will also know about the situation of local workers by asking my assistant to communicate with local workers.'(Planing department, Mr.WG)

As the processing of project A, more and more people joined in the construction process, and each of them was responsible for the relevant functional vacancies. The operation of the whole management system of project A is constantly adjusted and improved based on the need and the situation.

Result: The sues decreased with the processing of the construction project.

The employment of local assistants greatly helped with the daily work and

communication process. They help Chinese people translate Swahili into English, gather information when necessary to make decisions, connect to local people, explain to them, and facilitate the communication process.

Labour sue is frequently initiated by the local workers at the beginning of project A, while the sue decreases as the project is perceived. one reason is the improvement over the labour contract. The employment contract was be Scrutinized to make sure there were no mistakes in the employment contracts. Chinese supervisors' labour law-related knowledge and problem dealing abilities also improved as time got longer. The local employee management performance was gradually be improved.

7.2.7 Factor: Work experience

NO	Factor	Impact	Response	Result
1	Abundant local Work experience	1. Knowing more knowledge related to the local social environment. 2. Developing communication abilities and familiarity within the local communication environment. 3. Feeling more adapted to the local cultural environment than newcomer	1. Transferring experienced workers to the project	1. Shortening the time needed for adjusting and knowing how to conduct work in Tanzania's work environment. 2. Have higher communication efficiency compared to inexperienced Chinese employees. 3. Encourage experienced workers once worked with experienced Chinese managers to join the same project in Tanzania.

The communication process is also affected by personal work experience in construction projects. Compared to people who have more extended work experience in Tanzania, people who just started work in Tanzania for a few months feel more confused and need to explore the communication ways with local people. According to Mr. Z, who has ten years of working experience in Tanzania, he knows more about the local environment and knows more about local people. he even has local friends.

'I have a local friend who I knew him through work, and I can ask him anything about Tanzania, and he will try to answer my question; this is one kind of way by which I can understand Tanzanian. which also made me more understand how to communicate with local people since I have more communication experience than people who just work maybe few months.'

The more time work with local people, the more Chinese employees know about the communication ways .according to Mr. W, who mentioned how he communicates with his local assistant, it takes time to make a mutual understanding, especially when people don't understand English:

'My assistant needs to take time to understand what I said, my English is not good, it is very difficult at the start, but after a few weeks, he can understand what I want to express because he was already familiar with the work contents. And now I don't need much talk he can know what I want him to be assistant me...we have a kind of Tacit understanding. but it takes almost two years working with him.'

Impact 1: Knowing more knowledge related to the local social environment

Compared to Chinese employees who just started working at Project A and Project B, the experienced employees have more knowledge about the local environment, including local policy, the marketing status, local customs, and have more communication techniques when communicating with local people. Mr. Z in project A have worked in Tanzania for ten years, and he stayed at two construction project in Tanzania. Compared to others, he has a deeper understanding of local people, especially when he mentioned the impression on local people.

'although most of these workers who work at the construction site have a poor condition in economic, and do not have too much money, some of them will still dress clean clothes to the construction site and then change into work suits before the start of the work. And after working for a day with heavy load work in a dirty environment, they will put on their clean clothes and go back home, which shows their willingness to keep it decent and clean. they have high self-esteem and want to be respected.'

Meanwhile, people who have stayed a long time on the project will be more familiar with the local market, such as the market for construction truck components, the labour market, the local suppliers and local subcontractors. etc. Meanwhile, people who have worked for a long time will be familiar with the local political environment and the location of local authorities' offices and have higher efficiency in communication with local workers.

Impact2: Developing communication abilities and familiarity with the local communication environment

Based on the author's experience in project A, the new Chinese employees will undergo an adaptive phase to get used to the communication environment. For people who understand English, it will take time to get used to the accent of local employees when talking with local people in English. In contrast, Chinese employees who do not speak English will take time to learn and develop measures by themselves to communicate with their assistants and local colleagues. In the interview, Mr.WH said that although he can speak fluent English, he still has difficulty understanding what people say because of the accent of local people when speaking English.

'I had experienced difficulties understanding what people are saying when I hear local people speaking English. when I first arrived in Tanzania, I could speak English and

understand English, but it just needed time for us to familiar with accent, and then I can respond more quickly to what they said.'

Whereas there is also an accent when Chinese employee speaks English, and local employees also mention this problem. Mr. R, the local assistant who works at the planning department, said that sometimes he requests the repeat of a sentence is because he is not understood the Chinese accent English immediately. However, he got used to it and could understand Chinese accent English after a time.

Impact 3: Feeling more adapted to the local environment than a newcomer

Meanwhile, based on the author's experience on the Tanzania construction project, it is easier to stay calm when you are more familiar with local people, especially when dealing with a complicated situation.

The work experience allows people have enough time to build mutual understanding. After a long time, Chinese people will learn more knowledge about local people by working with local people together, consistently improving their language abilities, communication skills, familiarity with work content. At the same time, local people will also be familiar with work content and the communication style of Chinese people, which all can significantly enhance the communication efficiency in the construction project. Therefore, people with more experience can take a task and deal with it within a short time, compared to new employees who just started working at construction sites.

Response: Transfer experienced workers to the construction project

project A and project B both try to transfer Chinese employees who once worked in Tanzania or people who once worked in other countries to work in Tanzania .it is normal to see site supervisor managers who have been working for many years in overseas

construction sites. Especially Chinese supervisors who work at the site. Most of them can speak basic Swahili and are rich in construction site work.

'...many construction site managers once worked in Tanzania. I also worked here. we came here because the company management requires us to help with construction in this new project... the last project was completed two years ago, I back to China and stay for two years, then I back here again..' (The Chief engineer, Mr.Li)

Results: Shorten the time needed for adjusting and knowing how to conduct work in Tanzania's work environment, encouraged experienced workers once worked with experienced Chinese managers to join the same project. They have higher efficiency compared to inexperienced Chinese employees.

The involvement of experienced Chinese managers, especially those who once worked in Tanzania in another project, helped the local workers' employment process of project A .since many workers who once worked in Tanzania have their own construction team responsible for the certain construction process. The manager also trained many skilled workers in the last construction project, which means they do not need extra training. They can help introduce new employed local workers to projects. A.the experienced managers are familiar with the local environment and know labour laws to follow in Tanzania and avoid mistakes. They do not need to adjust to the working environment in Tanzania from the start. They can cope with the different work situations and have higher efficiency.

7.2.8 Factor: National Identity and self-esteem

NO.	Factor	Impact	Response	Results
1	National Identity and self-esteem	Tanzanians over sensitive with the communication attitude of Chinese people	Project arranged lots of activities to enhance understanding and communication	Most Chinese supervisors realize the importance of showing respect to them.

It was suggested by spinner-Halev, and Theiss-Morse (2003) that people's self-esteem was related to their national community and an essential aspect of people's identity is nationality. Meanwhile, if someone's nation is demeaned or weakened, the self-esteem of the one will be as well.

It is easy to understand why Tanzanians were so sensitive to the attitude of Chinese employees considering the relationship between self-esteem and the nation's status. This is because China has a higher development level and economic status than Tanzania. This situation may make Tanzanian feel frustration in their self-esteem. Some Tanzanian workers who work at the site feel angry and complaint to local authorities that they feel uncomfortable about the attitude of Chinese foremen because they think they were not be respected by Chinese employees. Mr. W, who responsible for the worker's employment, said:

'....they always complain Chinese foremen rudely treat them, but most of the situation is they can not finish the operation on time, which made their supervisor impatient and speak loud to them.'

At the same time, the chief engineer Mr.Li also mentioned that ‘local people will be very happy if you show your interest *to know their culture and their lives, they will be very happy to tell you.*’

Impact: Tanzanians over sensitive with the communication attitude of Chinese people

Local people are glad to tell the Chinese about their culture, and they have their own history and tradition, which they all feel proud of; they wish to be understood. However, the different development situations between these two countries and the technical help(young engineer and workers training) from China made them feel low self-esteem. Therefore, they will feel angry and very sensitive to the attitude of Chinese supervisors who speak loudly to them. They may think that this attitude is rude, and they felt be insulted and unfairly treated. However, Chinese employee was not meant to do that.

‘I treat people who work with me well. Local people do not have the habit of saving money. I always lend them money to them for lunch or lend them money for transportation. However, some workers complain that I treat them rude because I speak aloud to them and call the police, it really made me feel strange because I did not do anything.’(Site supervisor, Mr Y)

Response: Project arranged lots of activities to enhance understanding and communication

Facing this kind of situation, many Chinese supervisors were trying to change their way of expression at the construction site and at the office. Chinese managers will also try to enhance mutual understanding by holding department dinners and basketball games.

Mr.Li introduced the activities arranged in the engineering department aimed to enhance

mutual understanding.

'We would invite all engineers working both from the construction site and office to attend the dinner after work since we do not have time at the weekend. We also organize a basketball game between local engineers and Chinese engineers. It is a very good opportunity to understand each other since these activities can provide a casual talk environment. But you can not always informal talk at work place'.

Meanwhile, it can also find that Chinese supervisors and managers used to manage Chinese workers in Chinese construction sites in this way, while it can not apply to Tanzania workers anymore. Many Chinese managers are trying to shift their way to communicate with local people considering the cultural difference. They may yell at workers at the construction site. It was viewed as a normal thing in the Chinese construction site.

'sometimes, people will yell at local workers, but it is not proper because we are here trying to teach them technologies and finish the project on time. Therefore, more patience is needed in the communication, and many construction site foremen can not express well the instruction because of the language barriers; therefore, they need more patience to explain.'

Results: Most Chinese supervisors realize the importance of showing respect to them

Activities arranged by project A to enhance mutual understanding and cooperation. More and more Chinese supervisors understand that respecting workers or letting them feel respected is essential. Mr.Li noted that 'Local people need to be respected and we should enhance relationships with them. It can facilitate our cooperation and team performance.

The construction of Project A also reminds me of the friendship between Chinese people and Tanzanian in history. Therefore, it is essential to develop this kind of friendship.'However, it is not easy for some supervisors to change their way of communication. it was observed by the author at the construction site when working at project A.

7.2.9 Factor: Communication Expectations

NO.	factor	impact	response	result
1	Expectations on communication result	Caused misunderstanding in communication	Improving the interaction approach with Tanzanian	The relationship between Chinese employees and local employees developed into a neutral situation

When talking about the impression of Tanzanian or Chinese people, Local assistant R and Chinese employees give very different answers. Local assistant Mr.R said that '*Chinese people are too respect to their boss, but we(Tanzanian) do not so respect boss.*' while Chinese employees said that *Tanzanian does not have much 'gratitude' to their superior' after they are helped by their boss.*' gratitude here means a sense of gratitude and people want to express their thanks.

Chinese employees made lots of examples to explain why they think Tanzanians is not shown any gratitude to their boss(Chinese) even after receiving the favour from their superior.Mr.L said he lent money to local workers who asked for his help since most of the workers do not have the habit to saving money, they always do not have money to

pay the lunch, workers will find Mr.L to lend money for lunch. Therefore,Mr. L complains that:

'...Considering the difficult situation they were in and I lent money to them, sometimes they even did not pay back, but I never mind and it is not big money. However, they never considered that I was their supervisor, and I once helped them, they stole money from my office, which made me angry, and I do not know why. They do not look grateful for what you did for them, not at all.'

The experience is not only happened to Mr. L.Mr.W, but Mr. Z also had a similar experience, and they all said that local workers have will not show gratitude to others. However, you do help them or care for them. Mr. Z said local work is not performed like Chinese people:

'They will not be grateful that you helped them in work. For example, to encourage them in work or when they have good performance, I would add on working hours in the attendance sheet, although they did not work that long, they would not thank you for that. They (Tanzanians) take it for granted.'

What Here made Mr Z feel confused is why they even did not mention or show any gratitude to him. Because he thought the extra hours is added by him. In Chinese traditional culture,'人情', which in Chinese read 'ren qing' have an essential impact on interpersonal relationships. A similar vocabulary in English is 'favour'.while this word has abundant cultural meanings on different occasions in China. According to Cheng (2004),' ren qing' is a behaviour code and also is a moral standard in daily lives in interpersonal relationships, which means all the interaction and communication will

follow or be conducted around the topic. Therefore, Chinese people tend to conduct interaction and communication behaviour under the 'ren qing' code. And also judge a person if she or he has 'ren qing' or not based on the meaning of 'ren qing' conducting behaviour under this code means people should show high sensitivity to the need of others and show concern, concern over others in the interaction; control self-emotion and understand other's difficulties and be tolerant to when there are conflicts with others; face-saving is important for yourself and others when represent your own opinions, be humble.

Just as Cheng said, not every Chinese will follow these rules, but it is the goal or ideal condition that everyone will strive to reach by requiring themselves to conduct like this. Not only in interpersonal relationships, but Chinese also extend this conception into the workplace. This means people should consider others and set themselves in the same situation as the other side in mindset and show their empathy. Under this situation, it is proper for you to show your gratitude through hard work or care about your supervisor's situation and save face for them.

This is what these Chinese interviewees practised when they worked in China, which made people from other cultures may feel confused about this kind of situation. Mr. R, the local assistant, said that *I do not understand why the Chinese are so respectful to their boss* because he can not understand the communication expectation of Chinese people when he communication with Chinese people. And Chinese supervisor also did not realize that they faced people from different cultural backgrounds.

Result: Caused misunderstanding in communication

the different expectations on communication caused misunderstanding in communication.

Although working in a different cultural background, Chinese employees did not realize the difference in communication expectations, and this difference always results in an impression for these Chinese employees that Tanzanian is not behaviour like Chinese, Therefore, expecting they treat Chinese just as what Chinese did in interaction is hard.

Response: Improving the interaction approach with Tanzanian

There are no management strategies to cope with this situation, under most of the situations, For Chinese people who worked at Project A and project B, knowing the expectation differences through communication with local people. People always change their manners or interaction ways after understanding the difference. People would treat local people as normal but will not expect their understanding or empathy, and they would not offer help proactively. Unless local people asked for. Mr. Z and Mr. Y noticed their response to this different expectation:

...I will not offer help proactively, they do not resemble us, they take all the help and favour for granted, but we won't.... (Site supervisor, Mr. Y)

'They are different from us (Chinese). Therefore, I do not think they will have the same response as us, I treat them like normal, but I know there are some differences between us.' (Equipment manager, Mr. Z)

Result: The relationship between Chinese employees and local employees will develop into a neutral situation

Most Chinese employees will experience a similar situation and find out the difference between Chinese and Tanzania interaction. Most of the time, people learn from their experience and adjust their way of interaction. It means Chinese will not try to apply their Chinese social interaction norms to the Tanzania construction site., and Chinese

employee also adjusts their behaviour and communication ways as time goes by, it means they will not try to affect the team member relationship with Chinese interaction norms, which they always conducted in China. Chinese employees have not applied this behaviour code intentionally at the beginning, and it is because people tend to conduct all this such behaviour unconsciously. The relationship between local Tanzanian workers and Chinese people developed into a delicate balance as time went by, which means people will conduct their behaviour code and then find the result or expected result is different from China. They will change their proactive behaviour by offering favour actively. The relationship between local Tanzanian employees and Chinese workers keep at a neutral point. Not lean to one side.

7.3 Chapter summary

Section 7.1 to 7.2 have listed the different factors drawn out from the two cases, and the responses adopted to cope with intercultural communication problems and the results of these responses. To summarize and analyse findings from the result part, factors affecting intercultural communication, influences of cultural background in intercultural communication, and the good practice conducted in these two cases be presented in the chapter summary.

7.3.1 Summary of intercultural communication in the international construction project

The analysis process has drawn out a range of characteristics from the case study project. These characteristics are listed below:

1. Language is a major problem.
2. The impact of intercultural communication brings more challenges than opportunities to the project.

3. Time is needed to adapt to the host cultural environment, and time is needed to reconstruct communication ways in the proper style for both sides.
4. People in the case study experienced complex feelings to a more calm status in the communication process as time went by.

Language functions act as a bridge in these two case construction projects to give instructions and respond to different situations. However, most people in the two cases project can only speak English or Swahili. Many of them did not master one local official language until they started to work at the construction site.

Challenges can be observed in different aspects of the communication process. Project A and project B suffered the impacts from cultural factors, Such as the low capability of language abilities of employees, lacking cultural sensitivity of employees in the project lead to low communication efficiency; misunderstanding caused by different values and time notions; labouring issues caused because of lacking labour regulations and laws; management strategies adaptation result from work experience, national identity and different communication exceptions.

For company MB, the construction process of project A is more like a learning-adaptation process. Although it is not its first time to conduct a construction project in Tanzanian, the project management team still learned from different failures caused by ineffective communication. As time goes by, the communication style, attitude and knowledge with local people would be accumulated. The communication style would process toward more acceptable ways to both parties.

People in communication will inevitably affect by their cultural background in the intercultural communication process, which the impact of culture made people to conduct kind of communication they familiar as granted. The implications from aspects such as values and notions will take more time to be recognized. When people from different cultural backgrounds engage in a conversation, it inevitably has different expectations of the communication results. Chinese people and local people have a different perception of time and a different expected communication result compared to Tanzanians. That is why sometimes Chinese will face unexpected responses, which may make them feel confused and anxious. Eventually, the Chinese accepted this kind of difference after a time.

7.3.3 Summary of factors that affect intercultural communication in the international construction project.

The factors affecting intercultural communication in the international construction project drawn from two case study projects are vital to understanding how international construction projects are affected by these factors and the responses taken to cope with impacts and the response results. The response taken at the individual and organization level will guide the guideline development in the next chapter.

Generally, the findings showed that the two case study projects faced impacts from intercultural communication on the project organizational and individual level, these factors including language capability, time notions, values, cultural sensitivity, work experience, national identity and communication expectations and regulation or social environments. The communication process was affected by all these factors. The case study project also paid attention to enhancing capabilities on an individual level to relieve negative impacts from these factors, for example, holding language training classes and

initiating activities to improve relationships with local employees. These factors derive from the different cultural backgrounds are limited by individual capacities, such as language capability, cultural sensitivity and work experience.

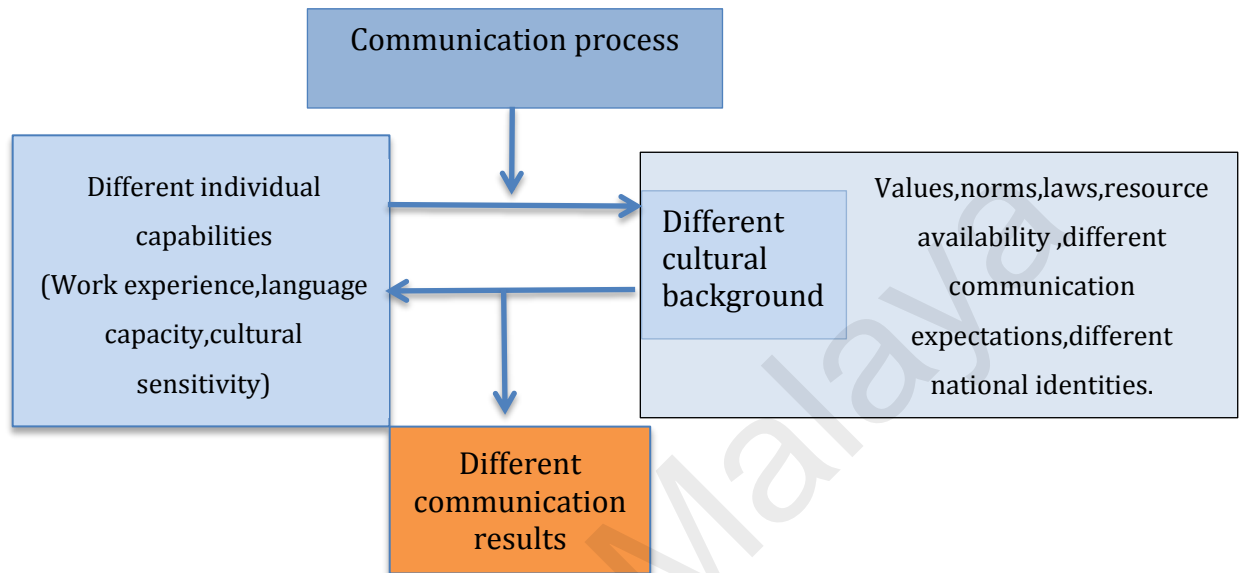


Figure 7.2: The intercultural communication process is limited by individual capabilities and affected by different cultural background

7.3.4 Summary of the impacts of cultural background on projects communication in international construction projects

First, cultural background changed the way people convey information in the project. The impacts from the cultural background on project communication can be found in the two case study projects in the different communication channels applied. For example, most Chinese companies use WeChat, QQ, which is the primary channel to help with communication. While in the two case projects, chat applications like What's up and emails is the main communication channel used. Chinese employees experienced communication channel change. Most Chinese employees used WhatsApp in projects A and B for the first time, which mean they changed their communication channel to adjust

to a different communication environment.

Second, the challenges from cultural background differences exposed significant communication management problems in project A and project B. there were no communication management strategies or communication management planning in these two projects. Let alone the communication process monitoring. The lack of communication management process caused employees' low-efficiency communication and repeated mistakes. At the same time, it significantly impacted the project 's communication performance and raised the labouring cost of project A.

Third, the different cultural backgrounds of the project management team member proposed higher requirements to communication skills and languages used in these two case study projects. However, most Chinese employees did not get communication or cultural training. Some even can not speak English or Swahili. The great gap between the demand proposed by the project and the actual situation caused low work efficiency and miscommunication in the work process.

Fourth, different cultural backgrounds and environments caused significant impacts to project organization structure. In project A, the responsibilities of each department were expanded. Since Tanzania lack professional sub-contractors and local professionals who can help with professional construction work at the construction site, many work contents need to be accomplished by Chinese employees themselves. Meanwhile, In the early stage of the project, the overlapping of work contents and the need to set up a human resource department reflected the project organization structure of project A is not compatible under the Tanzania construction environment. All these aspects caused Chaotic and delayed communication, which greatly affected the project's performance.

7.3.5 Summary of two case study projects' response and results

The response and the measures adopted by the two case study projects to improve communication efficiency and the relationship between Chinese employees and Tanzanian employees is vital for us to understand how international construction projects deal with the cultural influence on project communication and what results in these responses lead to. The analysis of these responses will guide the discussion and recommendation in the next chapter. Although the two case study projects also paid attention to improving Chinese employees' communication capacity and held many activities to enhance the relationship between Chinese employees and Tanzanian employees, which shows the intention to build a good relationship and improve the communication capacities of employees. However, the lack of project communication management process and the neglect of the actual communication demand, requirements, and stakeholders' expectations caused misunderstanding. It also reflected the project team's lack of professional communication knowledge and underestimated the importance of communication management. The communication management of case projects show below(see figure 7.3).

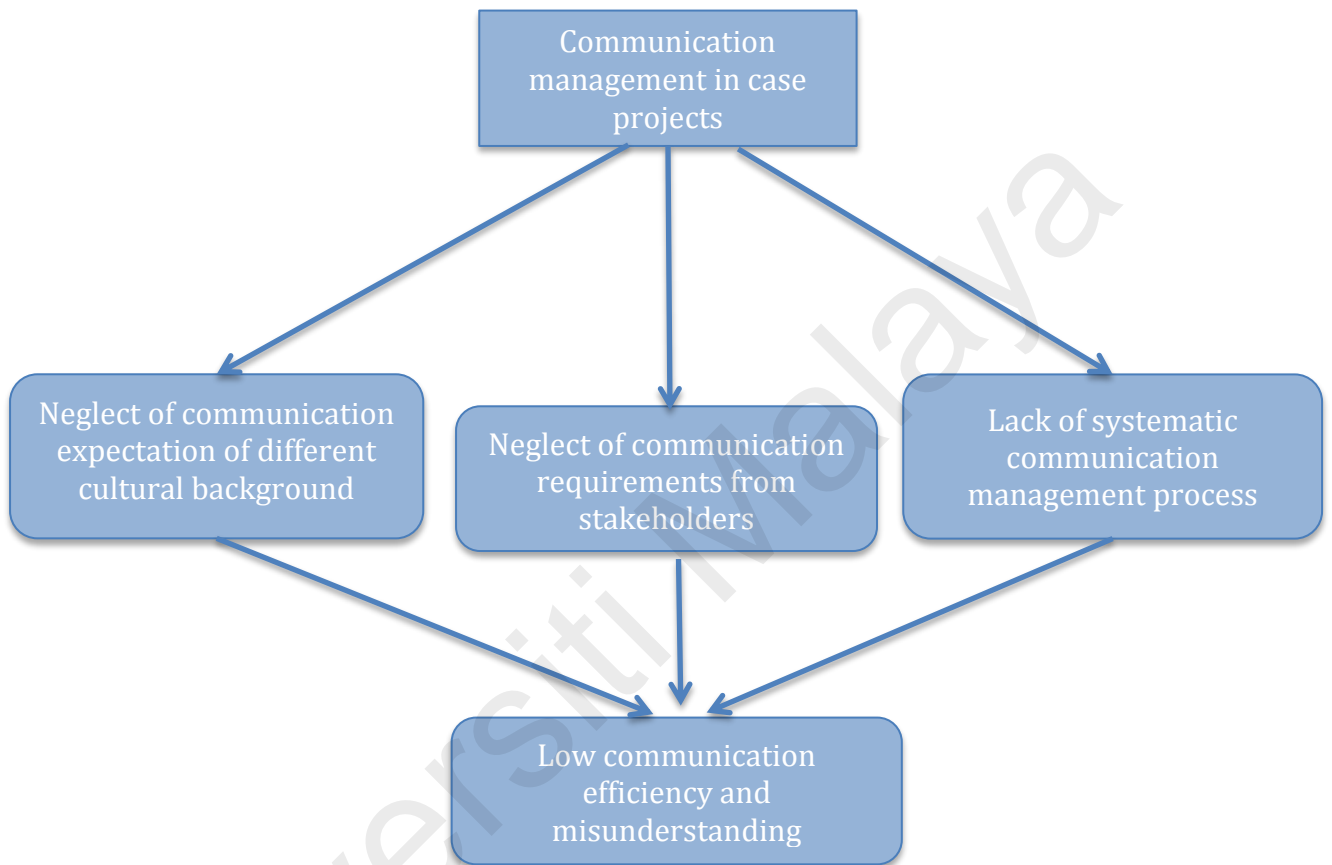


Figure 7.3: The communication management in case projects and its results

CHAPTER 8: DISCUSSION

8.1 Introduction

This study aims to explore intercultural communication in international construction projects and develop a guideline referring to intercultural communication in the construction project. An inductive study has already been implemented within two case study projects which conduct Infrastructure construction in Tanzania .findings have been elaborated from interviews with the Chief engineer, site supervisor, engineers assistant, administrator and department managers, combined with documents analysis.

The analysis was divided into three aspects, and the first aspect represented factors that occurred in these two case study projects to understand what affected intercultural communication, how these factors affected intercultural communication, how do Chinese employees in the project respond to those impacts, what measures are taken at the individual and organization levels. The second aspect explored the impacts of different cultural background on project communication, and the purpose is to understand how cultural background affect communication and what response was taken from a project organization and individual perspective. The third aspect was to develop a guideline, and the purpose is to make recommendations to Chinese construction companies who intended to conduct a construction project in Tanzania. The guidelines suggest the construction project conduct systematic project management and employee communication capability development.

These three aspects of analysis have corresponded to the three research questions of this study. The combination of the first two aspects addresses the overarching research question: to explore intercultural communication in the international construction project(see figure 8.1).

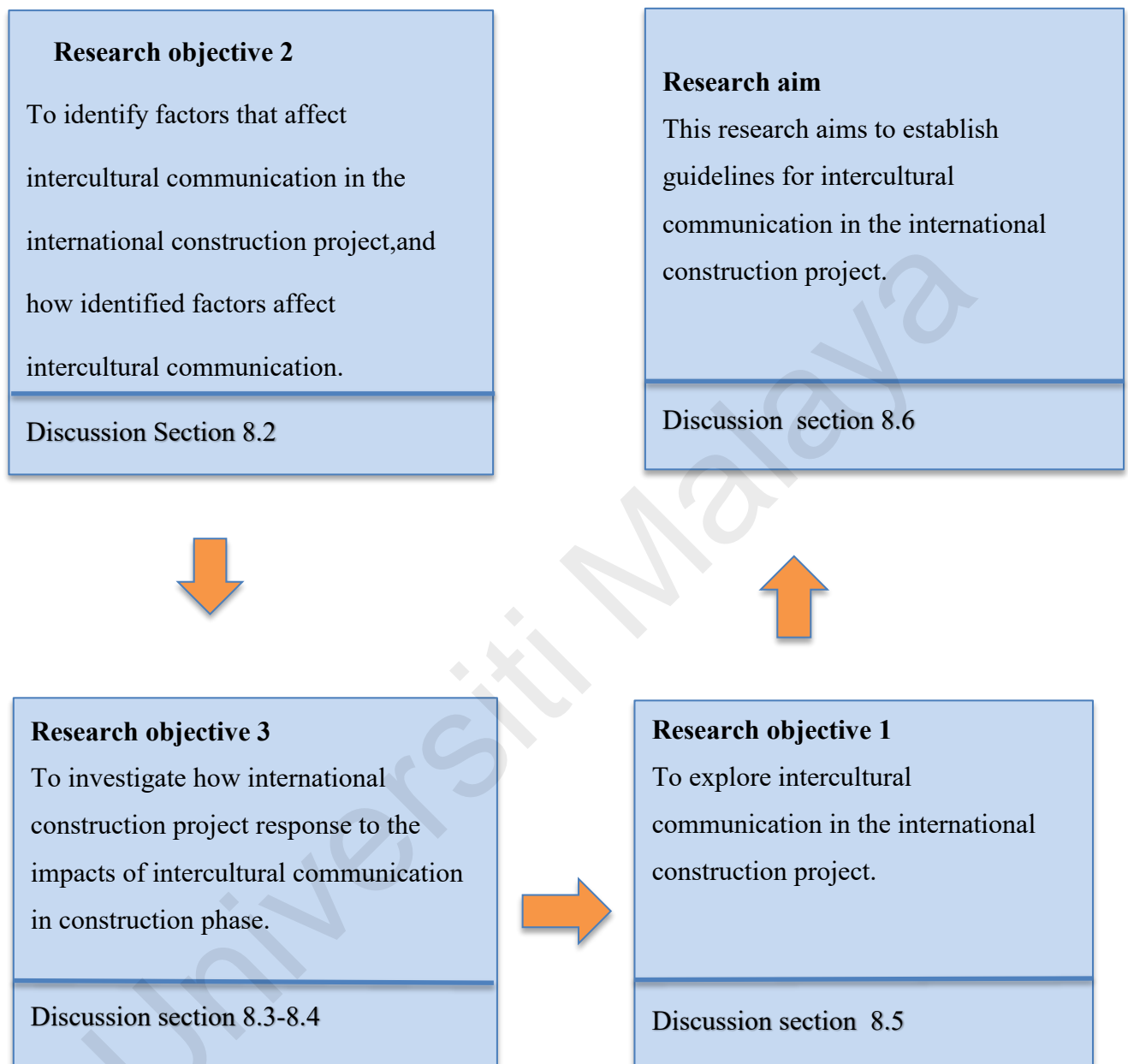


Figure 8.1: The different aspects of analysis and their relationships in the discussion chapter

8.2 Analysis of factors that affect intercultural communication and how it affect intercultural communication

8.2.1 Factors affect intercultural communication

To explore intercultural communication in the international construction project, it is important to know factors that affect intercultural communication in the international construction project and how they affect the communication process. The finding showed that the two case projects had similar conditions.

Identifying factors that affect intercultural communication in international construction projects starts from identifying factors from existing literature and identifying a preliminary list of factors that affect intercultural communication. The identifying process also includes analyzing interviews from two case projects. The analysis of the interview helps draw additional factors.

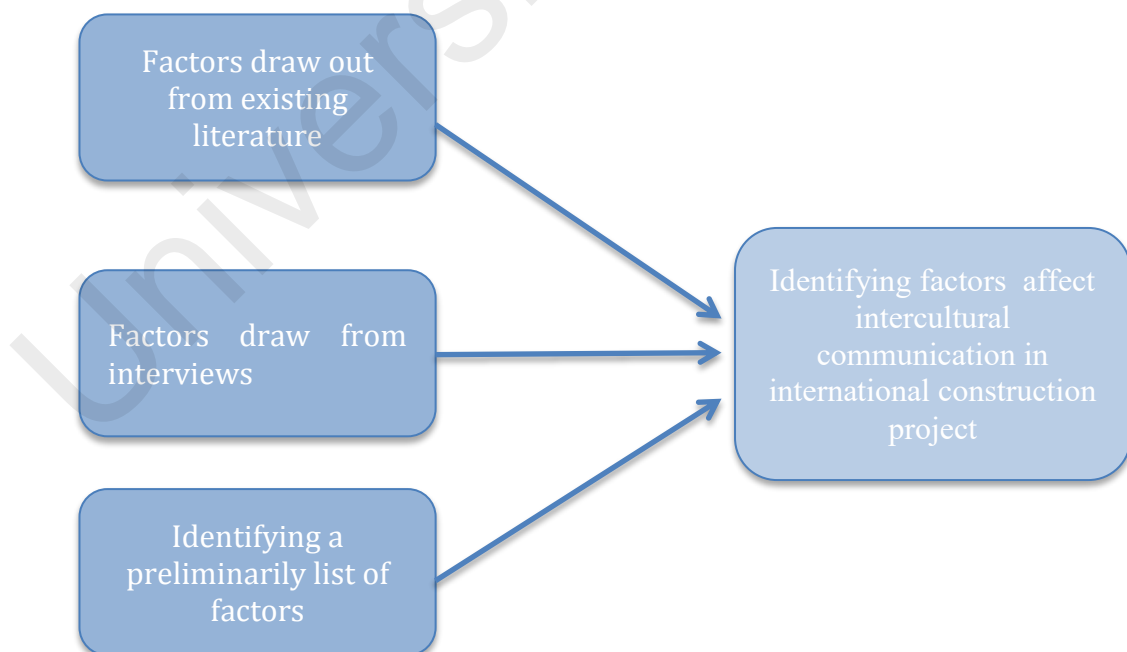


Figure 8.2 : The process of identifying factors that affect intercultural communication

The factors were identified in the result part of this thesis. These factors were combined in a tablet form and listed here.

Table 8.1 the factors that affect intercultural communication

Factors	Relationship between identified factors and case study projects
Language capability	language capability of Chinese employees affects communication.
Different perceptions towards time	The different notions toward time lead to confusion.
Informal communication	Facilitating understanding between Chinese and local employees.
Values	Different values cause misunderstanding.
Cultural sensitivity	Low cultural sensitivity cause low communication efficiency
Laws and resource availability	Cause lots of law suits in case projects and project structure problems
Work experience	Shorten the time to adjust to the local environment.
National Identity and self-esteem	Affecting the attitude of local people toward the Chinese.
Expectations on communication result	Causing misunderstandings in the project cases.

8.2.1.1 Language

The literature from Redmond (2000) suggested the importance of language in communication between different cultures. While Language is a prominent problem in these two case projects, it was mentioned by many interviewees. The impacts of language on intercultural communication derive from the reliance on language application, which leads to a low communication efficiency. Meanwhile, the language problem in this case also caused barriers in the technology transfer process.

8.2.1.2 Perspectives of time

The different perspectives of time lead to a different understanding of punctuality. Tanzanian employees intend to view time as an infinite resource and hold the polychronic views in which relationships and things in hand are more important compared to the following schedule. The finding in this thesis is in line with the concepts from Peng (2009) and Hall (1992). It also found that Chinese employees show time consciousness in this thesis.

8.2.1.3 Informal communication

Informal communication was applied in two case projects to enhance understanding and cooperation between Chinese employees and local employees. While the informal communication in projects A and B show the improving relationship between local employees and Chinese employees through various activities, which agree with the research of Xu and Li (2013) and Kraut et al. (1990).

In addition, the interview also shows the different perceptions of informal communication. Compared to local employees, it is found that Chinese people were more interested in conducting informal communication through various activities.

8.2.1.4 Values

The different attitude of local employees and Chinese employees shows the different values. However, these differences lead to misunderstandings and stereotypes. Tanzanians are more concerned about their work environment and work-life quality compared to Chinese employees, which support the finding of Hofstede (2021). At the same time, Chinese employers require people to work overtime, while the local workers were unwilling to work overtime. The different values caused challenges to management strategies adopted in a construction site. This situation is also in line with the findings of

Tone et al. (2009) and Fellows et al. (1994)

8.2.1.5 Cultural sensitivity

The lack of cultural sensitivity of Chinese employees in project A caused low communication efficiency and misunderstanding. Some Chinese employees did not know cultural knowledge about Tanzania and lacked understanding of the cultural difference in terms of values. In the interview, Chinese employees in case project A considered that sufficient explanation and proactive communication is necessary to facilitate mutual understanding, which support the findings of Ochieng and Price (2010)

8.2.1.6 Laws and resource availability

It is found in this thesis that different laws also cause great impacts on the project. Most Chinese supervisors did not know the labour law content in Tanzania. Therefore, they conducted the management strategies they used in China, which caused lots of labouring issues in the construction site in project A. The finding of Liu et al. (2006) suggested the organisational structure of a project affect communication. While this research shows the lack of professional workers, engineers and material extend the work contents and changed project structure, which may indirectly affect intercultural communication.

8.2.1.7 Work experience

Work experience is another important factor that affects intercultural communication in these two case projects. This finding agrees with the research from Ochieng and Price (2010); Case projects prefer to transfer experience employees to the site since experienced Chinese managers, especially those who once worked in Tanzania more familiar with the local environment and regulations. It also finds that experienced Chinese employees can help recruit local professional workers through their relationship network in Tanzania.

8.2.1.8 National identity and self-esteem

The finding of Spinner-Halev and Theiss-Morse (2003) suggested the relationship between national identity and self-esteem. In this thesis, the over-sensitive attitude of local employees in these two case projects support the above findings. the interview from site supervisor Mr.Y suggest the communication attitude of Chinese is important to them, and this research also suggests the importance of showing respect to people from a different cultural background

8.2.1.9 The expectation on communication result

The finding of Sethi and Seth (2009) indicated that expectation of communication would affect communication. The different expectations on communication results caused misunderstanding in the two case projects. The different expectation comes from two different interaction ways. In this thesis, Chinese people used to conduct Chinese social norms when communicating with local employees. 'ren qing' and 'face saving' greatly affect the way Chinese employees interact with others. However, local people can not understand the interaction way of Chinese.

8.2.2 analysis of How identified factors affect intercultural communication

To examine how identified factors affect intercultural communication, the impacts of these factors were analysed after identifying the factors. Three selective codes categories and one theory dimension were developed from the result parts. The selective code categories are discussed in detail below.

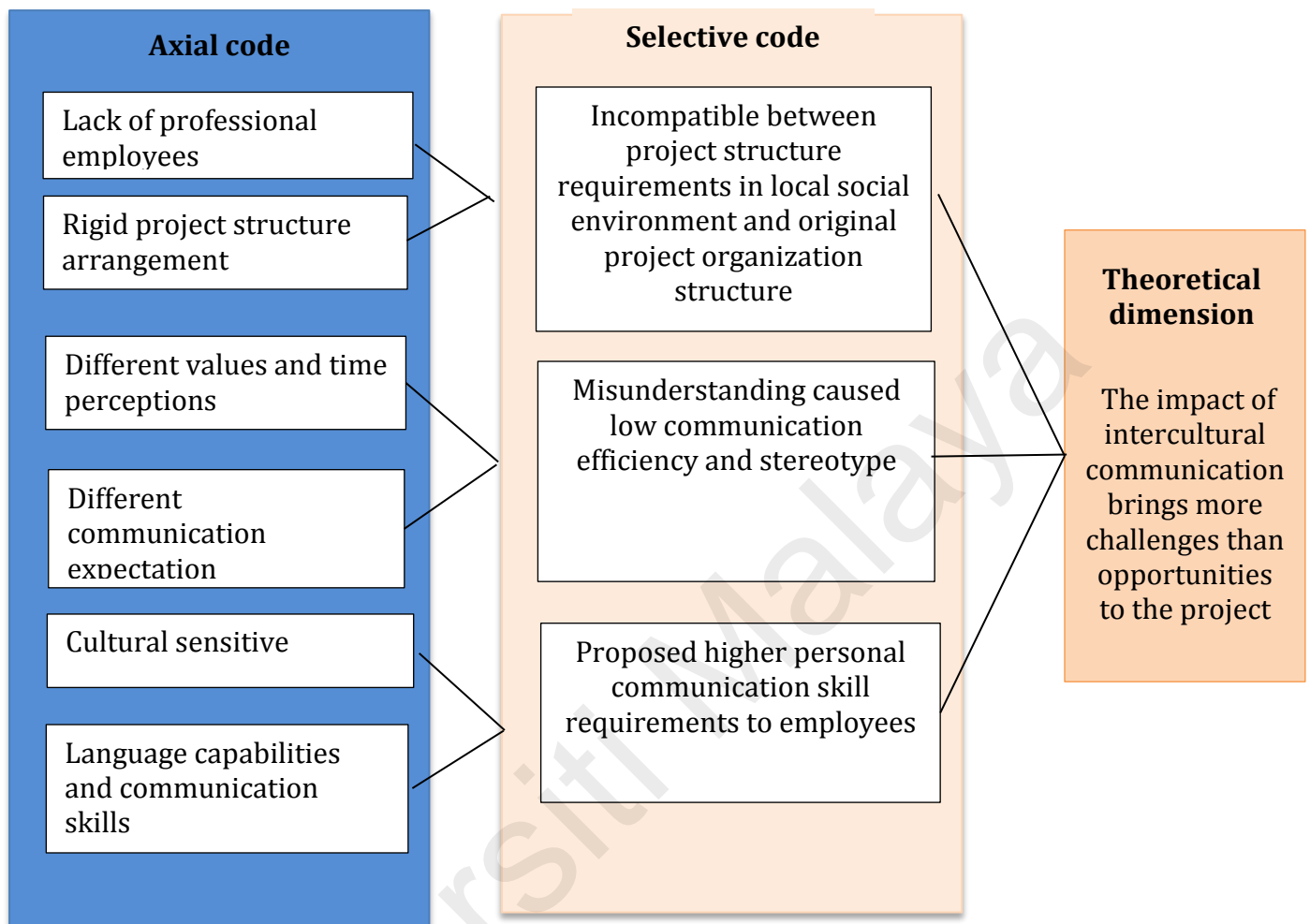


Figure 8.3: First aspect of analysis: how factors impact intercultural communication

8.2.2.1 Incompatible between project structure requirements in the local social environment and original project organization structure

The social environment is a broad concept. Here social environments refer to the laws of that society and resource availability. The finding of Ricks et al. (1990) suggested the continuous adaptation process of the international business organization structure under a global environment. This thesis stressed the incompatibility between the local social environment and the project organization structure, the adaptation process of the project

organization structure. This incompatibility can be found in the two case study projects. Project A failed to adjust to the Tanzanian social environment when it adopted a project organizational structure conducted in China. This is because the department set can not fulfil the project function requirements under the Tanzanian social environment. For example, the set-up of the human resource department in both projects was due to the lack of a professional sub-contractor who could provide skilled workers to the construction project.

Project A and B and the Chinese construction company MB never thought it necessary to set up an HR department before the start of the project, Which also exposed the potential risk of conducting international construction projects. This further suggested the cultural risk widely exist in the global market background, and the effort must be made to mitigate these risks (Bu-Qammaz et al., 2006; Fellows & Liu, 2006).

Meanwhile, although there were regulations that identified responsibilities of each function department and position in each department in the project management manual. However, when considering the social environment in Tanzania, some departments' work contents in project A and project B were not identified when conducting projects in Tanzania.

For the administration department of construction company RC in project A, connecting the local law consultant and following up the sue in project A is not included in the stipulate of administration work contents. Meanwhile, HR work contents were under the charge of the administration department, which means the administration department needed to finish both administration work and HR work contents. While in project B, the planning department in the project was responsible for the HR work content, the planning

manager of the project, Mr WG mentioned his work contents and said that HR work is helped by his local HR assistant and because the relatively smaller scale of the construction project B, it has less local worker problems compared to project A.

Meanwhile, the finding suggested two deeper issues; the finding indicates the extended work contents in project management, which are caused by the lack of resources in Tanzania (professional workers, engineers, material and qualified sub-contractors). Meanwhile, the incompatibility also derives from the gap between the management knowledge known by Chinese employees and the requirements of the project management knowledge in Tanzanian, especially in the aspect of cultural aspect. The gap between demands to complete the project and the resource provided by the social environment contributed to the incompatibility between the local social environment and project organization structure. At the same time, the project structure adopted is suitable for the Chinese environment. Therefore, it is necessary to consider cultural factors before the organization structure develops in another cultural environment (San Cristóbal et al., 2018).

This thesis suggested that the incompatibility between the project organization and local social environment lead to challenges in an international construction project which inevitably will affect the project's efficiency and its performance. This section discussed the first analysis aspect of impacts from factors identified in the result chapter on construction project communication. The results have suggested that the factors, especially different laws and lack of resources, lead to extended work contents and chaotic department responsibilities since the incompatibility between the original organization structure and the local social environment. The organizational structure can not cover the functional requirements in projects A and B within Tanzania's social

environment. It has also been identified in this research that potential cultural risks exist in the international construction project. The next section will introduce the second aspect of impacts from factors identified in the result chapter, low communication efficiency and stereotype.

8.2.2.2 Low communication efficiency and stereotype

All two case study projects noted the low communication efficiency caused by different values and behaviour models and stereotypes derived from misunderstandings because of different values and social norms. The results chapter demonstrated different values and notions that exist in different people's cultural backgrounds, which lead to misunderstandings and stereotypes.

According to Hall (1992) that culture can be classified into 'monochronic' and 'polychronic'. People who hold the monochronic view emphasize punctuality and schedule, while the people from polychronic culture stress relationships with people rather than the following schedule. In the interviews, the difference in time notion perception between Tanzanian and Chinese are in agreement with the literature. The Chinese people who worked at The two case study projects A and project B mentioned the late appointment of Tanzanians and complained the late since they thought the late of the Tanzanians affected their schedule. In this research, cultures such as Tanzania can seem as 'polychronic' since the contents of business and schedule are less important compared to things at hand. Although Chinese be viewed as polychronic in the research of DeHoff (2013), Chinese are time conscious in this research.

Meanwhile, it was also be found that the poor transportation in Tanzania severed the late for appointment or work. Therefore, the poor traffic condition also become a reason for

local people to explain their late or delay because traffic jam, this finding is also in line with the research of Otiso (2013)

Chinese interviewees in this research experienced confusion in the different perceptions of time between local people and Chinese employees. The attitude toward work also confused Chinese interviewees since there were great different attitudes towards work between local people and Chinese. These differences derive from different values between the Chinese and Tanzania, which caused misunderstandings and stereotypes. This finding is in line with findings that mentioned the negative impact of values from a different cultural background in international business (Gesteland, 1999; Hampden-Turner et al., 2020).

These differences made Chinese people feel confused and held a negative impression of Tanzanians. Most Chinese interviewees in project A and project B mentioned that Tanzanian workers are unwilling to work overtime even though be paid a high overtime salary from a Chinese employee's standpoint. In comparison, it is normal for Chinese employees to work overtime in order to get higher pay. This difference support different cultural dimensions theory from Hofstede (2021).

Meanwhile, Tanzanian employees can not understand why the Chinese were so obsessed with work. Tanzanians also feel confused and can not understand why the Chinese have different attitudes or perspectives from them (Tanzanian) to treat work time. People with different cultural backgrounds will act differently in the same situation and hold different opinions on one thing since they tend to view things from their own value system (Karahanna et al., 2005).

Meanwhile, Chinese employees in Project A and project B both hold the view that Tanzanian employees who worked in the construction project seldom show gratitude to their Chinese colleagues or supervisors after they receive favour or help from Chinese. Meanwhile, the local employees held the view that they were not so respectful to their supervisors as Chinese people do. The reaction of Tanzanian employees made the Chinese confused since the reaction of them is not what the Chinese expected. Which mean the Chinese in both projects seldom receive any favour in return from Tanzanian employees after they helped local people. This situation caused misunderstanding in Chinese employees when interacting with local people since it is not the communication results that would happen among Chinese.

This study also confirmed the finding that '*renqing*' is a form of interaction based on an exchange of favour to maintaining positive and long term relationships(Cardon, 2009; Leung et al., 2014). For Chinese people in this study, what they do is just what they conduct in their routine work or daily interactions when in China and the response of Chinese after receiving help will follow '*renqing*' norms to maintain a friendly and positive relationship. These kinds of social norms are also conducted to maintain a positive relationship be applied by Chinese employees in project A and project B. However, when it was conducted in Tanzanian, the responses of Tanzanian employees were totally different.

This situation would make Chinese people feel frustrated and confused since what they conducted was deemed granted among Chinese people, while Tanzanian people cannot understand. What should be noticed is that there were a few examples in which local people established friendly relationships with Chinese employees. In this situation, the relationship established between the Chinese and the local employees follows the norms

with which Chinese employees are familiar.

However, most of the Chinese interviewees in the two case projects would gradually revise their attitude or interaction ways as time went by when communicating with Tanzanian employees. Most of them adapted to the local norms and would not provide favour proactively anymore, which means they understood that the Chinese way of interaction could not work there.

Chinese employees also realized that local employees have different norms from Chinese, and it is necessary for Chinese employees to follow them to lead the cross-cultural team. The expectation of the communication results will also be adjusted when people are more familiar with local people. Meanwhile, the changes of Chinese employees in the two case projects also suggested literature on culture shock, and it also represented the socialization process in another culture; this finding support the research of Furnham (2019), Meisel (2012) and McLaren (1998).

8.2.2.3 Higher personal communication capability requirements to employees

The different cultural backgrounds exist between Tanzanian employees and Chinese employees not only proposed language requirements to Chinese employees in both case projects but also required high cultural sensitivity, professional knowledge and communication skills. In both case projects, some Chinese employees faced the challenges of language at the beginning of their work in Tanzania. The language problems also led to reliance on translation applications in the phone, which inevitably led to low communication efficiency since people need to spend time to search for and organize the meaning they want to express. In addition, the cultural sensitivity of Chinese employees also affects the intercultural communication process. The cultural sensitivity of Chinese

employees refers to the cultural knowledge about Tanzania, the consideration of cultural differences, and sufficient understanding of the different perspectives and values (Foronda, 2008). However, the interviewees in this study reported the lack of cultural sensitivity of Chinese employees, and sometimes even they did not realize barriers caused by the low cultural sensitivity. This kind of situation happened in construction sites when there were lots of instructions that needed to convey to the workers. Lack of sufficient explanation is another reason that leads to low-efficiency communication in the two case study projects. People neglect the importance to give enough explanation before conducting certain work in multiple cultural teams, and it is important to make a full explanation. This finding drawn out from the interview supports the finding of Greenberg (1990), in which he suggested the necessity to make sufficiency explanation to avoid misunderstanding.

However, there were few studies related to the intercultural communication capacity of managers in construction management projects in the literature, and most of the studies stress the cultural intelligence, communication capability and adapting capacity of international firms managers (Earley, 2006)

Meanwhile, there were many pieces of literature that call for capability development of construction project managers under multiple cultural environments. Especially the capabilities to think from a different cultural perspective and the global learning capability (Bartlett & Ghoshal, 1999; Ochieng & Price, 2010). at the same time, the findings of Ochieng and Price (2010) indicated that there was little research concern with cultural problems of the workforce. This thesis reported the cultural problems facing employees in two case studies and identified the high capacity requirements to employees in international construction projects, and clarified the capabilities requirements of high cultural sensitivity, proper communication skills and relevant professional knowledge of managers under another cultural background. All of the aspects in this thesis helped with developing a deepen

understanding of intercultural communication in international construction projects.

8.2.3 Summary: The impact of intercultural communication brings more challenges than opportunities to the construction projects

The purpose of the above section is to solve the research question: To identify factors that affect intercultural communication and how identified factors affect intercultural communication?

The nine factors reported by case study projects have been discussed. Three different aspects regarding the impacts of these factors have drawn out from the data, which were Incompatible between local social environment and original project organization, developed low communication efficiency among local and Chinese employees and developed stereotypes on local people, higher communication capability requirements to Chinese employees. These three aspects suggest the impact of intercultural communication brings more challenges than opportunities to the project. The three aspects are caused by chaotic department functions, low communication efficiency and high requirements to employees.

This study confirms the necessity of developing the capability of the workforce in an international construction project. Meanwhile, this thesis also stressed that not only the project manager's ability, the capability of employees in a construction project from different departments should also attach importance. These factors affect international construction and show the risks of the conduct construction project in diverse cultural backgrounds. In addition, this study revealed the influence of intercultural communication on project organization, confirmed its impacts on communication efficiency and identified requirements to construction project employees under different cultural environments. Findings in this part deepen our understanding of how identified

factors in the result section affected intercultural communication in international construction projects.

8.3 Analysis of inter international construction project's responses to intercultural communication

This is the second aspect of the analysis, the main finding was that under the impact of intercultural communication, the case study project and employees who worked in the project would develop strategies to cope with the challenges. However, the process is passive; communication and management capability improving by self-adapting and there no systematic communication management. Meanwhile, these two cases lack of support from the company level reflecting neglect of communication management in inter international construction projects (Tone et al., 2009). Three different codes and one theoretical dimension have been drawn out from the analysis of responses taken by the two case projects (see figure 8.3). These codes are analyzed in detail below.

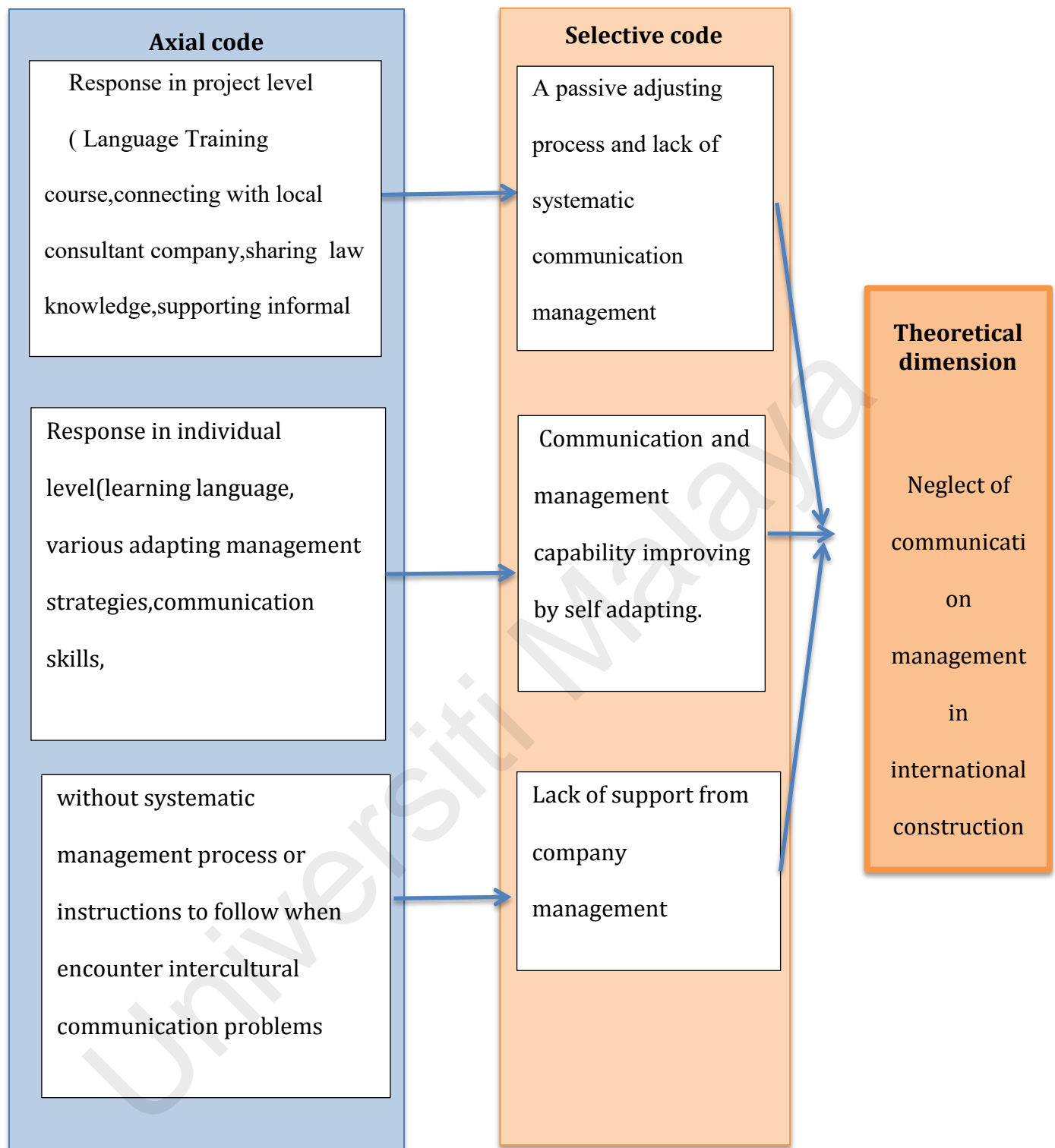


Figure 8.4 :The Second aspect of analysis: the responses to intercultural communication challenges

8.3.1 A passive adjusting process and lack of systematic communication management

Although two case study projects adopted some strategies to deal with the impacts of intercultural communication, these strategies can hardly set up a complete structure to help deal with the impacts consistently. Actually, the strategies taken by project A and project B aims to solve certain challenges from intercultural communication, which indicate a passive adjusting attitude of the project when coping with intercultural communication problems.

Interviewees from project A reported that the project organized an English learning course to improve the language capability of Chinese employees in project A considering the poor English capability of part of the employees. Once a week, the course was taught by Chinese who studied at Tanzanian university. However, most Chinese employees, especially those who worked in the site, can not attend the course, and the contents of the English learning course be taught can not be applied in routine work. Meanwhile, the English course lasted for only one month, the result of the learning also not be evaluated.

The labour law booklet was distributed, and consulting to local law consultant company is because of the high complaint rate and numerous labour lawsuits derived from lack of local law labour knowledge. The booklet distributed aimed to decrease mistakes made by Chinese supervisors in the workplace. Since most Chinese supervisors tend to treat local workers or employees as they did in China. However, it is inappropriate to conduct the same model in Tanzania. At the same time, to solve the lawsuit case of project A, the consultant company provided service to help Chinese HR understand the local Litigation process and avoid mistakes. These measures were taken after realizing the negative impact of inappropriate intercultural communication on project management. since the

lawsuit always mean the compensation need paid by the project and the negative impact on the company's reputation.

Another measure was taken by project A to improve the relationship between local employees and Chinese employees by conducting different activities such as department dinners and basketball games, which aims to facilitate the understanding and trust among employees in project A. However, these activities were conducted mainly in project offices, and most of the workers on the site could not join this kind of activities, mainly considering there were hundreds of local workers and the project had a limited amount of time and money to hold this kind of activities.

The findings of Tone et al. (2009) suggested the importance of previous working experience in the different cultural environments of supervisors in intercultural communication in construction projects. In these two cases, Project A and project B both transferred experienced employees who once worked overseas, including engineers and site supervisor to the project since people who once worked in Tanzania or overseas have more experience or have higher cultural sensitivity which can help process work more quickly and reduce unnecessary trouble.

These strategies conducted to cope with challenges was rather passive, most of the strategy were conducted after the problems occurred in the project, such as the labour lawsuit in project A, which caused loss to the project. Only after the loss, the project start to attach importance to the intercultural communication problems.

Meanwhile, lack of systematic ways to deal with these challenges in these two projects leads to inefficient management since there is neither no policy nor stipulation to follow when employees face communication problems nor measures be used to evaluate the

results or these strategies conducted to improve intercultural communication.

8.3.2 Communication and management capability improving by self-adapting

In addition to response at the project level, employees in both case projects also reported strategies to cope with the challenges impacts of intercultural communication. Employees in both projects are the frontline where intercultural communication happens. Most Chinese employees play a supervisor role in the project conducting phase. Therefore, to lead their multiple cultural teams, there were different management strategies be conducted, and communication skills were implemented by the Chinese supervisor to try to reach good communication effectively.

In the communication process, Chinese employees found that there exist different perspectives and values between local employees and Chinese employees. And it was reported that interviewees in this study experienced a change in their attitude and ideology. Which support the finding from Tone et al. (2009) that the leaders need to consider the project environment and cultural background. That when it comes to time, the Chinese employees experienced confusion and annoyance since what local people said 9 am is not really mean they will arrive at 9 am when they make an appointment with Chinese. While after a time, Chinese employees also get used to this kind of situation, although they may not really know why they will be late for the appointment. Meanwhile, some interviewees reported that they would care about the worker's living conditions when there was any worker sick or lending money to them to pay the lunch or traffic expenses. By this kind of interaction, the relationship and trust improved to some extent. This finding is in line with research from Moran et al. (2007), which stress the essential skills of leaders to conduct effective leading.

Meanwhile, the different attitudes toward work between local employees and Chinese employees raised complaints since Tanzanians did not want to work overtime while considering the schedule of the project. They were asked to work overtime by Chinese employees. Some interviewees came out with ways which both can increase work efficiency and decrease work hours. Mr. Y led his team by committing workers earlier back home if they finished a certain amount of work, which came out with high work efficiency. This kind of strategy considered the actual needs work requirements and respected local culture.

In addition, to increase understanding and get support from local employees, Mr. L made a detailed explanation to his subordinates when he tried to install a punch card machine in the workplace. The resistance of local employees decreased after his statement and detailed explanation. This shows the necessity for local employees to make a full understanding of what they have been asked to do, especially under intercultural communication situations. This finding agrees with the research of Greenberg (1990) and Tone et al. (2009).

Cultural adequacy suggested the importance of cultural knowledge, skills and personality orientation in a multi-nation organization, stressed cultural knowledge, appropriate behaviours and understanding of a different culture for effective management in a multicultural team. (Matveev & Milter, 2004; Tutar et al., 2014). While this thesis highlighted the process of how employees get used to differences in value and interaction, know cultural knowledge and develop proper behaviour during the interaction with local employees.

In the interview, Chinese employees always conduct their familiar interaction model with local employees unconsciously. since they conduct the same interaction model with people from another culture without thinking about the cultural difference at the beginning. This finding supports the research which explains how culture worked unconsciously(Brewster, 2013; Yakushko et al., 2016). although they aim to improve relationships with local people, the results always made them confused and disappointed. since there was no '*renqing*' concept in Tanzanian, and they did not understand these norms conducted in Chinese culture. In this situation, interviewees in this study reported that they changed their way of interacting with local people after a time. This means they would not offer favour proactively and expect local people can understand and show intention to improve the relationship. This change process indicates the adaptation of Chinese employees to local social norms and interaction model, which is in line with the study of Cheng (2004).

8.3.3The challenges facing the intercultural projects and the absence of support from company level

According to the report of interviewees from project A and project B, there was no systematic communication management process exist in these two projects. This means there was no communication management planning, organizational guidelines, or documents related to project communication management. For Chinese employees in the two projects, there were no instructions to follow when facing communication problems nor tools or techniques used to evaluate the efficiency of communication strategies adopted to cope with intercultural communication at project-level or personal level.

Meanwhile, lack of a consistent communication management process also lead to inconstant and inefficiency management. in the case study projects, the strategies taken

to cope with challenges without assessment and recorded as an experience or lesson learned for future projects. Which mean the experience got from project A and project B probably would not be made as a reference for other similar projects in Tanzania. This made a continuous improvement of communication management more difficult. Similar failures may repeat if one does not learn from previous situations(Rowe & Sikes, 2006).it also supported the lack of communication monitoring and evaluation in communication management (Muszyńska, 2018)

Although the strategies to improve communication in the project was conducted, there were no contents related to communication management In the project management manual of company MB. The lack of support from the company also contributes to the poor communication management situation in project A and project B, since lack of support at the company level made the strategies taken at the project level hardly conducted consistently.

For Chinese employees in these two projects, most intercultural communication problems were handled and solved by themselves without management support from company management.

The cultural background, languages and social norms and regulations between Chinese and Tanzanian made communication efficiency improving and misunderstanding mitigation a rather outstanding problem waiting for solving. Since the environment has Changed, cultural factors greatly affect communication, which made communication management more complicated compared to construction projects conducted in domestic. Akanni et al. (2015),Liu et al. (2019) and William (2002) suggested that External factors such as Socio-cultural factors will affect the operation of organizations in certain societies. In this thesis, the cultural factors arising challenges in international construction projects

in terms of communication management, which provide empirical data to a better understanding of the impacts of cultural factors in the aspect of project communication.

External environment the company MB did not foresee these problems nor challenges related to cultural factors. From the interview, Chinese employees said that they did not receive any cultural training or work instructions related to intercultural communication. The gap between the necessary to improve communication management in project A and project B and the support from the company caused a dilemma situation in communication management in these two projects.

The lack of support of company management in terms of policy or instructions on project management contributed to preventing systematic communication management. The project conducted without the communication instructions led to inconsistent management of communication. Poor evaluation and monitoring prevent projects from improving communication management level in the international construction project.

8.4The neglect of intercultural communication in international construction project

The section above aimed to answer the second research question: *how international construction projects respond to the impacts of intercultural communication on projects communication in the construction phase?*

The strategies taken by two case study projects when encountering the challenges have been analyzed. Three different codes related to how responses adopted derive from the data collected, codes including a passive adjusting process, communication and management capability improving by self-adapting, and the gap between the real

communication challenges and the policy .these themes indicate the neglect of intercultural communication in international construction projects.

The finding of the intercultural construction project 's neglect of intercultural communication paves the way of studying international construction's responses to the impacts of intercultural communication. In addition, the findings provided novel empirical data to suggest the importance of consistent management of communication at the project level and the importance of recording good managerial practices adopted by employees to cope with intercultural management challenges.

Besides, this study provided new empirical data related to international construction projects' strategies and practice through analysing the responses to impacts at the project and individual levels. The findings suggested the limited effectiveness of passive strategies to cope with intercultural communication challenges at the project level, since the project level strategies are more rigid and are used to solve certain problems, while the practical strategies cope with challenges at the individual level are more flexible, which can more practical and suit for various situations.

These findings indicate the importance of improving communication skills at the individual level. Furthermore, the findings also indicate the necessity to establish a systematic communication management process for continuously improving when facing intercultural communication challenges.

8.5 Conclusion: Bridging the gap

the findings have indicated that two case study projects face great impact from cultural differences. Intercultural communication in projects raises more challenges than

opportunities in the two case study projects. This also indicates the demanding capability requirement to employees who is working in an international construction project to make sure higher communication efficiency.

Another factor contributing to the challenges was the incompatibility between the responsibility division, the setting of the functional department and the actual demands of the case study project. This evidenced that case projects did not consider cultural factors in the construction phase or tailor project management methodology to fit in a different environment (PMI, 2017).

The findings also have suggested that intercultural communication in the two case study projects has brought more challenges than opportunities. This indicated that the impacts of different cultural backgrounds caused more communication barriers than people expected. Different values and customs which shape people in a specific social environment may cause communication problems in the international construction projects under globalization. However, considering there are different cultures in different countries, this thesis showed the neglect of intercultural communication in the intercultural project implemented by the Chinese construction company in Africa. Meanwhile, it also exposed the lack of necessary host country knowledge, sufficiency pre-construction investigation and the underestimate of cultural risk of the Chinese construction company.

These two cases also show that the project places too much emphasis on traditional objectives, such as quality, schedule and cost, thus ignoring the great impact of external environmental changes such as cultural background on the project. In fact, the impact of environmental changes will have a great impact on the realization of project objectives.

There is a great gap between the requirements decided by the external environment and the internal response to the requirements. Meanwhile, the two Chinese international construction projects took a passive response, and the lack of support from company management caused a dilemma in the project communication management.

To solve this kind of problem, international construction projects have to set up a systemic project communication process and highlight the continuous improvement of communication efficiency in projects by different measures. Bridging the gap will help improve communication efficiency in international construction projects and the overall success of international construction projects, especially Chinese construction companies that conduct international construction projects in Africa.

8.6 Developed Guidelines

little literature has been concerned with intercultural communication guidelines in the construction industry. The neglect of intercultural communication can affect the project in terms of cost and cohesion (Ochieng; & Price, 2010).By exploring the intercultural communication in two case construction projects and referring to relevant literature,This research developed guidelines related to intercultural communication in construction projects. It is especially suited for Chinese construction companies and project managers who conduct projects overseas.

8.6.1 Conducting systematic communication project management

It was found that communication project management has been neglected by Chinese construction projects compared to cost, time and quality management goals. However,

communication has foundation effects on project management. It communicates among project cost, time and scope to provide a quality project result (Zulch, 2014).

Therefore, Construction projects with a multicultural team should Set up systematic communication project management to provide an instant evaluation and constant improvement. It is essential to design a project communication plan at the beginning of the project, considering stakeholders involved in the project and their cultural backgrounds, and providing active project management with different communication tools or skills and monitoring communication process to provide feedback of the communication management for further improvement.

8.6.2 Attaching importance to lessons learned and experience sharing

One of the purposes of project communication management is to make sure the information requirements of projects and stakeholders are demanded (PMI, 2017). one important process in project management is to update the lessons learned register. It has been observed the lack of lessons learned register in the case study project led to the same mistakes.

Although every project is unique, the communication was affected by the cultural background, and it would not change as the changes of project contents. To record the solutions and mistakes made in intercultural communication will provide valuable experience for later phase projects or other projects. The lessons learned recording should be made in the individual level and project level. The good practice of individuals should be recorded, and experience should be shared to enlighten other employees in the project.

8.6.3 Adopting flexible strategies based on the cultural environment

According to Das (1995), flexibility is the capability of an organization to adjust to changes in the environment. the flexibility in this research derived from the strategies that

came out to cope with the cultural differences in the construction conduction phase. The flexible strategies improved the engagement of locals and improved the work efficiency under different situations. Managers should develop effective strategies to deal with varying challenges under different cultural environments.

8.6.4 Providing intercultural training courses before the start of projects

Training is an important strategy to facilitate communication in international construction projects(Tone et al., 2009).It was observed in the case study projects that employees did not have much time to attend their language training course when the construction was implemented. The training was necessary for employees prepared for intercultural communication and increasing cultural sensitivity. Therefore, it is necessary to conduct cultural training before the start of international construction projects.

8.6.5 Conducting Intercultural human resource development for employees

It is essential to consider intercultural human resources at the recruiting stage. Selecting a candidate not only should assess professional knowledge, but also evaluate the intercultural capability. After the recruit stage, training related to intercultural communication should follow up. The training contents should be considered and planned. Besides, based on performance, improving coaching is necessary(Thomas et al., 2010). All these steps will help the organization select capable employees to enhance communication efficiency.

8.6.6 Reconstructing cultural frame and Demonstrating respect

According to Ladegaard and Jenks (2015), the important rules in conducting intercultural communication is to understand and reconstruct frames of another culture, and to look at them as they look at themselves. Meanwhile, respect is important for intercultural

construction projects, and respect will help maintain a good relationship between people from different cultural backgrounds. To facilitate intercultural communication, people in international construction projects should understand people from another culture with the reconstruction of the cultural frame and demonstrating respect to them.

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CHAPTER 9: CONCLUSION

9.1 Introduction

This chapter restates this thesis's key findings and illustrates the contribution to international construction project communication management at the construction phase. The limitations of this research and the future research direction are also proposed in this chapter.

9.2 Summary of the key finding in this research

Nine factors in this research have been proposed through the case study project. These factors lead to challenges to an international construction project in terms of: high requirements on individual communication capability, organization structure incompatible, misunderstanding with low communication efficiency.

This thesis also explored the impact of challenges arising from intercultural communication. Such as the neglect of intercultural communication in international construction projects. It reflects a passive adaptive process in the international construction project. This research also revealed the personal management skill improving process; and the Absence of support from the company level.

This research found the importance to improve employees' Comprehensive communication skills, including language capability, cultural sensitivity and professional knowledge in another cultural background. Meanwhile, this research also suggested the neglect of intercultural communication in international construction projects. This situation shows that necessary to attach importance to intercultural communication in the international construction project.

The case study project's responses to challenges at the project level indicate a passive

and rigid solution to challenges. The responses at the individual level in the case study project present proactive and more flexible solutions to intercultural communication challenges. This thesis also highlighted the importance of the communication capability of individuals who work in intercultural construction projects. Cultural sensitivity, language capability, communication skills and relevant regulation knowledge is needed for efficient communication.

The relationships among factors that affect intercultural communication, responses to coping with challenges arising from these factors and the results of responses draw out a conceptual frame. readers might find this sentence work including two aspects, one is the high requirements of individual communication and management capability and the neglect of intercultural communication in international construction projects. This situation evidence the gap between the necessity to improve communication management in international construction projects and the corresponding passive reaction in project communication management in international construction projects. This also demonstrates further work is needed to improve intercultural communication in international construction projects.

9.3 Contribution

There were little pieces of literatures that investigated communication management in Chinese construction companies who conduct construction in Tanzania or examined how intercultural communication was conducted in the intercultural construction projects. This research investigated factors that influence intercultural communication in international construction projects, the responses of intercultural construction projects and the results of the responses. The empirical data from this thesis made contributions to the literature of intercultural communication in construction projects in the construction phase.

The identified factors in intercultural communication are developed from a practical and theoretical standpoint in this research. The understanding of these factors can provide different angles for project stakeholders to develop strategies aimed to improve communication effectiveness. Meanwhile, the conceptional frame developed in this research revealed the neglect of communication management in international construction projects and high intercultural communication requirements. The identified framework can be used as a guide to developing communication management planning in international construction projects.

9.4 Limitation

The data were collected to explore the impact of intercultural communication only from only two cases in Tanzania. The intercultural communication in these two case projects concentrates on the communication between Chinese and Tanzanian. It may raise concerns on applicability in other construction projects since other projects may face different challenges arising from intercultural communication or have various cultural background stakeholders(except Chinese and Tanzanian) involved in the construction phase.

The cases in this research was conducted in Tanzania. There has been literature demonstrating that the material availability, technology accessibility and market competitiveness will affect the procurement delivery system of the project(Liu et al., 2019).this will further impact the communication lines and communication flows among project participants during the implementation of projects(Liu et al., 2006). different countries have different situations in these three aspects. Therefore, this research may suggest that there are limitations to the applicability of this research in other countries.

The interviewees involved in this research were mainly comprised of employees who worked in subcontractors. Most of the participants interviewed in this study actually participated in the project as managers at different levels of the project, lacking the ideas of front-line workers from the host cultural background. Therefore, future research can expand the number and levels of research participants to achieve the purpose of comprehensively studying relevant issues. This study concentrates on intercultural communication in the frontline Chinese employees in which supervisors, assistants, and engineers were interviewed, while project managers and other stakeholders in this research were not investigated. This thesis may lack perceptions from Tanzania people since there was just one Tanzanian attending the interview. To provide more opinions or advice related to intercultural communication, more local people should be interviewed, and opinions be analysed.

9.5 Recommendation

Considering just two cases was explored in this research, Further research could use more samples, such as different project size or explore communication management in different kinds of projects to increase the applicability of research. Meanwhile, the involved kinds of nationality groups could also extend not limited to one or two.

It is essential to focus on the capability improvement and training of project employees to prepare for their work in international construction projects, which can further improve the project's performance. There has been little research on good practice of intercultural communication or the evaluation of communication strategies developed by employees.

Under the Chinese government's 'The Belt and Road Initiative' policy, many construction projects have been conducted overseas. The lack of awareness of cultural factors and communication leads to a loss in both project profit and images. One direction for future study is to conduct quantitative research on the impact extent of the cultural factor on international construction projects by using an objective method measured and providing a comparable and repeatable result. This research explored the situation of communication management in international construction projects, and the management process has been presented in this thesis. It will be a direction for future researchers to analyse why communication was neglected in the construction industry.

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