

**THE CONTRIBUTION OF CULTURAL INTELLIGENCE TO  
CROSS-CULTURAL ADJUSTMENT AND LEADERSHIP  
EFFECTIVENESS OF CHINESE EXPATRIATES  
IN THAILAND**



**Xiaoyun Guang**

**A Dissertation Submitted in Partial  
Fulfillment of the Requirements for the Degree of  
Doctor of Philosophy (Management)  
International College,  
National Institute of Development Administration  
2019**

**THE CONTRIBUTION OF CULTURAL INTELLIGENCE TO  
CROSS-CULTURAL ADJUSTMENT AND LEADERSHIP  
EFFECTIVENESS OF CHINESE EXPATRIATES  
IN THAILAND**

**Xiaoyun Guang**  
**International College,**

---

..... Major Advisor  
(Assistant Professor Peerayuth Charoensukmongkol, Ph.D.)

The Examining Committee Approved This Dissertation Submitted in Partial  
Fulfillment of the Requirements for the Degree of Doctor of Philosophy  
(Management).

..... Committee Chairperson  
(Chih\_Cheng Fang, Ph.D.)

..... Committee  
(Henzel Tagalog Embalzado, Ph.D.)

..... Committee  
(Assistant Professor Peerayuth Charoensukmongkol, Ph.D.)

..... Dean  
(Associate Professor Piboon Puriveth, Ph.D.)

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
\_\_\_\_\_

## ABSTRACT

<b>Title of Dissertation</b>	THE CONTRIBUTION OF CULTURAL INTELLIGENCE TO CROSS-CULTURAL ADJUSTMENT AND LEADERSHIP EFFECTIVENESS OF CHINESE EXPATRIATES IN THAILAND
<b>Author</b>	Xiaoyun Guang
<b>Degree</b>	Doctor of Philosophy (Management)
<b>Year</b>	2019

---

Since a large number of multinational corporations have entered international markets to maintain competitive advantages, the effectiveness of expatriates who handle the overseas tasks has been one of the key factors that affect the international business of multinational corporations. As the largest developing country, China has entered the global market in a rapid pace in recent years. Along with the new strategy known as *one belt one road*, Thailand is among the key strategic countries in South-East Asian region that has been chosen by Chinese multinational firms for trade and investment expansion. At the same time, there is a growing number of Chinese expatriates assigned to Thailand to supervise the overseas business. Despite this market expansion opportunity, expatriates inevitably face tremendous challenges caused by cultural differences when they work in a foreign country. Thus, it is crucial for expatriates to hold some cross-cultural competencies to adapt their managerial practices to local context. This issue tends to be common for Chinese expatriates who are assigned to manage business in Thailand, particularly when they have to work with Thai subordinates whose culture is quite different from the Chinese culture. Therefore, it is important to study the contribution of cross-cultural competence to the ability of Chinese expatriates to effectively manage employees in Thailand. Among various conceptualizations of cross-cultural competence documented in international business research, the concept of cultural intelligence (CQ) is regarded as the type of cross-cultural competence that has gained more popularity recently. This study investigates the contribution of CQ to cross-cultural adjustment and leadership effectiveness of Chinese expatriates in Thailand. In particular, the objective of this research is to analyze whether CQ of Chinese expatriates could affect (1) their ability to make effective cross-cultural management, (2) their tendency to demonstrate

supportive behaviors to Thai subordinates, (3) their potential to be perceived as effective leader by Thai subordinates, and (4) their potential to gain commitment from Thai subordinates. The survey data were collected from 169 pairs of Chinese expatriate and Thai subordinate from subsidiaries of Chinese companies in Thailand. In order to avoid the common method bias from single-source data collection, the data of CQ and cross-cultural adjustment were collected from Chinese expatriates, whereas the data of leadership effectiveness, perceived supervisor support and commitment to supervisor were collected from Thai subordinates who worked for Chinese expatriates. The survey data were analyzed by using Partial Least Squares Structural Equation Modeling (PLS-SEM) showing that Chinese expatriates with high CQ tend to display a higher level of cross-cultural adjustment and are likely to be evaluated more favorably by Thai subordinates regarding perceived supervisor support. However, the results did not significantly support the contribution of CQ to leadership effectiveness and commitment to supervisor. It could be possible that CQ may determine leadership effectiveness and commitment to supervisor indirectly through the role of perceived supervisor support. The results of this study provide some suggestions for multinational corporations to manage local employees in culturally diverse workforce. This study suggests that Chinese companies should provide CQ training programs for expatriates to understand Thai culture so that they can adjust their working styles in order to support the cultural nature of Thai subordinates. CQ training programs should provide cultural knowledge and guidance for Chinese expatriates showing how to interact with foreign subordinates in appropriate manners. Furthermore, the training programs should allow Chinese expatriates to know how to adjust management styles across-cultures. The CQ training is expected to help Chinese expatriates to display supportive and appropriate behaviors when managing employees in Thailand, which contributes to their cross-cultural leadership effectiveness and successful management in the overseas businesses.

## ACKNOWLEDGEMENTS

My study at the International College of National Institute of Development Administration (ICO-NIDA) will soon come to an end. At the completion of my doctoral dissertation, I would like to express my gratitude to all those who helped me during the period of my study.

My deepest gratitude goes first and foremost to my advisor, Asst. Pro. Dr. Peerayuth Charoensukmongkol. I have been extremely lucky to have an advisor who has offered me valuable suggestions in my academic studies. He has patiently walked me through all the stages of the writing of my dissertation. Without his consistent and illuminating instruction, insightful criticism and expert guidance, the completion of my doctoral dissertation would not have been possible.

I am very thankful to my committee chairperson Dr. Chih Cheng Fang and committee member Dr. Henzel Tagalog Embalzado for their valuable time and comments to improve my work. I would also like to express my gratitude to all professors at ICO-NIDA for their valued academic guidance. And, I would also like to thank all staff members of ICO-NIDA for their support during the period of my study.

I want to deeply thank my PhD classmates for their encouragement and help during this journey. In addition, I would like to extend my gratitude to my friends for their help, support and cooperation during my data collection period. I am also very thankful to those who participated in my investigation, and I am thankful to the library staff and IT staff who offered heartfelt help and support on my e-thesis work.

Finally, I owe my deepest thanks to my beloved family for their endless love, continuous support, encouragement and understanding as well as their great confidence in me through all these years.

Xiaoyun Guang

October 2019

## TABLE OF CONTENTS

	<b>Page</b>
ABSTRACT.....	iii
ACKNOWLEDGEMENTS.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES .....	x
LIST OF FIGURES .....	xii
CHAPTER 1 INTRODUCTION .....	1
1.1 Background of the Study .....	1
1.2 Problem Statement.....	3
1.3 Research Gap.....	5
1.4 Purpose of the Study.....	5
1.5 Significance of the Study.....	6
CHAPTER 2 LITERATURE REVIEW .....	7
2.1 Expatriation .....	7
2.2 Cultural Intelligence .....	10
2.2.1 The Development Background of the Concept of CQ .....	10
2.2.2 Research Findings about positive contributions of CQ.....	15
2.3 Cross-cultural Adjustment.....	22
2.3.1 The Importance of Cross-cultural Adjustment.....	25
2.3.2 Research about CQ in Expatriation .....	27
2.4 Challenge of Managing a Cross-cultural Workforce.....	27
2.5 Cross-cultural Leadership Effectiveness .....	28
2.6 Perceived Supervisor Support .....	29
2.7 Commitment to Supervisor.....	31
2.8 Social Identity Theory .....	32
2.9 Hypotheses Development.....	34

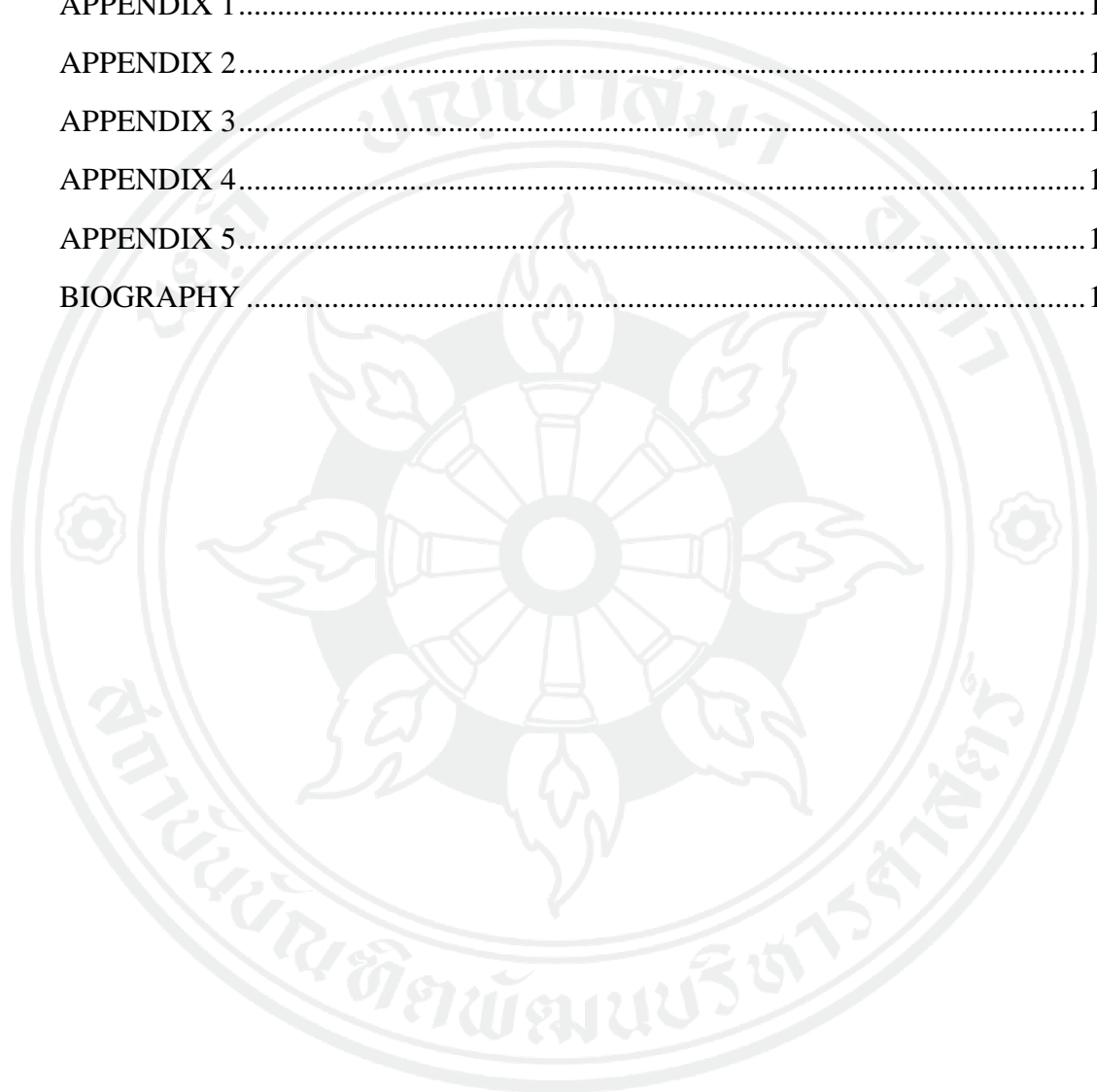


2.9.1 CQ and Cross-cultural Leadership Effectiveness .....	34
2.9.2 CQ and Perceived Supervisor Support .....	38
2.9.3 CQ and Commitment to Supervisor .....	38
2.9.4 Cross-cultural Leadership Effectiveness and Commitment to Supervisor .....	39
2.9.5 Perceived Supervisor Support and Commitment to Supervisor .....	40
2.9.6 CQ and Cross-cultural Adjustment .....	40
2.9.7 Cross-cultural adjustment and Cross-cultural Leadership Effectiveness ..	42
2.9.8 Cross-cultural Adjustment and Perceived Supervisor Support .....	43
CHAPTER 3 METHODOLOGY .....	45
3.1 Research Context .....	45
3.2 Sample Selection .....	46
3.3 Data Collection Method .....	46
3.4 Measurement .....	48
3.4.1 CQ .....	48
3.4.2 Cross-cultural Adjustment .....	50
3.4.3 Cross-cultural Leadership Effectiveness .....	51
3.4.4 Perceived Supervisor Support .....	51
3.4.5 Commitment to Supervisor .....	52
3.5 Control Variables .....	52
3.5.1 Age .....	53
3.5.2 Gender .....	53
3.5.3 Job Tenure in current position .....	54
3.5.4 Local Language Proficiency .....	54
3.5.5 Length of relationship .....	55
3.5.6 Job Function .....	55
3.6 Estimation Method .....	56
CHAPTER 4 DATA ANALYSIS AND RESULTS .....	58
4.1 Data .....	58

4.2 Demographic Characteristics.....	59
4.3 Measurement Model Assessment.....	62
4.3.1 Validity Test.....	63
4.3.1.1 Convergent Validity Test.....	63
4.3.1.2 Discriminant Validity Test.....	67
4.3.2 Reliability Test.....	69
4.3.2.1 Cronbach's Alpha Coefficient.....	69
4.3.2.2 Composite Reliability.....	69
4.4 Multicollinearity.....	70
4.5 Normal Distribution.....	70
4.6 Test of Hypotheses.....	73
4.6.1 Control Variables.....	79
4.6.2 Total Effect Analysis.....	80
4.6.3 R-squared.....	81
4.7 Model Fit Indices.....	83
4.7.1 Average path coefficient (APC).....	83
4.7.2 Average R-squared (ARS).....	83
4.7.3 Average adjusted R-squared (AARS).....	83
4.7.4 Average variance inflation factor (AVIF).....	83
4.7.5 Average full variance inflation factor VIF (AFVIF).....	83
4.7.6 Tenenhaus GoF (GoF).....	84
4.7.7 Sympson's paradox ratio (SPR).....	84
4.7.8 R-squared contribution ratio (RSCR).....	84
4.7.9 Statistical suppression ratio (SSR).....	84
4.7.10 Nonlinear bivariate causality direction ratio (NLBCDR).....	84
CHAPTER 5 DISCUSSION AND CONCLUSION.....	86
5.1 Findings.....	86
5.2 Contribution.....	92
5.2.1 Academic Contribution.....	92



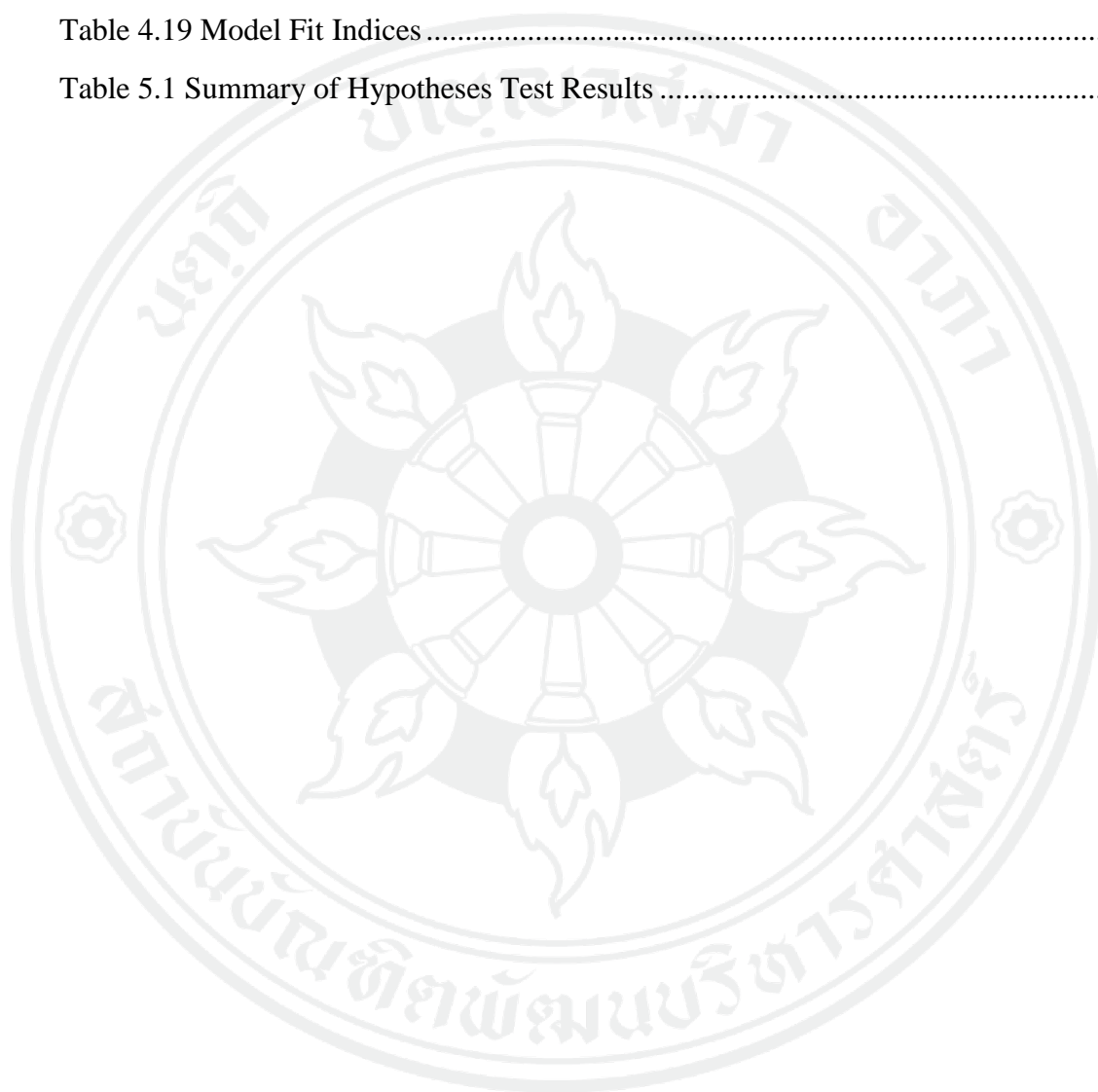
5.2.2 Practical Contribution.....	93
5.3 Limitations.....	95
5.4 Future Research.....	96
BIBLIOGRAPHY.....	97
APPENDIX 1.....	121
APPENDIX 2.....	122
APPENDIX 3.....	123
APPENDIX 4.....	128
APPENDIX 5.....	131
BIOGRAPHY.....	135



## LIST OF TABLES

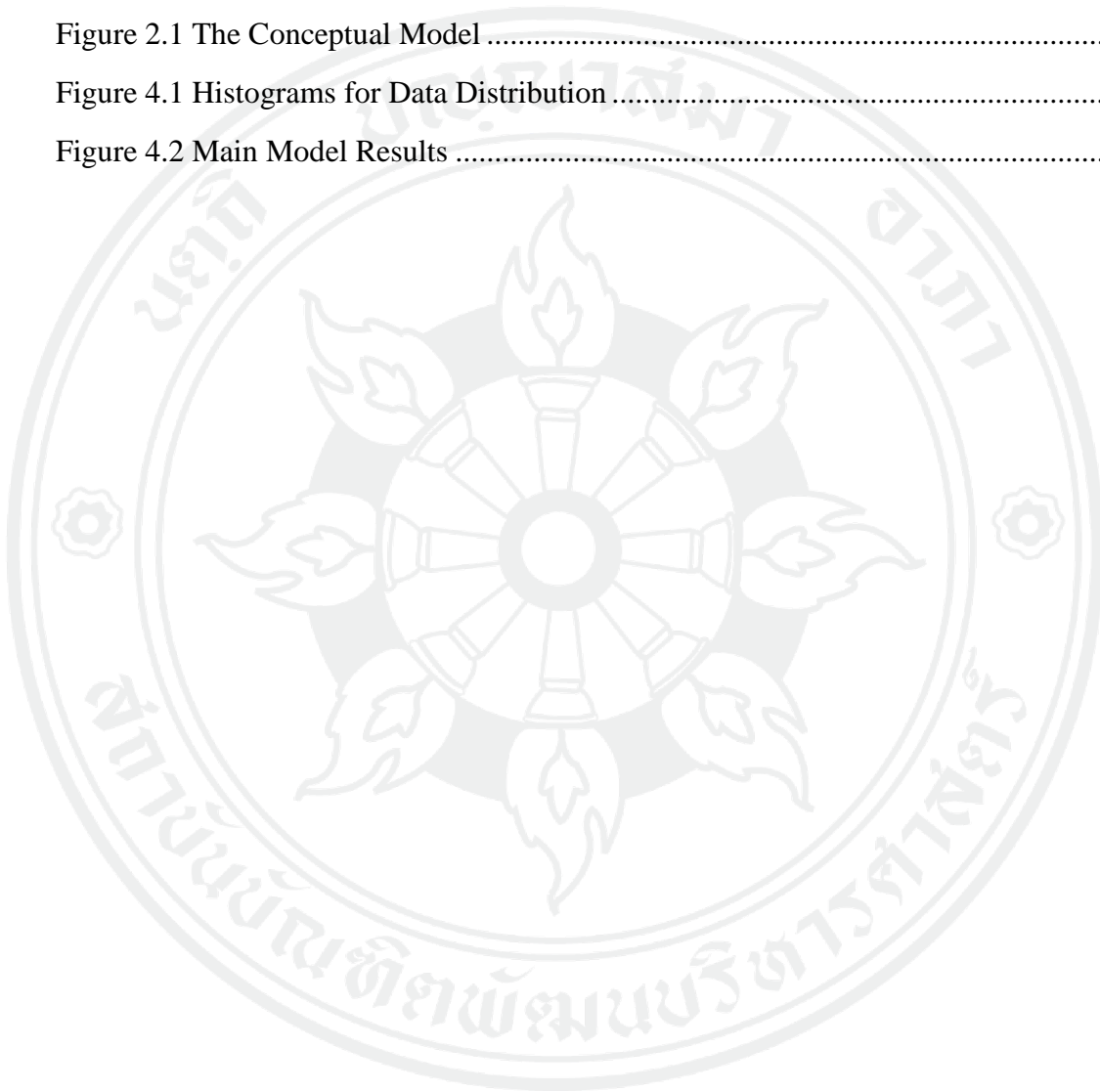
	<b>Page</b>
Table 2.1 Recent Research on the Contributions of CQ.....	16
Table 2.2 The Summary of Research Hypotheses .....	43
Table 3.1 Cultural Intelligence (CQ) .....	49
Table 3.2 Cross-cultural Adjustment .....	50
Table 3.3 Leadership Effectiveness .....	51
Table 3.4 Perceived Supervisor Support.....	51
Table 3.5 Commitment to Supervisor.....	52
Table 4.1 Respondents' Gender of Chinese Supervisors and Thai Subordinates.....	59
Table 4.2 Respondents' Age of Chinese Supervisors and Thai Subordinates .....	59
Table 4.3 Job Tenure of Chinese Supervisor and Thai subordinate in the Company..	60
Table 4.4 The Department that Chinese Supervisors Work in .....	61
Table 4.5 The Industry that Chinese Supervisors Work in.....	61
Table 4.6 Thai Proficiency of Chinese Supervisors.....	62
Table 4.7 The Length of Relationship that Thai Subordinates Work with Chinese Supervisors.....	62
Table 4.8 The Factor Loadings and Cross Loadings .....	63
Table 4.9 The Factor Loadings and Cross Loadings of Variables after the Low Loading Item was Removed .....	65
Table 4.10 Correlation among Constructs VS Square root of Average Variance Extracted (AVE) .....	68
Table 4.11 Cronbach's Alpha Coefficient and Composite Reliability .....	69
Table 4.12 The Full Collinearity VIF Statistics of all Variables .....	70
Table 4.13 The Normalization of the Variables.....	70
Table 4.14 Skewness and Exc. kurtosis Coefficients .....	71
Table 4.15 Effect of Cultural Intelligence, Cross-cultural Adjustment and Perceived Supervisor Support on Cross-cultural Leadership Effectiveness.....	74

Table 4.16 Effect of Cultural Intelligence and Cross-cultural Adjustment on Perceived Supervisor Support.....	75
Table 4.17 Effect of Cultural Intelligence, Cross-cultural Leadership Effectiveness and Perceived Supervisor Support on Commitment to Supervisor .....	76
Table 4.18 Effect of Cultural Intelligence on Cross-cultural Adjustment .....	78
Table 4.19 Model Fit Indices .....	85
Table 5.1 Summary of Hypotheses Test Results .....	86



## LIST OF FIGURES

	Page
Figure 2.1 The Conceptual Model .....	44
Figure 4.1 Histograms for Data Distribution .....	72
Figure 4.2 Main Model Results .....	82



## CHAPTER 1

### INTRODUCTION

#### 1.1 Background of the Study

International expansion has been a phenomenon as business becomes global (Jonsson & Foss, 2011). Accompanied with globalization, countries are motivated to diversify their markets, gain market shares and remain competitive on a global scale (Khorana & Servaes, 2011; Yoder, Visich, & Rustambekov, 2016). Internationalization has been a vital strategy for firms in order to maintain their growth, and firms are no longer based on a single location to compete with others (Lu & Beamish, 2001; Yoder et al., 2016). A large number of firms have engaged in international activities, and they compete to gain a larger customer base and obtain the dominating market share in their industry around the world (Li, 2018; Patatoukas, 2011).

As the largest developing country, China has received lots of researchers' attention since its rapid growth of domestic economy, and it has attracted many foreign investments in the last two decades (Deng, 2013; Wang, Fan, Freeman, & Zhu, 2017). To this day, the influence of China is spreading all over the world (Lin & Zhao, 2016). Many global companies are trying to become successful in China; at the same time, Chinese companies are also entering the global market in a rapid pace (Quer, Claver, & Rienda, 2010). The policy of reformation and opening of the late 1970s led to the emergence of outward direct investment of China, and Chinese firms were encouraged in overseas investments after China entered into the WTO by the end of 2001 (Zhang & Daly, 2011). Along with the establishment of going global strategy in 2004, there are an increasing growth of Chinese companies that go global, and overseas direct investment of China has sharply increased in recent years (Morck, Yeung, & Zhao, 2008; Wang et al., 2017; Zhang & Daly, 2011). China has been the second largest economy in the world since 2010 (Du, 2016). In late 2013, a new strategy *Silk Road Economic Belt and Maritime Silk Road of the 21<sup>st</sup> Century*, known as *one belt one road*,

was put forward. ASEAN has been chosen for the starting point of the Maritime Silk Road. As a member of ASEAN, Thailand gains from the economic partnership between China and ASEAN, and Thailand's trade with China has surpassed the other members of ASEAN over the past decade (Keorite & Pan, 2016). In recent years, many Chinese companies have expanded their trade as well as investment in Thailand (Bunchapattanasakda & Wong, 2010; Sorndee, Siengthai, & Swierczek, 2017). In terms of trade, the China-Thailand bilateral trade volume totaled USD 25.32 billion in January to April 2018; in terms of investment, China has become Thailand's second largest source of investment in January-March, 2018 (MOFCOM, 2018).

One of the key factors that determines success of multinational corporations in the foreign markets is the effectiveness of the expatriates who are assigned to handle the overseas operations (Farndale, Pai, Sparrow, & Scullion, 2014). Expatriates play a crucial role in transferring knowledge, building good relationships between headquarters and subsidiaries, as well as developing international management competencies in the process of dealing with international business (Emmerik & Euwema, 2009). Particularly for the international expansion of the Chinese multinational corporations, the outflow of Chinese expatriates has significantly increased with the rapid growth of China's overseas direct investments (Wang et al., 2017). Many Chinese firms assign expatriates to Thailand since the China-Thailand bilateral trade and investment has a rapid growth in recent years. Consequently, there are a growing number of Chinese expatriates sent to Thailand to operate overseas tasks (Sorndee et al., 2017). The investments of Chinese firms in Thailand involves various industries such as the Automotive Industry, Textile and Garments, Metal and Machinery, Electronics and Electrical Industry, Chemicals, Plastic and Construction Material, Food, Service, etc. These Chinese firms assign their headquarters' staff to act in the role of managers in Thailand since they are familiar with the policies of their firms as well as being able to implement firms' instructions better. In order to effectively manage the firms and develop good relationship with Thai employees, Chinese expatriates also take the responsibility of developing management from their host country in recent years (Li, Ruangkanjanases, & Chen, 2014).



## 1.2 Problem Statement

Although expatriates promote international business, they also face various challenges in the cross-cultural setting (Lin, Chen, & Song, 2012). Globalization has increased cross-cultural interaction in the work environment, and individuals have to interact with others from different cultural backgrounds (Farndale et al., 2014; Jyoti & Kour, 2015). Expatriates need to distinguish the cultural differences and effectively interact with people from other cultures (Jyoti & Kour, 2017). Cultural differences require that expatriates should adapt managerial practices to local context (Selmer, 2001). Similarly, Chinese expatriates should pay attention to their cross-cultural interaction with Thai employees. Due to the differences between Chinese and non-Chinese cultural circumstances, there may occur potential challenges between Chinese expatriates and Thai subordinates (Liang, Nontasak, & Pongsabutr, 2015; Sorndee et al., 2017). One of the challenges is that various aspects of working styles are different between Chinese and Thais, and any of the differences can be a problem if they are to work together effectively (Bunchapattanasakda & Wong, 2010). For example, problems related to time management might affect the work relationship between Chinese and Thais. Basically, Chinese are willing to accomplish the assignments before the deadline while Thais think the time frame given by Chinese leaders is too rushed (Bunchapattanasakda & Wong, 2010). It was reported in the literature that Thai employees accustomed to show little commitment to appointed times or work schedules, and they do not liking working overtime (Sriussadaporn, 2006). As a result, Thais may think that Chinese have no patience and make Thais uncomfortable during the work process. In addition, Chinese focus on cooperation as well as interdependence, and pay attention to their behaviors that may have an influence on other group members (Chan & Goto, 2003; Hofstede, 1983). However, research indicated that Thai employees like to work along with clear instruction, and they may feel uncomfortable when they are in a working setting that is participative (Komin, 1990; Pimpa, 2012; Yukongdi, 2010). Because Thai employees pay more attention to personal-related problems and they do not like much competition in the work-related environment, the collaboration and personal connection might make Thais think that Chinese cannot understand the Thai style (Pimpa, 2012; Sriussadaporn, 2006). As a result, Thai

employees may show resistance when they are dissatisfied with the Chinese expatriates' working style. In order to lessen the problems caused by cultural differences in the work setting, Chinese expatriates must be able to understand the Thai culture and adapt their management style to match the nature of Thai culture. It is vital for Chinese expatriates to adjust to the new environments in order to enhance their performance (Newman, 1992; Sorndee et al., 2017).

Considering the problems that normally arise in cross-cultural interactions, it is important for expatriates to possess some competencies that allow them to be effective in their international assignment. Individuals who possess cross-cultural competencies can be efficient in understanding the perceptions of host country nations and having an effective interaction with local people (Mendenhall & Oddou, 1985). Cultural intelligence (CQ) is a concept that has received a lot of attention in recent studies as a cross-cultural competency proposed to enhance expatriate effectiveness (Ang et al., 2007; Earley, 2002; Templer, Tay, & Chandrasekar, 2006; Thomas, 2006). Research has supported the idea that CQ plays an important role in various areas such as cross-cultural adjustment and adaptation (Guðmundsdóttir, 2015; Huff, Song, & Gresch, 2014; Jyoti & Kour, 2015; Nunes, Felix, & Prates, 2017), cross-cultural performance (Groves, Feyerherm, & Gu, 2015; Presbitero & Toledano, 2017), cross-cultural team effectiveness (Adair, Hideg, & Spence, 2013; Chua, Morris, & Mor, 2012; Moon, 2013; Mor, Morris, & Joh, 2013; Scholz, 2012), cross-cultural leadership effectiveness (Rockstuhl, Seiler, Ang, Van Dyne, & Annen, 2011), and organizational performance (Charoensukmongkol, 2015, 2016b; Chen, Liu, & Portnoy, 2012; Magnusson, Westjohn, Semenov, Randrianasolo, & Zdravkovic, 2013; Yitmen, 2013). Given the benefits of CQ in the areas of cross-cultural adjustments and adaptation supported by prior research, CQ could be a competency that might facilitate cross-cultural adjustment of Chinese expatriates and allow them to effectively motivate Thai subordinates who work with them.

### **1.3 Research Gap**

Although there are a number of evidences about the contribution of CQ in the area of expatriation, there are some gaps that remain unaddressed in research. Although prior CQ studies link CQ to cross-cultural adjustment and leadership effectiveness (Rockstuhl et al., 2011), there are a very limited number of studies considering the mediating role of cross-cultural adjustment as the mediating factor that might explain the contributions of CQ to leadership effectiveness. Besides this, there is no study that links CQ to perceived supervisor support and commitment of subordinate toward expatriates. Even though research on the contributions of CQ on expatriate effectiveness has been done in various contexts such as Brazil (Barakat, Lorenz, Ramsey, & Cretoiu, 2015; Nunes et al., 2017), India (Jyoti & Kour, 2015), the US (Chua et al., 2012; Guðmundsdóttir, 2015; Lorenz, Ramsey, & Richey, 2017; Presbitero & Toledano, 2017) and Singapore (Wu & Ang, 2011), there is no research done on Chinese expatriates in Thailand. It is crucial that these gaps be addressed because they limit our understanding about the role of country and workplace context where CQ has not been tested.

### **1.4 Purpose of the Study**

This research will study the role of CQ in Chinese expatriates which might be associated with their ability to work effectively with Thai subordinates. In particular, this research will explore the contributions of CQ of Chinese expatriates to four aspects of outcomes including (1) the level of cross-cultural adjustment of the expatriates, (2) the perception from Thai subordinates about leadership effectiveness of expatriates, (3) the perception from Thai subordinates about the degree of supervisor support of the expatriates, and (4) the level of commitment that Thai subordinates have toward the expatriates. In addition to the direct contribution of CQ to these outcome variables, this research also explores the possibility of the mediating effect of the outcome variables. The analysis will investigate whether the level of cross-cultural adjustment of the expatriates can mediate the relationship between their level of CQ and leadership effectiveness. The analysis also explores whether the level of cross-cultural adjustment

of the expatriates can mediate the relationship between their level of CQ and the perception of subordinates about the expatriates' supervisor support. Moreover, this study will test whether leadership effectiveness and perceived supervisor support can mediate the relationship between the CQ of the expatriates and the level of subordinates' commitment to the expatriates.

### **1.5 Significance of the Study**

On the one hand, this research will provide academic contribution to existing research on CQ. Research studied the role of CQ in expatriate effectiveness and performance in many contexts. However, there is no research on CQ related to Chinese expatriates in Thailand. This study will explore the role of the CQ of Chinese expatriates in effective cross-cultural management in the Thai context. The results of this research will provide additional evidence to existing research regarding expatriate contextual performance, particularly in the perspective of cross-cultural leadership effectiveness, and the quality of working relationships between foreign expatriates and local subordinates.

On the other hand, this research will also provide practical contributions to multinational corporations in dealing with expatriation issues. The results might give human resource practitioners some solutions in solving the problems related to assignment management that expatriates face in cross-cultural situations. The result of this research might also provide some insights for managing local employees in culturally diverse workforce for multinational corporations. In addition, this research might also provide suggestions to multinational companies for understanding the qualifications of the expatriates so that they might increase their potential to be successful in international assignments.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Expatriation**

An expatriate is defined as an individual who is transferred from the native country to a foreign country to accomplish the goal of employment (Edström & Galbraith, 1977). In the international management, expatriate is a label to describe the employees sent overseas by multinational corporations to work on different foreign assignments with others from various backgrounds (Gullekson & Dumaisnil, 2016; Richardson & Mallon, 2005; Zhang, 2013). Owing to the rapid growth of international business, there is an increasing demand for sending employees to work as expatriates to undertake overseas operations (Gullekson & Dumaisnil, 2016; Horak & Yang, 2016; Zhang, 2013). This is in line with the earlier viewpoint that global competition and global operations speed up expatriation (Laurent, 1986; Porter & Tansky, 1999). Besides, Edström and Galbraith (1977) pointed out that companies send expatriates with motives, which are to fill a position, for management development purposes, and for organizational development. Moreover, Derr and Oddou (1993) expressed the idea that expatriation is the best choice to internationalize a young manager. Baruch and Altman (2002) also stated that expatriation is regarded as the clearest manifestation of globalization in terms of human resources in the existing studies. According to Zhang (2013), successful international assignments rely not only on effective extensive businesses, but also capable people. Consequently, multinational companies send capable expatriates to function well in international business in order to maintain continuous growth and accomplish business goals (Muhammad, Mohamed, & Ahmed, 2013; Palthe, 2008; Zhang, 2013).

Research showed that expatriation can benefit organizations in many aspects (Gupta, 2013; Kühlmann & Hutchings, 2010; Sonesh & DeNisi, 2016; Subramaniam, Ramalu, Wei, & Rose, 2011; Tungli & Peiperl, 2009). According to Zhang (2013),



people play a decisive role in worldwide tasks as they represent their organizations. Thus, expatriate performance has become crucial in overseas task operations of multinational enterprises (Selmer, 2006). First, expatriates take an effective role in transferring knowledge and skill between headquarters and subsidiaries (Barry Hocking, Brown, & Harzing, 2004; Edström & Galbraith, 1977; Sonesh & DeNisi, 2016). Multinational companies can transfer their series of knowledge, skills even competencies to overseas operations, and obtain information from international assignments (Harzing, Pudelko, & Sebastian, 2016; Liu & Lee, 2008). Second, expatriation facilitates the communication and coordination between headquarters and subsidiaries (Liu & Lee, 2008; Rosenzweig, 1994). Expatriates bring the corporate philosophies and overall vision to overseas tasks (Rosenzweig, 1994). Besides, expatriates will explain organizational goals and objectives with their intended ways (Liu & Lee, 2008). Therefore, multinational companies can achieve effective coordination and control across organization's foreign operations through expatriates (Black & Gregersen, 1992; Harzing, 2001; Kühlmann & Hutchings, 2010). Third, expatriates also can develop relationships with the persons who can assist them in achieving organizational goals, since expatriates can acquire local culture which is conducive to developing contacts with local nations (Hocking, Brown, & Harzing, 2007; Sonesh & DeNisi, 2016). Moreover, expatriates make contributions for multinational firms in gaining a company's competitive advantage in the global context (Kühlmann & Hutchings, 2010; Stroh & Caligiuri, 1998; Taylor, Beechler, & Napier, 1996). Expatriation is a means of enhancing firms' competencies because expatriates are sensitive to international chances (Liu & Lee, 2008). Competent expatriates learn about the updated direction of global business as well as intercultural management through their international experiences to gain competitive edge (Webb, 1996). These perspectives are in keeping with Mendenhall and Oddou (1991)'s exploration that expatriation aid in expanding international standpoints, communicating more effectively with others in cross-cultural settings, and absorbing the business development trend along with globalization background.

Although expatriates make contributions to multinational companies' international operations, it is undeniable that expatriates are confronted with difficult situations when they work in global assignments within an unfamiliar environment



(Kühlmann & Hutchings, 2010; Liu & Lee, 2008; Sambasivan, Sadoughi, & Esmailzadeh, 2017). Olie (1990) pointed out that cross-cultural differences lead to difficulties in international business tasks. Because of this, expatriates inevitably face work and personal difficulties due to different norms, values, languages, political as well as economic systems compared to their home country (Harzing & Christensen, 2004; Oberg, 1960; Sambasivan et al., 2017). Tung (1987) also explored the reasons that caused some expatriates to fail and reported reasons such as expatriate's inability to adapt to a new environment, an expatriate's immature emotions, expatriate's inability to deal with their responsibilities linked to overseas tasks, etc. Therefore, it is a challenge for expatriates to make sense of the cultural assumptions and identify the similarities as well as the differences between the host country and their home countries (Sambasivan et al., 2017). If expatriates are exposed to uncertainty and anxiety in their work and non-work circumstances, their performance will be obstructed (Osland & Osland, 2005). As a result, expatriates need to comprehend the foreign country where they are exposed to function, because it is essential to cross critical cultural boundaries as well as mindset boundaries during executing the overseas tasks (Fish, Bhanugopan, & Cugin, 2008; Liu & Lee, 2008). Expatriates ought to have abilities to appropriately respond to cross-cultural situations that are less comfortable compared to their home country's environment (Peterson, 2011; Thomas et al., 2008; Yamazaki & Kayes, 2004). In particular, the challenges that expatriates generally face are also common for Chinese expatriates when they work and interact with local employees. Chinese expatriates may face problems such as conflict in cross-cultural assignments, because cultures and social norms tend to vary from one culture to another (Leung, 2014). In addition, Chinese expatriates may experience in group favoritism and out group discrimination in cross-cultural settings because of culture-based intergroup dynamics. Furthermore, language barriers and business communication are challenges for Chinese expatriates during the cross-cultural adjustment process (Shi & Wang, 2014). Hence, it is vital for Chinese expatriates to successfully adjust to the new environment and effectively deal with international assignments.

Research showed that successful adjustment relies on expatriate's a range of cross-cultural competencies such as perceptual skills, interpersonal skills, communication skills and others (Harzing & Pudelko, 2013; Mendenhall & Oddou,

1985; Yamazaki, 2010). These competencies help expatriates to deal with the difficulties mentioned before when they function in the global context (Chen, Kirkman, Kim, Farh, & Tangirala, 2010; Wang, Feng, Freeman, Fan, & Zhu, 2014; Yamazaki, 2010). Cross-cultural competencies are also the predominant factors affecting expatriate performance (Yamazaki, 2010). Desired performance is facilitated due to cross-cultural competencies in the cross-cultural settings (Seak & Enderwick, 2008; Yamazaki & Kayes, 2004). Therefore, it is necessary for expatriates to build strong cross-cultural competences to adapt to the host environment effectively (Caligiuri & Tarique, 2012). Among various conceptualizations of cross-cultural competencies proposed to enhance expatriate effectiveness, CQ is a concept that has received more attention in recent studies as a competency that helps expatriates become effective in various cross-cultural situations. (Ang et al., 2007; Earley, 2002; Templer et al., 2006; Thomas, 2006). To be consistent with previous studies, this research focuses on CQ as the cross-cultural competency that expatriates need to have to help them adjust successfully to international task assignment. The details of CQ will be discussed in the next section

## **2.2 Cultural Intelligence**

### **2.2.1 The Development Background of the Concept of CQ**

Cultural intelligence (CQ) explains an ability of the individual to deal with novel situations related to cultural diversity (Ang et al., 2007; Earley & Ang, 2003). CQ is developed ground in the multi-dimensional framework of intelligence of Sternberg and Detterman (1986), which includes metacognitive intelligence, cognitive intelligence and behavioral intelligence. Basically, multiple intelligences such as linguistic intelligence, mathematical intelligence and others can be used in academic fields. However, Sternberg and Detterman (1986) have argued that intelligence like social intelligence and emotional intelligence can also be demonstrated in non-academic settings. Social intelligence and emotional intelligence are in connection with cultural intelligence. However, while social and emotional intelligences are applied in certain cultural contexts, they are not meaningful in other cultural settings. Conversely,

CQ is culture free so that it can be applied across cultures (Ang et al., 2007; Sternberg & Grigorenko, 2006).

Earley and Ang (2003) first made great progress in our understanding of cultural intelligence. According to Earley and Ang (2003), CQ is a specific intelligence of a person that allows them to manage different cultural interactions effectively. Grounded on Sternberg and Detterman (1986) multi-dimensional intelligence framework, Earley and Ang (2003) conceptualized CQ as a multidimensional construct which is comprised of cognitive cultural intelligence (CCQ), metacognitive cultural intelligence (MCCQ), motivational cultural intelligence (MCQ) and behavioral cultural intelligence (BCQ). According to Ang et al. (2007), cognition, metacognition as well as motivation are the mental capabilities, and the explicit action is the behavioral capability. The details of Earley and Ang (2003) multi-dimensional construct of CQ are described as follow.

#### Cognitive CQ

Cognitive CQ demonstrates an individual's knowledge and information related to different cultures (Ang et al., 2007; Gonçalves et al., 2016). The mentioned knowledge covers culture-general knowledge and context-specific knowledge in a novel cultural environment (Ang et al., 2012). Ang et al. (2012) defined the culture-general knowledge as "the universal elements that constitute a cultural environment". This type of knowledge includes objective culture like economic, legal and political system, and knowledge with regards to languages, non-verbal behaviors, and others (Ang et al., 2012). In addition, Ang et al. (2012) pointed out that the cultural-general knowledge covers subjective knowledge which is less observable, like values and beliefs belonging to a certain society. Regarding the context-specific knowledge, Ang et al. (2012) defined it as "declarative knowledge about manifestation of cultural universals in a specific domain and procedural knowledge of how to be effective in that domain". According to Triandis (1994), the mentioned domain can be a country or a region. Besides, Fine and Fields (2008) pointed that the domain can also be a specific subculture like business manager, educator and so on. This type of knowledge benefits people by enabling them to adapt to a new setting quickly (Soon & Linn, 2015).

Cognitive CQ can benefit individuals in the multicultural environment. Both kinds of cognitive knowledge assist people in understanding new cultures with their cultural map in mind (Soon & Linn, 2015; Rockstuhl et al., 2011). Besides, the

cognitive knowledge facilitates individuals making sense of the social interactions affected by the cultural system in the specific setting (Ang et al., 2012; Rockstuhl et al., 2011). A person who holds a high level of cognitive CQ will be very conscious of the similarities and differences in the diverse cultures that they encounter (Earley & Ang, 2003; Sharma & Hussain, 2017).

#### Metacognitive CQ

Metacognitive CQ demonstrates one's awareness of cross-cultural interactions in an unfamiliar environment (Soon & Linn, 2015; Earley & Ang, 2003), and it is a high-level of cognitive skill to cope with information linked to the specific situation (Ang et al., 2012; Nelson, 1996). It reveals how people manage and employ their cognitive knowledge and information related to the certain context (Sharma & Hussain, 2017). In other words, Ang et al. (2012) pointed that metacognitive CQ represents one's mental process involved in planning, which includes preparation and developing specific steps before interactions; awareness, which refers to the cultural consciousness in the real-time interaction context; and checking strategies, which involves looking back to cultural assumptions and adjusting mental models grounded on the experiences (Bell & Kozlowski, 2008; Jacobs & Paris, 1987). In this process, Ang et al. (2012) pointed that planning usually proceeds before cultural interactions; awareness should be always current; checking usually happens in the real-time settings and after certain interactions.

People with high metacognitive CQ are furthermore able to obtain desired interaction outcomes inside the specific context (Sharma & Hussain, 2017). Those with high metacognitive CQ always acquire and grasp the relevant cultural knowledge before and during running into the cross-cultural interactions (Ang et al., 2012; Ang et al., 2007). According to Earley and Ang (2003), persons who have high metacognitive CQ are able to integrate their learning into their self-concept. Moreover, they use inductive reasoning beyond their existing knowledge to flexibly understand a novel situation (Earley, 2002). They will question their cultural assumptions, think about the specific setting and then make corresponding adjustments to function (Brislin, Worthley, & Macnab, 2016). Besides, people possessing high metacognitive CQ will spend a lot of time trying to comprehend the new knowledge and densely packed information they encounter, which will lead to creative thinking to revise mental models



and may help them to develop updated strategies for novel interaction environments (Flavell, 1979; Thomas et al., 2008). Conversely, people with low metacognitive CQ cannot understand the behavioral options in a multicultural environment; they are incapable of grasping how cultures vary as well as how cultures influence behaviors (Thomas, 2006). Additionally, the stereotyping assumptions of people holding low metacognitive CQ in the cognitive process will undermine the positive judgments towards an intercultural relationship (Chua et al., 2012). Hence, high metacognitive CQ will help individuals to less rely on their stereotypic knowledge (Earley, 2002). A high level metacognitive CQ helps people notice others' assumptions in the diverse cultural environments and helps people perceive the specific situation through what others speak (Thomas, 2006). In addition, high metacognitive CQ can help people to view the context from multiple standpoints and then create new mental maps and take adaptive behaviors to adjust to the intercultural settings (Earley, 2002; Thomas, 2006).

#### Motivational CQ

Motivational CQ demonstrates one's capability to capture the drive source to learn and manage effectively when facing cultural differences in diverse settings (Ang et al., 2007; Gonçalves et al., 2016). There are various drive sources for individuals (Latham & Pinder, 2005), and people will adjust their actions based on the level of drive to get involved in the interactions (Ang et al., 2012). The drive sources related to motivational CQ are derived from intrinsic interest, extrinsic interest and self-efficacy to adjust (Ang et al., 2012).

According to Ang et al. (2012), the intrinsic interest of motivational CQ is the intangible benefits and satisfaction attained from different culture situations, and it is the self-generated enjoyment from intercultural interactions. Extrinsic interest of motivational CQ refers to the tangible benefits gained from the cross-cultural interactions. For instance, people in multicultural organizations accept the recognition or promotion and they will continue to function well regarding to the intercultural work (Ang et al., 2012; Ryan & Deci, 2000). Self-efficacy to adjust is a crucial aspect for individuals to be effective within intercultural settings (Bandura, 2002; Eccles & Wigfield, 2002). It refers to the confident degree of one's capability to effectively interact within the cross-cultural settings, which has influences on the extent of paying

efforts to make adjustments to the specific situations (Ang et al., 2012; Sharma & Hussain, 2017).

Motivational CQ is involved in a considerable part in intercultural situations. Motivational CQ can help people to develop their self-efficacy toward multicultural environments (Bücker, Furrer, Poutsma, & Buyens, 2014). People with a strong sense of efficacy are more stimulated and look for more opportunities to engage in interacting with others from different cultural backgrounds (Ang et al., 2012; Deci & Ryan, 1985). Besides, those with high motivational CQ will make a big effort to engage in solving problems related to intercultural encounters, since they have a great deal of confidence in going through the challenges of intercultural interactions (Bandura, 2002). In contrast, people who have a low level of motivational CQ will tend to avoid experiencing intercultural interactions (Templer et al., 2006). They do not believe that they can manage the culturally diverse situations which exceed their capabilities to overcome. Thus, motivational CQ is essential in this regard because a person's engagement in an unfamiliar circumstance is affected by their self-efficacy (Earley, 2002). High motivational CQ helps people to overcome obstacles through the strong sense of self-efficacy and the ability to learn more from the new cultures (Bandura, 1977; Earley, 2002).

#### Behavioral CQ

Behavioral CQ demonstrates the capability that one possesses in situations where one must appropriately deal with intercultural settings through verbal and nonverbal actions (Ang et al., 2012; Sharma & Hussain, 2017). People exhibit actions with verbal behavior, non-verbal behavior as well as through speech acts when they interact with others. According to Ang et al. (2012), verbal behavior is "flexibility in vocalization like accent and tone". Non-verbal behavior means that communication is transported through facial expressions, gesture and body language (Knapp, Hall, & Horgan, 2013). Speech acts explains the communicating flexibility in terms of a specific kind of message, such as disagreement, apology and so on (Bowe, Martin, & Manns, 2014).

These flexible actions are conducive to satisfying outcomes of intercultural interactions. People with high behavioral CQ can manage their actions more appropriately when engaging in situations across cultures (Earley & Ang, 2003; Yläne,



2008). Their flexible verbal behaviors display the mental processes used to adapt to novel environments and improve the communicative effectiveness (Ang et al., 2012; Beamer & Varner, 2001). Besides this, their culturally appropriate non-verbal behaviors show the respect given to others from different cultures (Ang et al., 2012; Hall, 1989; Helen, 2008). Additionally, their flexible speech acts can make others feel at their ease during the interactions (Ang et al., 2012; Helen, 2008; Tanaka, 1991). Moreover, people with high behavioral CQ will persist in acquiring new skills and provide desired responses in a multicultural environment; the host will react positively towards those with high behavioral CQ as they exhibit situational behaviors to adapt to local traditions, customs and lifestyles (Ang et al., 2012; Earley & Gardner, 2005).

### **2.2.2 Research Findings about positive contributions of CQ**

The varieties of outcomes related to CQ have been explored since CQ draws researcher's massive attention (Ang et al., 2012; Huff, 2013; Ott & Michailova, 2018; Puyod & Charoensukmongkol, 2019; Sharma & Hussain, 2017). Studies have recognized extensive outcomes connected with CQ in cross-cultural situations (Bücker, Furrer, & Lin, 2015; Charoensukmongkol, 2019; Jyoti & Kour, 2015; Ng & Earley, 2006; Ott & Michailova, 2018; Sharma & Hussain, 2017). Persons with high CQ have better outcomes in term of cross-cultural adjustment and adaptation, cross-cultural performance as well as positive work-related behaviors in cross-cultural work contexts (Ang et al., 2007; Chen, 2015; Korzilius, Bücker, & Beerlage, 2017; Presbitero, 2016; Sharma & Hussain, 2017; Suthatorn & Charoensukmongkol, 2018; Templer et al., 2006). For example, Nunes et al. (2017) found that CQ positively affects expatriates' cross-cultural adaptations by using the sample of expatriates in Brazil. Presbitero (2016) focusing on the sample of call center employees in Philippines provided evidence that CQ was positively related to cross-cultural task performance in virtual and cross-cultural interaction. Korzilius et al. (2017) found that CQ positively affected employees' innovative work behavior by using the sample of employees in the headquarters of an international and Dutch-based staffing agency. Likewise, research showed that CQ can benefit cross-cultural team effectiveness through collaboration, team shared values and cross-cultural performance (Adair et al., 2013; Chua et al., 2012; Groves & Feyerherm, 2011; Moon, 2013; Scholz, 2012). For instance, Moon

(2013) using the sample of students in a business school in Korea found evidence that multicultural teams with highly level of CQ were more likely to improve cross-cultural team performance. Besides, CQ makes contributions to cross-cultural leadership effectiveness (Groves & Feyerherm, 2011; Kim & Linn, 2012; Rockstuhl et al., 2011). Moreover, studies supported that idea that CQ was associated with organizational performance such as export performance and global competitiveness (Charoensukmongkol, 2016b; Chen et al., 2012; Tuan, 2015). For example, a study conducted by using the sample of small-medium enterprises in Thailand showed that business owners with greater CQ led to the firm's higher level of international knowledge acquisition capability and better export performance (Charoensukmongkol, 2016b). A study of Tuan (2015) focusing on multinational companies in Vietnam reported that managers with high CQ were conducive to the process of building global competitiveness. However, scholars noted that CQ may be particularly effective only in the contexts that require cross-cultural interaction. For example, some research found that CQ may lead to better performance only in culturally diverse context (Groves & Feyerherm, 2011; Rockstuhl et al., 2011). Moreover, the previous study showed that CQ did not explain better performance in low diversity environments (Groves & Feyerherm, 2011; Rockstuhl et al., 2011). Given the job characteristics of expatriates that required them to deal with cross-cultural experiences in a foreign country, CQ seems to be a relevant cross-cultural competence that is essential for them. Table 2.1 summarizes findings about contributions of CQ reported in recent research.

Table 2.1 Recent Research on the Contributions of CQ

Authors	Research Contexts	Outcomes of CQ
Nunes et al. (2017)	Expatriates living in Brazil	CQ positively affects expatriate cross-cultural adaptation.
Jyoti and Kour (2015)	Managers working in nationalized banks in India	CQ has a significant influence on cross-cultural adjustment.

	Authors	Research Contexts	Outcomes of CQ
<b>Cross-cultural Adjustment and adaptation</b>	Guðmundsdóttir (2015)	Nordic expatriates working in the US	CQ positively predicted cross-cultural adjustment.
	Huff et al. (2014)	Assistant language teacher or a coordinator working in Japanese Exchange and Teaching program	Motivational CQ had a positive relationship with cross-cultural adjustment.
	Presbitero and Toledano (2017)	Employees of global teams at a multicultural company which is engaged in offshoring business headquartered in the US	Improved CQ positively predicted individual-level task performance of IT service providers in a global team.
	Presbitero (2016)	Call center employees in Philippines	CQ was positively related to task performance in virtual and cross-cultural interaction.
<b>Cross-cultural Performance</b>	Jyoti and Kour (2015)	Managers working in nationalized banks in India	CQ had a positive relationship with task performance.
	Groves et al. (2015)	Full employed MBA students	Cognitive CQ and behavioral CQ had

Authors	Research Contexts	Outcomes of CQ
<b>Positive Work- related Behaviors in Cross-cultural Work Contexts</b>	Korzilius et al. (2017) Employees in the headquarters of an international and Dutch-based staffing agency	positive impacts on negotiation performance. CQ positively affected employees' innovative work behaviors.
	Lorenz et al. (2017) Expatriates working in the US	Expatriates with high metacognitive CQ and cognitive CQ recognized more international opportunities.
	Chen (2015) Philippine laborers working in technology manufacturing industries of Taiwan in China	Foreign labors with high CQ were better involved in their job in the host country.
	Bücker et al. (2014) Chinese host country managers working for international firms	CQ had a positive relationship with communication effectiveness and job satisfaction. CQ had a negatively relationship with anxiety.

<b>Cross-cultural Team Effectiveness</b>	<b>Authors</b>	<b>Research Contexts</b>	<b>Outcomes of CQ</b>
	Moon (2013)	Students in a business school in Korea	Teams with high levels of CQ were more likely to improve team performance.
	Scholz (2012)	Game developers working in various regions	CQ was positively associated with teamwork quality in creative jobs.
	Mor et al. (2013)	American MBA students in an American business school	Metacognitive CQ had a positive influence on intercultural cooperation.
	Chua et al. (2012)	Managers from various nations working in the US	Managers with higher metacognitive CQ resulted in more effective and creative collaboration as well as greater idea sharing across cultures.
	Adair et al. (2013)	Undergraduate students of a Canadian university	Metacognitive CQ and behavioral CQ positively affected shared values within multicultural teams.
	Groves and Feyerherm (2011)	Leaders and their direct followers	Leader CQ had influences on the

	Authors	Research Contexts		Outcomes of CQ
		from MBA students in a public university in the US		follower perceptions of leaders' performance and team performance within a culturally diverse work team.
<b>Cross-cultural Leadership Effectiveness</b>	Rockstuhl et al. (2011)	Swiss military officers		CQ facilitated cross-cultural leadership effectiveness.
	Chen et al. (2012)	US real estate agents		Motivational CQ positively predicted cross-cultural performance
	Charoensukmongkol (2015)	Small and medium manufacturing firms in Thailand		Entrepreneurs' CQ positively predicted the relationship that their companies have with foreign customers, foreign suppliers as well as foreign competitors.
	Magnusson et al. (2013)	US exporting firms		Export managers with higher motivational CQ made a better decision to adapt to marketing-mix, whereas export managers possessing



Authors	Research Contexts	Outcomes of CQ
<b>Organizational Performance</b>	Charoensukmongkol (2016b) Small-medium enterprises in Thailand	higher metacognitive CQ improved their firms' export performance. Business owners with greater CQ led to firm's higher level of international knowledge acquisition capability and better export performance
	Yitmen (2013) Contracting firms from Turkish Contractors Association	Organizations with high CQ can function effectively in the intercultural environments and maintain a sustainable development as well as their competitive advantages. Besides, firms with a high level of CQ had strong cross-cultural competence to establish and increase their international

Authors	Research Contexts	Outcomes of CQ
Tuan (2015)	Multinational companies in Vietnam	<p>strategic alliances performance</p> <p>Managers with high CQ were conducive to the process of building organizational competitiveness.</p> <p>Managers' CQ played a moderating role in the relationship between organizational orientation and competitive intelligence.</p>

The outcomes mentioned above showed that CQ played influential roles in enhancing various areas of performance in cross-cultural settings. In particular, the results indicated that those with high CQ tended to demonstrate cross-cultural adjustment performances. Because of this characteristic, CQ is also found as a competency that helps expatriates adjust effectively during overseas task (Templer et al., 2006). The following section will describe the details of cross-cultural adjustment and the contribution of CQ.

### 2.3 Cross-cultural Adjustment

Cross-cultural adjustment refers to the process of one's adaptation to a new situation, and it is the perceived degree in terms of comfort that one feels and the extent of adjustments toward varieties of aspects of the new environment (Black, 1988; Black, Mendenhall, & Oddou, 1991). It demonstrates the extent to which individuals are

integrated in the daily life and work environment within the host country's context as well as individuals' abilities to adapt to the interactive aspects related to the local culture (Davies, Kraeh, & Froese, 2015; Ward, Okura, Kennedy, & Kojima, 1998). Cross-cultural adjustment is also a process of uncertainty reduction through the expatriate's feeling of comfort and harmonizing with the new environment (Black, 1988). Psychological adjustment and sociocultural adjustment were the two notions that the earlier literature on adjustment focused. These two notions paid attention to subjective well-being and the ability to function effectively in host culture. At the same time, psychological adjustment and sociocultural adjustment stressed the attitudinal elements that were conducive to cultural learning as well as the acquisition of culturally appropriate skills and behaviors during the adjustment process. Later, expatriate adjustment was operationalized by two facets: general adjustment and work adjustment. Furthermore, Black and Stephens (1989) extended the framework of cross-cultural adjustment to three areas consisting of general adjustment, work adjustment as well as interaction adjustment. Subjective well-being related to psychological aspects of adjustment was well developed and sociocultural aspects of adjustment are covered in this multi-framework. Given that this framework has been widely adopted in prior research (Muhammad et al., 2013; Ditchburn & Brook, 2015; Jyoti & Kour, 2015; Selmer & Luring, 2015; Vijayakumar & Cunningham, 2016; Wu & Ang, 2011), it is selected for this study. The details of this framework of cross-cultural adjustment are explained as follow.

#### *General adjustment*

General adjustment means the degree of comfort related to expatriate overall adjustment to the living conditions in a new environment (Black, 1988). It refers to the basic needs as well as activities of the expatriate's daily life (Black et al., 1991). The dimensions of this aspect includes food, housing, the cost of living, transportation, shopping and health care (Black, 1988; Hechanova, Beehr, & Christiansen, 2003; Krishnan & Kirubamoorthy, 2017). Expatriates who are effective in general adjustment tend to become accustomed to local life (Black, 1988). They feel comfortable toward various aspects of the host-country's environments (Salamin & Davoine, 2015).

#### *Work adjustment*

Work adjustment refers to one's adjustment to the new job within a foreign environment (Black, 1988). This aspect of adjustment involves the new work roles, tasks as well as the work environment (Black & Stephens, 1989; Krishnan & Kirubamoorthy, 2017). It is facilitated by the similarities in procedures, policies and requirements of the assignments between host country operation and the home country operation (Black & Stephens, 1989). Expatriates who are effective in work adjustment tend to feel comfortable toward assignment requirements in the cross-cultural contexts (Black, 1988; Salamin & Davoine, 2015). They keep the attitude that their presence is valuable in the task (Salamin & Davoine, 2015).

#### *Interaction adjustment*

Interaction adjustment reflects the degree of comfort individuals feel when interacting with host nationals in the work situation and in the non-work environment (Black & Stephens, 1989; Krishnan & Kirubamoorthy, 2017). Interaction adjustment involves not only language, but also the nonverbal behaviors such as facial expressions, eye contact and posture when socializing with local people (Ditchburn & Brook, 2015; Usunier, 2011). It is facilitated by interaction frequency, trust as well as contact quality (Hechanova et al., 2003; Liu & Shaffer, 2005). Expatriates who are effective in interaction adjustment can develop a better relationship with host country employees (Lee & Sukoco, 2010). They can positively interact with local employees and easily acquire trust within the organization (Lee, Li, & Wu, 2018; Napier & Taylor, 2002).

The combination of these three aspects of adjustment has influences on expatriates' lives when they enter a foreign environment (Black et al., 1991). Interaction adjustment is the most difficult area of adjustment among these three facets of cross-cultural adjustment. This is particularly true because each culture with various customs, cultural norms and behaviors has effects on interactions within the host nation in a specific setting (Black, Gregersen, Mendenhall, & Stroh, 2001; Krishnan & Kirubamoorthy, 2017; Selmer & Luring, 2015). On the other hand, general adjustment and work adjustment are grounded on socializing and interactions within the host country nations (Bell & Harrison, 1996). Interaction with host country people is a method of comprehending the local culture since the actions within local nations are the sources of cultural information (Puck, Holtbrügge, & Dödling, 2003). Furthermore,

interactions with local people can facilitate expatriates' sense of cultural differences, and they can then exhibit appropriate behaviors within a social setting (Bochner, 1981).

### **2.3.1 The Importance of Cross-cultural Adjustment**

As an indicator of the feelings of acceptance of a new environment, adjustment has been measured and become one of the influential themes of expatriate study (Muhammad et al., 2013; Brislin, 1981; Sambasivan et al., 2017; Selmer & Luring, 2016). Many studies have explored expatriate adjustment in the intercultural studies (Jyoti & Kour, 2015; Mahajan & Toh, 2014; Salamin & Davoine, 2015; Sambasivan et al., 2017; Selmer & Luring, 2016). The research found that cross-cultural adjustment was related to expatriate effectiveness and job performance. For example, a study of Salgado and Bastida (2017) focusing on the sample of expatriate managers from Spanish companies found that cross-cultural adjustment had a positive relationship with expatriate effectiveness. Jyoti and Kour (2015) found by using a sample of managers working in nationalized banks in India that cross-cultural adjustment positively affects task performance. A study conducted using the sample of expatriates in private colleges in Malaysia of Hassan and Diallo (2013) also found that cross-cultural adjustment was positively related to improve expatriate job performance. Beside these studies, Wu and Ang (2011) reported that work adjustment and work adjustment of expatriates in Singapore had positive effects on the intention to complete the assignment.

In addition, research also found that cross-cultural adjustment had important influences on expatriate contextual performance. For instance, the study of Wu and Ang (2011) focusing on expatriates in Singapore found that interaction adjustment positively affected contextual performance such as interaction with host country co-workers. Harrison and Shaffer (2005) found evidence that work adjustment and interaction adjustment of expatriates in Hong Kong had a strong association with relationship building. Nunes et al. (2017) also found that cross-cultural adaptation of expatriates in Brazil was positively related to their effectiveness in managing local employees. Moreover, a study of Shay and Baack (2006) conducted by the sample of expatriate managers and their subordinates in multinational host hotel firms showed that expatriate work adjustment had a positive relation with local subordinates' satisfaction with



supervision. In this study, expatriate managers were from various countries such as Australia, France, Germany and others. The subordinates came from a number of countries including Australia, China, Malaysia and others. This study also showed that expatriates' work adjustment influenced local employees' perception of the expatriate's managerial effectiveness (Shay & Baack, 2006).



### **2.3.2 Research about CQ in Expatriation**

CQ has played an important role in explaining successful expatriation (Malek & Budhwar, 2013; Ott & Michailova, 2018). The research about CQ in expatriation has covered various areas. A body of research found that CQ can facilitate expatriate adjustment (Lee & Sukoco, 2010; Wu & Ang, 2011). Some scholars reported evidence about the contribution of CQ to expatriate performance (Lee & Sukoco, 2010; Ramalu, Rose, Uli, & Kumar, 2012; Zhao, Liu, & Zhou, 2016). In addition, Huff (2013) explored the influence of CQ on expatriates' satisfaction with job assignment and living in the current country. Research also found the connection between CQ and previous work experience of expatriates (Hyoung, Byoung, & Jae, 2012, 2013). Moreover, research explored other aspects in expatriation related to CQ. For instance, Vlačić, Caputo, Marzi, and Dabić (2018) analyzed the role of CQ of the expatriate manager in the area of knowledge transfer. Lorenz et al. (2017) conducted a research on the effect of CQ on international opportunity recognition and innovation of expatriates. Elenkov and Manev (2009) also analyzed the relationship between CQ and leadership effectiveness of expatriates related to innovation. Additionally, Lee and Sukoco (2010) found that CQ had a positive effect on cultural effectiveness of expatriates.

Given prior evidence about the positive contribution of CQ and cross-cultural adjustment, this research focuses on three aspects of subordinates' attitudes and behaviors that could be promoted by CQ and cross-cultural adjustment of expatriates: (1) leadership effectiveness, (2) perceived supervisor support, and (3) commitment to supervisor. The content in the next sections will review these outcome variables in more detail. Then, this research will provide theoretical and literature support regarding why they can be promoted by CQ and cross-cultural adjustment.

## **2.4 Challenge of Managing a Cross-cultural Workforce**

Cross-cultural workforces have attracted a lot of attention in global business since the rapid growth of globalization began (Bird & Mendenhall, 2016; Dalluay & Jalagat, 2016; Shaban, 2016; Stahl, Miska, Lee, & De Luque, 2017). Basically, a culturally diverse workforce is a workplace that is composed of employees with a variety of cultural backgrounds (Oya, 2006). For people who work in multicultural

workforces, there is a need to interact frequently with persons who come from different cultures (Oya, 2006; Montagliani & Giacalone, 1998). Workers coming from different cultures tend to have different work attitudes and behaviors (Dong & Liu, 2010). Some workers may not distinguish other cultures from their own culture; as a result, they will maintain their behaviors in their own ways (Dalluay & Jalagat, 2016; Hofstede, 2003). Perceived cultural differences also make some workers pay attention only to their own interests, and they do not want to focus on team work (Hofstede, 2003; Mach & Baruch, 2015). These cultural issues will negatively influence workers' performance in the cross-cultural environment (Adler & Gundersen, 2007). In addition, the different values, assumptions as well as perception of employees can lead to misunderstanding and conflicts (Cragan, Wright, & Kasch, 2008; Stahl et al., 2017). These misunderstanding and conflicts may also negatively affect communication effectiveness within cross-cultural context (Oya, 2006). Cultural diversity in the workforce also creates challenge for managers who come from different cultural background (Dong & Liu, 2010). In particular, the impact of cultural differences can potentially reduce cooperation between managers and other employees (Smith, Peterson, & Schwartz, 2002). Thus, it is essential that managers and leaders should possess cross-cultural sensitivity and skills within cross-cultural workforces (Bird & Mendenhall, 2016; Dong & Liu, 2010; Zander, Mockaitis, & Butler, 2012). Managers and leaders should be aware of cultural difference in the workplace and the impact it may cause instead of ignoring the differences or even allowing these differences to result in problems (Agrawal, 2012; Kundu, 2003; Stevens & Ogunji, 2011).

## **2.5 Cross-cultural Leadership Effectiveness**

Leaders play the leading role in achieving organizational goal (Yazmina, Miguel, & Teresa, 2017; Muchiri, Cooksey, Di Milia, & Walumbwa, 2011). For any organization, leadership effectiveness plays a crucial role in its success (Sadeghi & Pihie, 2012). Leadership effectiveness indicates leaders' ability to affect their followers to accomplish goals (Chemers, 2001; Vardiman, Houghton, & Jinkerson, 2006; Yukl, 1994). Research has shown that good relationships with subordinates is a crucial factor that affects the effectiveness of leaders (Hogg et al., 2005). Effective leaders have the

ability to attract their subordinates to engage in organizational activities (Sadeghi & Pihie, 2012). They are skilled at taking advantage of their subordinates' competencies as well as limitations to achieve organizational objectives (Manamela, Cassim, & Karodia, 2016).

Accompanying the rapid growth of international business, cross-cultural leadership effectiveness has become an important topic in literature (Caligiuri & Tarique, 2012; Harteis, 2012; Rockstuhl et al., 2011). Developing cross-cultural leadership competency is challenging because leaders have to face different social systems that are different from those in their countries, and employees from different cultures tend to have different attitudes towards their leaders (Elenkov & Manev, 2009; Rockstuhl et al., 2011). Research has found that the situational context has influences on leaders' behaviors (Vroom & Jago, 2007). Some behaviors of leaders may be effective in a certain context and ineffective in another setting (Avery, 2004). This is in accordance with idea that successful leadership behaviors vary from one context to another (Ersoy, 2014; House, Hanges, Javidan, Dorfman, & Gupta, 2004). Therefore, effective management of culturally diverse workforce acts in a crucial role in international operations (Caligiuri & Tarique, 2012; Okoro, 2012). Leaders must realize the different cultures and understand different cultural perspectives within the cross-cultural workforce, and they need to be equipped with requisite competencies (Egel & Fry, 2017; Groves & Feyerherm, 2011).

## **2.6 Perceived Supervisor Support**

Perceived supervisor support indicates the degree to which subordinates receive constructive support as well as recognition from their supervisor (Maertz Jr, Griffeth, Campbell, & Allen, 2007; Stinglhamber & Vandenberghe, 2003). Perceived supervisor support reflects employees' perception related to their relationships with supervisors as well as represents the degree to which employees depend on supervisors to think of employees' personal concerns (Yu, 2011). Generally, subordinates tend to perceive that their supervisor is supportive when supervisors demonstrate certain behaviors toward the subordinates (Phungsoonthorn & Charoensukmongkol, 2018). For example, subordinates tend to have a sense of support from the supervisors when the supervisors

care about subordinate welfare (Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002). Moreover, subordinates perceive that they receive support when supervisors clarify subordinate roles and fairly assign a reward to value subordinate contributions (Podsakoff, Podsakoff, & Kuskova, 2010; Tremblay, Vandenberghe, & Doucet, 2013). Besides, providing career development chances for subordinates is also a way for supervisors to support subordinates.

Perception of employees about the supportive behaviors of a supervisor was shown to positively affect subordinate accomplishment of their work (Charoensukmongkol, Murad, & Gutierrez-Wirsching, 2016; Tremblay & Gibson, 2016). Employees with high level of perceived supervisor support feel obligated to organizations and exert more efforts to help their supervisors to achieve goals (Khan, Mahmood, Kanwal, & Latif, 2015). On the contrary, employees who did not see that supervisor display supportive behavior tend to exhibit withdrawal behaviors (Charoensukmongkol, 2014; Liao, Joshi, & Chuang, 2004; Menguc, Auh, Fisher, & Haddad, 2013). Scholars asserted that supervisor support acts a role in fostering employees' positive attitudes regarding to their organizations (Eisenberger et al., 2002; Levinson, 1965). A research of Dysvik and Kuvaas (2013) using sample of Norwegian employees from public organizations also found that perceived supervisor support moderated the relationship between job autonomy and turnover intention. Besides, a study of Shanock and Eisenberger (2006) focusing on the sample of full-time retail employees and their supervisors in the northeastern United States found that subordinates' perceived supervisor support was positively connected with their perceived organizational support, in-role performance as well as extra-role performance. A research of DeConinck (2010) focusing on advertising managers from the US companies also documented that perceived supervisor support positively related with organizational trust. Moreover, the study of Gok, Karatuna, and Karaca (2015) using sample of medical secretaries in Turkey found that perceived supervisor support was positively associated with job satisfaction. A study of Jose and Mampilly (2015) indicated that perceived supervisor support positively connected with employee engagement and psychological empowerment.



## 2.7 Commitment to Supervisor

Commitment is a psychological state and attachment that characterize the relationship that employees develop with other persons in a workplace or with an organization (Meyer & Allen, 1991; O'Reilly & Chatman, 1986). Commitment motivates individuals to use their best endeavors to complete assignments outside their duties (Salancik, 1977). Individuals with high level commitment are more likely to sacrifice their personal welfare to maintain a good relationship with others in the work environment (Van Lange et al., 1997; Wieselquist, Rusbult, Foster, & Agnew, 1999). In addition, individuals with high level commitment are less likely to leave their organizations (Mathieu & Zajac, 1990).

Research classifies the concept of commitment in a workplace at different levels which include: commitment to organizations, unions, occupations and professions, teams and leaders, personal careers as well as customers (Becker, 1992; Gordon, Philpot, Burt, Thompson, & Spiller, 1980; Hall, 1996; Mathieu & Zajac, 1990; Meyer & Allen, 1991; Meyer, Allen, & Smith, 1993; Siders, George, & Dharwadkar, 2001). Within a workplace, organizational commitment is defined as the degree to which employees are psychologically attached to their organizations (Mathieu & Zajac, 1990). It represents the degree to which employees are willing to remain at the organization and make a contribution toward the organization (Kalidass & Bahron, 2015; Meyer et al., 1993). However, according to Reichers (1985), commitment to an organization cannot be adequately considered as the commitment to the workplace. Employees can develop commitment to various targets other than the organization (Becker, 1992; Cohen, 1999; Snape, Chan, & Redman, 2006); for example, they can develop commitment toward a supervisor, a work group as well as customers (Becker, Billings, Eveleth, & Gilbert, 1996; Gregersen, 1993; Snape et al., 2006). Given that the focus on this research is leadership effectiveness of expatriates who take a supervisory role at a workplace, the aspect of commitment that this research emphasizes is commitment to supervisors.

Commitment to a supervisor has been one of the vital foci of commitment (Becker et al., 1996; Wong & Lui, 2007). Commitment to a supervisor represents subordinates' psychological attachment to their supervisors, which is grounded on

supervisors' attitudes as well as behaviors (Becker et al., 1996). When subordinates develop commitment toward their supervisor, they are willing to exert extra efforts to help the supervisors accomplish goals (Mowday, Steers, & Porter, 1979). Subordinates who develop commitment toward their supervisor also have a willingness to continuously work for their supervisors (Mowday et al., 1979). Scholars reported that commitment to a supervisor was positively related to job performance (Becker, 1992; Becker et al., 1996; Becker & Kernan, 2003; Cheng, Jiang, & Riley, 2003). Research also found that commitment to supervisors positively predicted employees' job satisfaction (Chen, 2001). Beside this, earlier research documented that commitment to a supervisor was positively associated with organizational citizenship behaviors (Gregersen, 1993; Wasti & Can, 2008). Scholars also supported that commitment to one's supervisor was negatively connected with turnover intention (Harris, Harris, & Harvey, 2008; Vandenberghe & Bentein, 2009). Moreover, research also found that commitment to supervisors was negatively related to subordinate-supervisor conflicts (Landry & Vandenberghe, 2009). Literature also showed that high level of commitment that employees have toward a supervisor indicates a good relationship between employees and their supervisors (Cheng et al., 2003). In addition, commitment to a supervisor was also found to have a significant effect on work related attitudes as well as behaviors of employees (Chughtai, 2013). Employees tend to be more engaged in their work when they develop a high-quality relationship with their supervisors (Carmeli, Batia, Waldman, & Rupp, 2009; Chughtai, 2013). Beside this, research suggested employees are likely to learn and be innovative in the workplace when they develop high commitment to their supervisors (Janssen, 2000).

## **2.8 Social Identity Theory**

This study uses social identity theory as a framework to guide hypotheses development about the positive contribution of CQ that might help Chinese expatriates work effectively with Thai subordinates. Hogg, Terry, and White (1995) asserted that social identity theory is a theory of group membership and behavior. This theory has been widely used to explain conflict and collaboration among group members who are influenced by cultural diversity (Fiske, Rosenblum, & Travis, 2004; Shupe, 2007).

Jenkins (2014) pointed out that social identity is an ongoing process of interaction between individual and in group as well as between individual and out group. Tajfel and Turner (1979) specified three processes involved in social identity theory to evaluate members as in group or out group and the processes are social categorization, social identification and social comparison.

According to Turner (1981), an individual develops a social identity through the process of self-categorization (Korte, 2007). For purposes of understanding the social environment, people always categorize themselves and others. Once people know what categories they belong to, they will refer to the group norms to define proper behaviors. Then, individuals will adopt the identity of the group which they categorized themselves as belonging to, and they will behave in the ways that the group members act. When people categorize themselves as the members of a group and identify with this group, they tend to compare this group with other groups. Generally, people perceive that out group members are less trustworthy and cooperative than in group members (Brewer, 1979; Hobman, Bordia, & Gallois, 2003). Visible demographic variables such as age, gender or ethnicity are used in social categorization processes (Triandis, 2003; Tsui, Egan, & O'Reilly III, 1992). Those who are visibly dissimilar in a work group regarding these characteristics might be categorized as out group members (Hobman et al., 2003). Besides, it is documented that demographic, attitudinal, and work value differences are associated with lower group cohesiveness and lower commitment to groups (Hobman et al., 2003). Culture also plays a role in drawing the line between in group and out group (Worchel, 2005). The empirical evidence supported that in group favoritism and out group discrimination are also likely in a situation that involves interactions among members from different cultures (Shupe, 2007). Perceived similarity is a vital element in intergroup relations (Triandis, 2003). When individuals perceive each other as similar, they tend to discuss and coordinate in group work (Triandis, 2003). On the other hand, research found that there are more perceptual problems and conflict in diverse groups, because people are likely to avoid or be aggressive with one another when they see others as dissimilar (Triandis, 2003).

The ideas of social identity theory have been applied in work contexts, particularly in the area of leader-and-subordinate relationship (Ellemers, Dick, & Haslam, 2004). Basically, leaders are the members of organizations and of varieties of

groups. As a result, leaders share one or more group memberships with others they lead (Daan & Hogg, 2003). Subordinates are likely to stay with an in group leader who displays desirable behavior (Bruins, Ellemers, & Dick, 1999). By contrast, the willingness of subordinates to cooperate with the out group leader relies on whether the leader represents the features that contribute to distinguish the in group from other groups (Ellemers, Wendy, Bruins, & Dick, 1998). CQ is regarded as a competency to help individuals to adjust effectively in any cross-cultural situation, which helps people lower perceived differences and enhance perceived similarities (Earley & Gardner, 2005). In this point, individuals with high CQ are able to overcome the challenge of differentiating themselves from other group members with different cultural backgrounds (Earley & Mosakowski, 2000). In this regard, it might help Chinese expatriates with high CQ to effectively get Thai employees to perceive that the expatriate is not different from them. When this occurs, the Thai employees are more willing to develop positive attitudes toward Chinese expatriates.

## **2.9 Hypotheses Development**

### **2.9.1 CQ and Cross-cultural Leadership Effectiveness**

Among various aspects of the cross-cultural competencies documented in research, CQ appears to be a cross-cultural competency that plays a vital role in promoting cross-cultural leadership effectiveness, especially for the expatriates who practice leadership cross cultures (Alon & Higgins, 2005; Elenkov & McMahan, 2005). This research proposes that all aspects of CQ can contribute to leadership effectiveness of Chinese expatriates in Thailand. In a culturally diverse workforce, the ability of expatriates to effectively cope with cultural differences in the cross-cultural environment is vital (Collings & Sculling, 2006). It is crucial for expatriates to understand and to have the ability to manage subordinates from different cultures (Deng & Gibson, 2008). Given that subordinates from different cultural backgrounds tend to possess different cultural perceptions regarding the characteristics of effective leadership style, expatriates must have the ability to understand how subordinates with various cultural backgrounds view them as well as interpret their behaviors (Deng & Gibson, 2008; Dong & Liu, 2010; Spector et al., 2001; Yukl, 1994). Hence, cognitive



CQ that demonstrates an individual's knowledge and information of different cultures is important for expatriates to effectively interact with others in a cross-cultural context. Expatriates with high cognitive CQ tend to identify the differences and similarities across cultures (Keung, 2011; Livermore, 2011). They can accurately interpret the circumstance when they are involved in intercultural settings (Musamali & Martin, 2016). Beside this, high cognitive CQ can facilitate expatriates' understanding of subordinates' norms and values and make them more considerate to their subordinates (Musamali & Martin, 2016). Cultural knowledge of expatriates also allows them to understand work behaviors of subordinates from different cultures. Moreover, expatriates with high cognitive CQ tend to know what the leadership style is that is consistent with cultural expectations of their followers (Hanges, Aiken, Park, & Su, 2016; House et al., 2004). These can contribute to their leadership effectiveness when managing subordinates from different cultures.

Metacognitive CQ also can make contributions to leadership effectiveness of Chinese expatriates in Thailand. Metacognitive CQ is a high-level of cognitive skill to deal with the cultural information in a certain situation, and it represents individuals' awareness of intercultural activities (Soon & Linn, 2015; Ang et al., 2012; Earley & Ang, 2003). Individuals with high metacognitive CQ always acquire and grasp the cultural knowledge before and during cross-cultural interactions (Ang et al., 2012; Ang et al., 2007). Moreover, they will be more flexible in understanding a new situation using inductive reasoning in addition to their existing knowledge (Earley, 2002). Beside this, individuals with high metacognitive CQ will question their assumptions and make adjustments to function in the cross-cultural settings (Brislin et al., 2016). In this regard, high metacognitive CQ will help expatriates to be more sensitive to cultural cues in the culturally diverse environment (Groves & Feyerherm, 2011). Expatriates with high metacognitive CQ can think about their knowledge of other cultures within the cross-cultural environment, examine their cultural assumptions then to suppose values that may be feasible to their interaction with subordinates (Solomon & Steyn, 2017). Keung (2011) also supported the idea that leaders with high metacognitive CQ are more likely to find cultural ways to connect with their subordinates from other cultures. This can help leaders to know how to develop good relationships with their followers. Moreover, individuals with high metacognitive CQ always take time to learn and comprehend new



knowledge related to cross-cultural settings. This will help individuals to create new mental maps and make strategies to function in new environments (Thomas et al., 2008). For this reason, expatriates with high metacognitive CQ tend to have the ability to understand the specific culture that they are involved in (Deng & Gibson, 2008). They also have the ability to identify the relevant information that contributes to correct judgments about the new situation (Triandis, 2006). Consequently, expatriates with high metacognitive CQ will tend to develop adaptive strategies to deal with subordinates from other cultures who may have different expectations about characteristics of an effective leader. They will create the appropriate mental map of the situation to effectively function with their subordinates to make them develop positive attitudes toward the expatriate. Thus, metacognitive CQ helps expatriates to enhance their effectiveness in cross-cultural context.

Motivational CQ also can make contributions to leadership effectiveness of Chinese expatriates in Thailand. For leaders to function effectively in a cross-cultural context, it is not enough to only have relevant knowledge about national culture of their subordinates. Leaders also need to be self-motivated to adjust to the cross-cultural context (Deng & Gibson, 2008). Motivational CQ shows individuals' ability to capture the drive source to function effectively across cultures (Ang et al., 2007). Individuals with high motivational CQ will develop their self-efficacy and have much more confidence to overcome difficulties during the cross-cultural interactions (Bandura, 2002; Bückner et al., 2014). Accordingly, expatriates with high motivation CQ tend to have the ability to determine how to effectively function with others with confidence. They tend to possess high interest in the new cultures of their followers (Deng & Gibson, 2008; Earley & Peterson, 2004). These characteristics of motivational CQ encourage expatriates to apply their cultural knowledge to interact with followers in the manner that can help them gain respect from their foreign subordinates (Templer et al., 2006). This will contribute to the leadership effectiveness of expatriates during their management of a cross-cultural workforce.

Behavioral CQ also can make contributions to the leadership effectiveness of Chinese expatriates in Thailand. Although cultural knowledge is the foundation of the intercultural communication, it is not enough for leaders to interact effectively with followers from different cultures (Ersoy, 2014). Leaders must flexibly and

appropriately interact with their followers within the cross-cultural situations (Rockstuhl et al., 2011). Behavioral CQ shows individuals' behavioral flexibility through verbal and nonverbal actions when interacting with others from different cultures (Ang et al., 2012). Because of this characteristic, expatriates with high behavioral CQ can effectively manage their actions across cultures (Earley & Ang, 2003; Yläne, 2008). Their flexible verbal and nonverbal behaviors can improve communication effectiveness and show their respect to others from different cultures (Ang et al., 2012; Beamer & Varner, 2001). According to Alon and Higgins (2005), leaders with high behavioral CQ tend to switch cultural contexts as well as display situational behaviors to deal with the dynamic interactions with others from different cultures. In this regard, behavioral CQ can help expatriates adjust their behaviors to exhibit more proper and respectful behaviors to their local subordinates (Earley, Ang, & Tan, 2006). This can enhance the effectiveness of expatriates in cross-cultural settings.

Evidence about the contribution of CQ of expatriate to cross-cultural leadership effectiveness was also supported in previous studies (Bird & Mendenhall, 2016; Peter & Daan, 2018). For example, a qualitative study conducted by Ersoy (2014) found that expatriate leaders' CQ had positive influences on their cross-cultural leadership effectiveness. This study interviewed expatriate managers from Spanish, Dutch and Indian as well as local Turkish managers. The result is in accordance with an earlier qualitative study of Deng and Gibson (2008) focusing on Australian expatriate managers in China and local Chinese managers, which confirmed that expatriate leaders' CQ positively impacted their leadership effectiveness in cross-cultural contexts. In addition, the study of Groves and Feyerherm (2011) using the sample of leaders and their direct followers from MBA students in a public university in the US showed that leaders' CQ had impacts on their followers' perceptions of leaders' performance within the cross-cultural context. Musamali and Martin (2016) using the sample of educational leaders in Kenya and the US found evidence that there was a significant relationship between CQ and effective leadership practices across cultures. Rockstuhl et al. (2011) also supported the notion that CQ facilitated cross-cultural leadership effectiveness by using the sample of Swiss military officers. On the basis of these supports, the following hypothesis is proposed:

H1: CQ of Chinese expatriates is positively related to Thai subordinates' perception of cross-cultural leadership effectiveness.

### **2.9.2 CQ and Perceived Supervisor Support**

This research proposes that the CQ of Chinese expatriates will relate to the degree of support that Thai subordinates perceive from the Chinese expatriates. Since subordinates rely largely on their leaders for rewards as well as career opportunities, leaders play a vital role in recognizing their subordinates' contributions and positively reacting to their subordinates (Van Vianen, Shen, & Chuang, 2011). Subordinates are developing a global view about the degree to which their supervisors value their well-being as well as evaluate their contributions (Eisenberger et al., 2002; Leveson, Joiner, & Bakalis, 2009). Given that subordinates from different cultural backgrounds tend to hold various cultural perceptions related to received support, expatriates must have the ability to recognize the well-being of subordinates and then to support the subordinates (Jyoti & Kour, 2017). Because individuals with high CQ can identify the differences across cultures, expatriates who possess high CQ tend to understand their subordinates' different cultural values through their cultural knowledge (Livermore, 2011). In addition, expatriates with high CQ tend to be sensitive to cultural cues to connect with subordinates (Groves & Feyerherm, 2011). In this point, expatriates with high CQ have the ability to make effective reward plans to value their subordinates' contributions to organization. Additionally, expatriates with CQ can behave properly in order to show their care as well as recognition of subordinates' performance (Earley et al., 2006). Consequently, subordinates might feel that they perceive high levels of support from the expatriate who understands what the subordinates expect in their culture. Thus, this research proposes the following hypothesis:

H2: CQ of Chinese expatriates is positively related to Thai subordinates' perceived supervisor support

### **2.9.3 CQ and Commitment to Supervisor**

This research proposes that the CQ of Chinese expatriates will be associated with the level of commitment that Thai subordinates have toward the

Chinese expatriates. According to Engle and Lord (1997), subordinates may positively react to their supervisors when cultures between their supervisors and them are similar. Leaders with high CQ are able to consider the influence of different cultural values employees bring to their workforce, and they tend to exhibit adaptive behaviors in response to followers (Ang et al., 2012). In this point, expatriates with high CQ tend to effectively and respectfully interact with subordinates. Their high level of knowledge about culture also allows them to consider working styles and expectations of their subordinates from the subordinates' culture (Anvari, Irum, Ashfaq, & Atiyaye, 2014; Keung, 2011; Livermore, 2011). In addition, expatriates with high CQ can analyze and adapt to different personal values to make subordinates' satisfaction possible (Anvari et al., 2014). In this regard, when the supervisors understand and treat the subordinates well, subordinates are more willing to make a commitment toward their supervisor (Chughtai, 2013). Given the prior evidence, it is supposed that Chinese expatriates with high CQ accept trust from their subordinates when they behave properly in showing concern for subordinates, which results in the subordinates developing commitment toward the Chinese expatriates. Thus, this study proposes the following hypothesis:

H3: CQ of Chinese expatriates is positively related to Thai subordinates' commitment to supervisors.

#### **2.9.4 Cross-cultural Leadership Effectiveness and Commitment to Supervisor**

This research proposes that the cross-cultural leadership effectiveness of Chinese expatriates is associated with Thai subordinates' commitment to their supervisor. According to Bass (1985), effective leaders are more likely to make their subordinates realize the task goals and the importance of these goals. They are also aware of satisfying subordinates' personal needs during the process of achieving organizational goals (Jackson, Meyer, & Wang, 2013). When subordinates feel that their leader pays attention to their needs, they increase their attachment to their leader (Yukl, 2013). Effective leaders also obtain subordinates' commitment and extra efforts through promoting shared values and enhancing enthusiasm among subordinates (Gill, 2011). High-level leadership effectiveness of expatriates can provide development opportunities to subordinates and trust subordinates to make decisions in the cross-



cultural settings (Yukl, Gordon, & Taber, 2002). Research found that followers tend to show commitment to leaders when their leader trusts and has confidence in them (Garg & Ramjee, 2013). Under this condition, when Chinese expatriates can express appropriate leadership effectiveness, it could be easy for them to gain the subordinates' commitment. Thus, this research put forward the following hypothesis:

H4: Cross-cultural leadership effectiveness of Chinese expatriates is positively associated with Thai subordinates' commitment to their supervisor.

### **2.9.5 Perceived Supervisor Support and Commitment to Supervisor**

This research proposes that Thai subordinates' perceived supervisor support is related to their commitment to Chinese expatriates. Research supported the idea that subordinates show their commitment to supervisors when they received direct support from their supervisors (Dansereau Jr, Graen, & Haga, 1975; Graen & Uhl-Bien, 1995). Conversely, studies showed that a lack of support from supervisors could lead to the intention of employees to leave their organizations (Wayne, Shore, & Liden, 1997). The supportive behaviors of leaders can improve followers' trust and tend to drive followers to feel obligations to play additional roles to help others (Cheng et al., 2003; Shanock & Eisenberger, 2006). In addition, research also showed that leaders' supportive behaviors can reduce subordinates' turnover intentions (Kalidass & Bahron, 2015). Considering the prior research evidence, it can be expected that Chinese expatriates who can express supportive behaviors to their subordinates might have a higher tendency to gain commitment from the subordinates. Hence, this study proposes the following hypothesis:

H5: Thai subordinates' perceived supervisor support is positively related to their commitment to Chinese expatriates.

### **2.9.6 CQ and Cross-cultural Adjustment**

This research proposes that the CQ of Chinese expatriates relates to their cross-cultural adjustment in Thailand. Individuals with high CQ have general knowledge and specific knowledge of other countries (Ang et al., 2012). The knowledge can assist expatriates in understanding the differences across various cultures. When expatriates with high CQ understand the new culture, they tend to have



the ability to adjust to the new environment they are involved in (Guðmundsdóttir, 2015). Beside this, individuals with high CQ possess the ability to grasp the cultural preference of others, and they will develop relevant strategies before and during cross-cultural actions (Ang et al., 2012; Ang et al., 2007). In this regard, expatriates with high CQ can use this competence to help them learn and gain more understanding about the new culture easily. This allows them to know how to make responsive adjustments to act more effectively in the new social interactions and work environment (Huff et al., 2014). In addition, individuals with high CQ tend to have more interest in learning the new culture and engaging in non-work and work situations related to cross-cultural context (Ang et al., 2007). They also have more confidence in overcoming difficult situations in intercultural interactions (Bandura, 2002). Their high-level self-efficacy to adjust to intercultural settings facilitates expatriates to overcome difficulties they face during cross-cultural interactions, so that they can have a better adjustment in the new environment (Guðmundsdóttir, 2015). Furthermore, the ability to display a range of flexible and adaptive behaviors to adjust to culturally diverse environment also allows expatriates with high CQ to tend to exhibit situational behaviors when they interact with people from other cultures (Earley & Ang, 2003; Yläne, 2008). This competence allows them to effectively manage their actions to adapt to local customs, traditions as well as lifestyle (Ang et al., 2012; Earley & Gardner, 2005).

The contributions of CQ to the cross-cultural adjustment of expatriates can be supported by prior studies that confirm CQ significantly affects cross-cultural adjustment of expatriates in various contexts (Konanahalli et al., 2014; Malek & Budhwar, 2013; Nunes et al., 2017; Presbitero, 2017b; Ramalu, Rose, Kumar, & Uli, 2010). As a vital skill, CQ assists expatriates crossing cultural borders to better adjust to the host country's culture and situations that arise. (Ang et al., 2007; Ott & Michailova, 2018; Shin, Morgeson, & Campion, 2007). Malek and Budhwar (2013) and Ramalu et al. (2010) supported the notion that CQ facilitated cross-cultural adjustment of expatriates in Malaysia. A study conducted by Guðmundsdóttir (2015) also found that CQ had a positive relationship with cross-cultural adjustment of Nordic expatriates in the US. Beside these, Nunes et al. (2017) focusing on expatriates in Brazil supported the idea that CQ positively affected their cross-cultural adjustment. Another study conducted by Presbitero (2017b) also provided evidence that CQ has positive

influences on cross-cultural adjustments of religious expatriates. Moreover, the study of Huff (2013) focusing on the native English-speaking expatriates in Japan found that motivational CQ was the most vital factor of CQ in predicting cross-cultural adjustment. The study of Konanahalli et al. (2014) focusing on British expatriates provided the evidence that cognitive CQ and motivational CQ significantly affects cross-cultural adjustment. Thus, the following hypothesis is posited:

H6: CQ of Chinese expatriates is positively related to their cross-cultural adjustment in Thailand.

### **2.9.7 Cross-cultural adjustment and Cross-cultural Leadership Effectiveness**

This study hypothesizes that cross-cultural adjustment of Chinese expatriates is associated with the perception of their subordinates about cross-cultural leadership effectiveness that Chinese expatriates exhibit. Research showed that cross-cultural adjustment is a salient factor related with expatriate effectiveness (Salgado & Bastida, 2017). Black (1988) mentioned that expatriates who are effective in adjustments in the new environment can make sense of the basic needs of local employees in their daily life. In this regard, expatriates who act in supervisory roles and effectively adjust to new environment can develop relevant measures to satisfy local subordinates' needs in the process of achieving goals. In addition, expatriates who are effective in cross-cultural adjustment can recognize their roles as well as tasks in the new work environment (Black, 1988). Regarding this point, expatriates who are effective in cross-cultural adjustment can exhibit appropriate behaviors to motivate local subordinates to perform better. In addition, expatriates who are able to adjust to the host environment can positively interact with local employees and acquire trust (Lee et al., 2018; Napier & Taylor, 2002). In this respect, expatriates who play supervisory roles and adjust well in the new environment tend to build good relationships with local subordinates (Lee & Sukoco, 2010). Consequently, these improve the leadership effectiveness of expatriates who take supervisory roles in cross-cultural context. Research also supported the idea that cross-cultural adjustment of expatriates was positively related to managing local subordinates (Nunes et al., 2017). Therefore, this research proposes the following hypothesis:

H7: Cross-cultural adjustment of Chinese expatriates is positively related to their cross-cultural leadership effectiveness.

### **2.9.8 Cross-cultural Adjustment and Perceived Supervisor Support**

This study hypothesizes that the cross-cultural adjustment of Chinese expatriates can determine the degree to which Thai subordinates perceive that their Chinese expatriate is supportive. Cross-cultural adjustment of expatriates is a way to understand the various aspects of host country nations (Puck et al., 2003). Regarding this point, expatriates who become accustomed to local life tend to understand about cultural life style and expectations of their subordinates (Puck et al., 2003). In addition, expatriates who adjust well in the cross-cultural environment tend to develop close relationships with local subordinates (Harrison & Shaffer, 2005). They tend to pay attention to the specific cultural values, norms and attitudes of local subordinates, and provide subordinates with necessary resources and work incentives that match their cultural expectations (Shay & Tracey, 2009). When local subordinates feel their supervisor understands their culture and can effectively adjust the working style toward the local culture of the subordinates, it can enhance the perception of the subordinates that their supervisor is supportive. Thus, this study proposes the following hypothesis:

H8: Cross-cultural adjustment of Chinese expatriates is positively related to Thai subordinates' perceived supervisor support.

All hypotheses are illustrated in the form of a conceptual model as showed in Figure 2.1. Table 2.2 also summarizes all hypotheses proposed in this research.

Table 2.2 The Summary of Research Hypotheses

<b>Hypotheses</b>
<b>H1: CQ of Chinese expatriates is positively related to Thai subordinates' perception of cross-cultural leadership effectiveness.</b>
<b>H2: CQ of Chinese expatriates is positively related to Thai subordinates' perceived supervisor support</b>
<b>H3: CQ of Chinese expatriates is positively related to Thai subordinates' commitment to supervisors.</b>

**H4: Cross-cultural leadership effectiveness of Chinese expatriates is positively associated with Thai subordinates' commitment to their supervisor.**

**H5: Thai subordinates' perceived supervisor support is positively related to their commitment to Chinese expatriates.**

**H6: CQ of Chinese expatriates is positively related to their cross-cultural adjustment in Thailand.**

**H7: Cross-cultural adjustment of Chinese expatriates is positively related to their cross-cultural leadership effectiveness.**

**H8: Cross-cultural adjustment of Chinese expatriates is positively related to Thai subordinates' perceived supervisor support.**

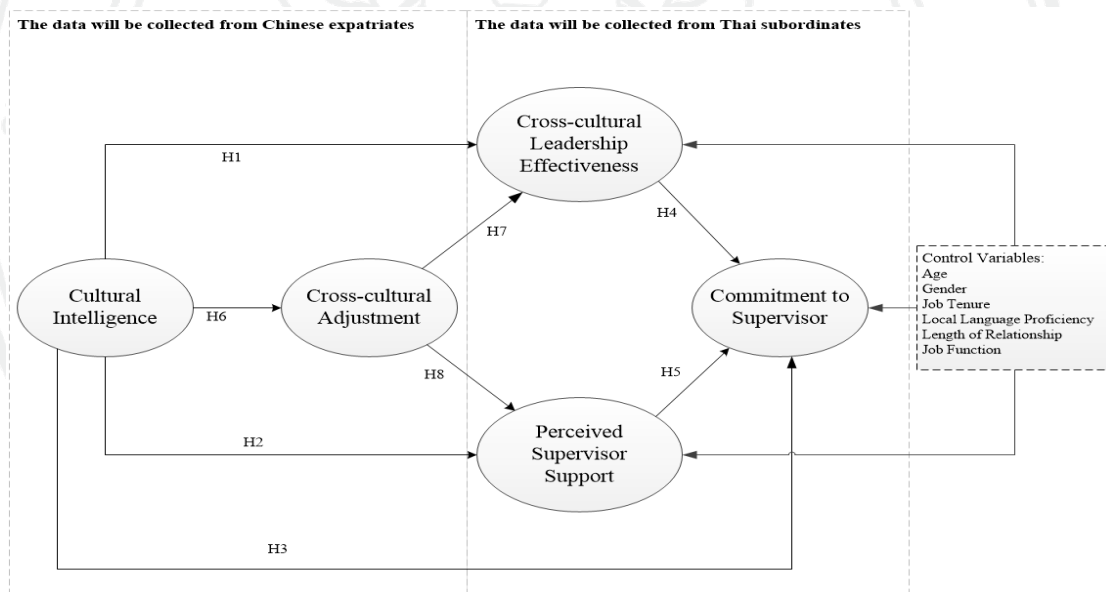


Figure 2.1 The Conceptual Model

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Research Context**

This research will collect data from Chinese multinational corporations that have established a subsidiary in Thailand. Thailand is a good context for this research because it has been one of the investment destinations for many Chinese companies. Sorndee et al. (2017) mentioned that the number of Chinese expatriates has taken the second place in Thailand. Investments of Chinese companies in Thailand are driven by several factors. One of the key factors that drive the direct investments of Chinese companies in Thailand is the Agreement on Promotion and Protection of Mutual Investment between Thailand and China. Along with the go-out policy of China, Chinese government has a close tie with ASEAN. In the light of the China-ASEAN Free Trade Area, China's investment in Thailand has a strong growth. Beside these factors, Thailand's Board of Investment (BOI) Promotional Schemes also facilitated the investments of Chinese firms in Thailand. All the investments of Chinese firms were approved by BOI. In addition, BOI granted the promotional privileges to these firms. BOI can provide preferential rights in taxes such as the exemption of the import tax on machinery and on raw material. BOI also provides the preferential rights in introducing experts and technicians for firms. During the period of 1987 to 2014, Chinese firms have invested in 373 projects that covered a wide range of business sectors in Thailand (Keorite & Pan, 2016). Chinese multinational corporations invest in Thailand in various industries including metal and machinery, electronics and electrical industry, plastic and construction material, food, latex products, service, etc. In the first two quarters of 2018, China applied for investing 47 projects valued 4.71 billion baht. To date, there are more than 100 Chinese subsidiaries in Thailand and most of them locate in Bangkok and Rayong areas.



### **3.2 Sample Selection**

This study focuses on the sample of Chinese expatriates who take a supervisory role in international assignments in Thailand and their Thai subordinates. The sample of this study will be obtained in Bangkok and Rayong in Thailand. These areas are selected because they are major economic areas where many Chinese companies are established. The companies in these areas involve food, service, latex, electronics and electrical industry, metal and machinery, automotive industry, etc. There are around 100 firms and approximately 2000 Chinese expatriates working in these areas. This research uses convenience sampling to collect data. Convenience sampling is a kind of nonprobability sampling technique that targets respondents who are selected because they are easy to access by researchers (Dörnyei, 2007). This method allows the researcher to obtain a large number of target respondents at a given time. In addition, this method is affordable to researchers. The reason this study uses convenience sampling to conduct data collection is that it allows the researcher to easily access target samples who are willing to respond to the questions. It is a quick way to collect data in a certain time, and it is affordable to the researcher during the data collection process.

### **3.3 Data Collection Method**

This study uses a self-administered questionnaire survey to collect data. Questionnaires can be distributed all at once and respondents can complete questionnaires at a convenient time (Bell, Bryman, & Harley, 2018). This method allows researchers to collect data from large numbers of respondents within a short period of time; in addition, the collection is anonymous which encourages each respondent to answer the questionnaire honestly (Bell et al., 2018). All the scale questions used to measure main variables of this study were developed originally in English. Given that language difference and English proficiency, the questions of the scale need to be translated from English to the Chinese language (which will be used to collect data from Chinese expatriates), and to Thai language (which will be used to collect data from Thai employees). Back-translation is a technique that is necessary in

cross-cultural studies when the researcher collects the data of the respondents from two or more groups of samples that use different languages (Hult et al., 2008). Back-translation can contribute to ensuring that the meaning of questions to target language is accurate in cross-cultural study (Brislin, 1970). To ensure the validity of the questionnaire used in this cross-cultural study, questions for Chinese expatriates and Thai subordinates will be translated into Chinese and Thai respectively by bilingual experts and then back-translated to English to compare to see whether the version that was back-translated still retains the same meaning or not (Brislin, 1970).

The data will be collected from two sources that have Chinese expatriates and Thai subordinates who work for the Chinese expatriates. The data of CQ and cross-cultural adjustment will be collected from the source of Chinese expatriates. The data of cross-cultural leadership effectiveness, perceived supervisor support and commitment to supervisor will be collected from the Thai subordinates. The reason to collect data from two different sources is to minimize the problems that might occur from common method bias and social desirability bias. Common method bias is a phenomenon caused by the measurement method in research (Kock, 2015). Method bias tend to occur when the data for both predictor and criterion variable are collected from the same person in the same measurement context; besides, method bias can be a problem in research since these biases are one of the sources of measurement error, which may have a negative influence on the validity results of the relationship between measures (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). When studies use the self-report questions as the single measurement method, there may occur problems from human subjects in the data gathering process (Kock, 2015). In addition, social desirability can be a source of common method bias. Individuals are likely to give socially desirable answers instead of showing their true feelings about a topic (Grimm, 2010). As a result, the bias may hide the true relationship between variables (Ganster, Hennessey, & Luthans, 1983). One way to control the common method bias is to collect the data of predictor and criterion variables from different sources (Podsakoff et al., 2003). To alleviate concerns about single-source bias, using two sources data collecting method could avoid social desirability when respondents answer self-rating questions. Given that leadership effectiveness and supportive behavior of the Chinese expatriates, as well as employee commitment to the Chinese expatriates, are assessed by Thai

employees who work with Chinese expatriates, this method might avoid the tendency of Chinese expatriates to overstate their effectiveness in the workplace.

The process that the research will use to collect data will be performed as follows: First, the researcher will ask permission from Chinese firms to collect data. After getting the permission to collect data at the companies, the questionnaire for Chinese expatriates will be distributed to Chinese expatriates in person. Then, the researcher will identify the Thai employees who work for the Chinese expatriates and contact them to complete the questionnaire that evaluates their Chinese expatriates. Both of them are informed of the study objectives as well as the guarantee of confidentiality and anonymity. The questionnaires will be collected back by the researcher.

### **3.4 Measurement**

The questionnaire of this study adopts the scale questions that were developed by prior researchers, since the reliability and validity of the existing scales have been tested (Hyman, Lamb, & Bulmer, 2006). The measurements of each main variable will be presented as follows.

#### **3.4.1 CQ**

CQ will be measured by a self-report scale developed by Ang et al. (2007). Previous research has used this scale and it has been tested for good validity and reliability (Imai & Gelfand, 2010; Koh, Ang, & Linn, 2015; Young, Haffejee, & Corsun, 2017). It consists of twenty items with four subscales: Cognitive CQ with six items, Metacognitive CQ with four items, Motivational CQ with five items and Behavioral CQ with five items. All items are measured by using a five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5). Table 3.1 displays the items.

Table 3.1 Cultural Intelligence (CQ)

**Cognitive CQ**

1. I know the legal and economic systems of other cultures.
2. I know the cultural values and religious beliefs of other cultures.
3. I know the marriage systems of other cultures.
4. I know the arts and crafts of other cultures.
5. I know the rules (e.g., grammar) of other languages.
6. I know the rules for expressing non-verbal behaviors in other culture.

**Meta-cognitive CQ**

7. I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.
8. I am conscious of the cultural knowledge I apply to cross-cultural interaction.
9. I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.
10. I check the accuracy of my cultural knowledge as I interact with people from different cultures.

**Motivational CQ**

11. I enjoy interacting with people from different cultures.
12. I enjoy living in cultures that are unfamiliar to me.
13. I am confident that I can socialize with locals in a culture that is unfamiliar to me.
14. I am confident that I can get accustomed to the shopping conditions in a different culture.
15. I am sure I can deal with the stress of adjusting to culture that is new to me.

**Behavioral CQ**

16. I change my verbal behavior (e.g., accent, tone) when a cross-interaction requires it.
17. I change my non-verbal behavior when a cross-cultural situation requires it.

---

**18. I use pause and silence differently to suit different cross-cultural situations.**

**19. I vary the rate of my speaking when a cross-cultural situation requires it.**

**20. I alter my facial expressions when a cross-cultural interaction requires it.**

---

Source: Ang et al. (2007)

### **3.4.2 Cross-cultural Adjustment**

Cross-cultural adjustment will be measured by the scale developed by Black and Stephens (1989). The scale has been tested for good reliability and validity in prior research (Robie & Ryan, 1996; Shaffer & Harrison, 1998; Wu & Ang, 2011). There are fourteen items with three dimensions that are general adjustment (7 items), work adjustment (3 items) and interaction adjustment (4 items) to measure. Respondents will be asked to what degree they agree with the following adjustment. All items are rated on a five-point Likert scale ranging from completely unadjusted (1) to well adjusted (5). The following table 3.2 shows the items of this variable.

Table 3.2 Cross-cultural Adjustment

---

#### **General Adjustment**

- 1. Living conditions in general**
  - 2. Housing conditions**
  - 3. Food**
  - 4. Shopping**
  - 5. Cost of living**
  - 6. Entertainment/recreation facilities and opportunities**
  - 7. Health care facilities**
- 

#### **Work Adjustment**

- 8. Specific job responsibilities**
- 9. Performance standards and expectations**
- 10. Supervisory responsibilities**

#### **Interaction Adjustment**

---



---

**11. Socializing with host nationals**

**12. Interacting with host nationals on a day-to-day basis**

**13. Interacting with host national outside of work**

**14. Speaking with host nationals**

---

Source: Black and Stephens (1989)

### **3.4.3 Cross-cultural Leadership Effectiveness**

Leadership effectiveness will be measured by four items developed by Cicero, Pierro, and Van Knippenberg (2010). The scale has been tested for good reliability and validity in the research conducted by Solomon and Steyn (2017). All items are measured by using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Table 3.3 shows the items to be measured of this variable.

Table 3.3 Leadership Effectiveness

---

- 1. My Chinese supervisor is very effective as a leader.**
  - 2. My Chinese supervisor is a good leader.**
  - 3. My Chinese supervisor influences my level of commitment effectively.**
  - 4. Overall, I feel a good level of agreement with my Chinese supervisor.**
- 

Source: Cicero et al. (2010)

### **3.4.4 Perceived Supervisor Support**

Perceived supervisor support will be measured by a scale developed by Cheng, Jiang, Cheng, Riley, and Jen (2015). The scale has been tested for good reliability and validity in the research conducted by Cheng et al. (2015). Prior research There are three items that are measured by using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Table 3.4 displays the items to be measured.

Table 3.4 Perceived Supervisor Support

---

- 1. My Chinese supervisor shows concern for my comfort.**
  - 2. My Chinese supervisor expresses an interest in my personal well-being.**
  - 3. My Chinese supervisor helps employees to develop their strengths.**
- 

Source: Cheng et al. (2015)

### 3.4.5 Commitment to Supervisor

Commitment to supervisor will be measured by the scale developed by Cheng et al. (2015). The scale has been tested for good reliability and validity in the research of Cheng et al. (2015). There are six items to measure this variable, and each item is measured by using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). Table 3.5 shows the items of this variable.

Table 3.5 Commitment to Supervisor

- 
1. **Since starting this job, my personal values and those of my Chinese supervisor have become more similar.**
  2. **I find that my values and those of my Chinese supervisor are very similar.**
  3. **I identify with my Chinese supervisor's work philosophy.**
  4. **When someone criticizes my Chinese supervisor, I feel it is a personal insult.**
  5. **I promote my Chinese supervisor to my friends as a great person for whom to work.**
  6. **I admire how my Chinese supervisor conducts himself/herself at work.**
- 

Source: Cheng et al. (2015)

## 3.5 Control Variables

The following set of control variables which could be associated with the level of the leadership effectiveness, perceived supervisor support and commitment to supervisor that Thai employees evaluate the Chinese expatriate, are incorporated in the data analysis. The control variables include the age of Chinese expatriates, genders of Chinese expatriates, Chinese expatriate job tenure in current position, local language proficiency of Chinese expatriates, length of relationship that Thai employees have worked with Chinese expatriates as well as the job function that Chinese expatriates have. The explanation for why these variables might affect the main dependent variables are presented below.

### **3.5.1 Age**

The age of Chinese expatriates might relate to their leadership effectiveness. Research indicated that leader's age has impacts on leadership effectiveness (Taylor & Hood, 2011). Doherty (1997) found that younger leaders were perceived as more effective than those who are older. Beside this, Barbuto, Fritz, Matkin, and Marx (2007) reported that older and younger leaders are perceived as more effective than leaders in the middle age. In addition, the age of Chinese expatriates might associate with the perception of Thai employee regarding the supportive behavior of the Chinese expatriate. For example, research showed that subordinates may perceive that older and experienced supervisors may have the ability to provide more support to subordinates than younger supervisors (Tsui, Egan, & Xin, 1995). Additionally, the age of Chinese expatriate might also be associated with the level of commitment that Thai employees have toward the Chinese expatriate. Research showed that when supervisors are older, subordinates tend to show a higher level of commitment; conversely, subordinates tend to show a lower level of commitment when supervisors are younger (Tsui et al., 1995). This variable will be measured by the actual age of expatriates.

### **3.5.2 Gender**

The gender of Chinese expatriates might associate with their leadership effectiveness. Zacher, Rosing, Henning, and Frese (2011) demonstrated that leaders' genders affect leadership effectiveness. Women are characterized by considerate and relationship behavior whereas men score high in task-oriented behavior and directive controlling (Druskat, 1994; Eagly & Johnson, 1990; Helgesen, 1995). Rosen and Jerdee (1973) reported that subordinates were satisfied with a considerate leadership style from the opposite gender supervisors. In addition, genders of Chinese expatriate might associate with the perception of Thai employees regarding the supportive behavior of Chinese expatriate. Research showed that men deemphasize the feeling expression and pay attention to autonomy as well as independence while women focus on warmth and care (Olson & Shultz, 1994). Thus, there may be gender differences on the side of Chinese expatriate support toward Thai employees. Moreover, Chinese expatriate genders might be related to the level of commitment that Thai employees have toward the Chinese expatriate. The result of the study conducted by Nadler,

Nadler, and Todd-Mancillas (1987) showed that subordinates will show a higher level of commitment to women supervisors who possess communicative competence when they work longer with women supervisors. Gender of Chinese will be measured by using a dummy variable; male will be code as 1 and female will be code as 0.

### **3.5.3 Job Tenure in current position**

Job tenure of Chinese expatriates might be related to their leadership effectiveness. Research showed that the short tenure of supervisors limited their effective management (Hanbury, 2001). In addition, Chinese expatriate job tenure might be related to the perception of Thai employees regarding the supportive behavior of the Chinese expatriate. Research has documented that supervisors with high tenure could gain more details of the skills, habits and mental models of their subordinates (Hutzschenreuter & Horstkotte, 2013). Related to this point, the high tenure of Chinese expatriates could contribute to the effective communication between Chinese expatriates and Thai employees, thereby facilitating Chinese expatriates to accurately provide various support based on the needs of Thai employee. In addition, job tenure of Chinese expatriate might associate with the level of commitment that Thai employees have toward the Chinese expatriate. For example, prior research found that supervisors' job tenure was significantly related with subordinate commitment (Witt, Kacmar, & Andrews, 2001). Job tenure of Chinese expatriates will be measured by using the actual number of years that Chinese expatriate has worked in their current position in Thailand.

### **3.5.4 Local Language Proficiency**

Local language proficiency of Chinese expatriate might be related to their leadership effectiveness. Generally, efficient communication relies on a common language (Peltokorpi, 2008; Ravasi, Salamin, & Davoine, 2015). Regarding this point, the Chinese expatriate's fluency in Thai might facilitate their communication effectiveness with Thai employees so that the Chinese expatriate can have a better understanding of local culture and work values (Caligiuri & Lazarova, 2002; Froese, Peltokorpi, & Ko, 2012). Accordingly, the ability to communicate in Thai also facilitates the Chinese expatriates to know the leadership style that Thai subordinates

expect, and to guide Chinese expatriates to behave properly in showing their support of Thai subordinates. In addition, high levels of local language may help expatriates receive trust and close relations from local employees (Lauring & Selmer, 2012). In this regard, Thai subordinates may develop commitment to Chinese expatriates with a high-level Thai language proficiency. Thai language proficiency of Chinese expatriates will be measured by five items developed by Takeuchi, Yun, and Tesluk (2002). The good validity of these items has been supported by the research conducted by Presbitero (2017a). The five items include “I feel confident in (a) using Thai language in general, (b) writing in Thai language, (c) speaking Thai language, (d) reading and understanding Thai language, and (e) listening to Thai language.”

### **3.5.5 Length of relationship**

Based on the prior research on expatriates, length of relationship has been used as a control variable to test expatriate effectiveness (Ewen et al., 2013; Fan, Cregan, Harzing, & Köhler, 2018). To be consistent with prior studies, this study also uses length of relationship that Thai subordinates have worked with Chinese expatriate as the control variable for leadership effectiveness, supportive behavior of Chinese expatriate, and commitment of Thai employees toward the Chinese expatriates. This variable will be measured by using actual number of years that Thai subordinates have worked with the Chinese expatriate.

### **3.5.6 Job Function**

This study also controls for the job function that Chinese expatriates are in. Job function is represented by the department that the Chinese expatriates work for. There are five departments including production department, marketing/sales department, finance/accounting department, human resource department and IT department. Job functions are coded as dummy variables. For example, if a Chinese expatriate works in the production department, the dummy variable that represents production department is coded as 1; and the dummy variables that represent other departments are coded as 0.



### 3.6 Estimation Method

This study will use Partial Least Squares (PLS) as a statistical technique for data analysis. PLS combines principal component analysis, a series of regression analysis and path analysis. According to Hair, Ringle, and Sarstedt (2011), the operation of PLS structural equation modeling seems like a multiple regression analysis. It allows one to test multiple hypotheses simultaneously. It can be particularly useful when researchers need to predict a set of dependent variables from a set of independent variables (Abdi, 2007). It aims to maximize the explained variance in the dependent constructs and evaluate the data quality based on the characteristics of measurement model (Hair et al., 2011). PLS can be used with smaller samples than other structural equation modeling techniques (Richter, Cepeda, Roldán, & Ringle, 2016). In this research, given the limited population size of Chinese expatriates who take supervisory roles in Thailand, PLS is appropriate for sample size that the study obtains. PLS is recommended for complex theoretical models with a high number of indicators and constructs (Hair Jr, Matthews, Matthews, & Sarstedt, 2017). Because the theoretical model of this research involves a large number of indicators and constructs, particularly the measure of CQ that has 20 items, PLS seems to be suitable for this research. Additionally, PLS does not require normally distributed data. PLS has been applied in many fields such as marketing (Fornell & Bookstein, 1982; Hair, Sarstedt, Pieper, & Ringle, 2012; Hair, Sarstedt, Ringle, & Mena, 2012; Henseler, Ringle, & Sinkovics, 2009), international business (Ketkar, Kock, Parente, & Verville, 2012; Lee, Yang, & Graham, 2006; Sarstedt, Ringle, Smith, Reams, & Hair Jr, 2014; Tanchaitranon & Charoensukmongkol, 2016), accounting (Lee, Petter, Fayard, & Robinson, 2011; Van Rinsum & Verbeeten, 2012), human resource management (Aryanto, Fontana, & Afiff, 2015; Charoensukmongkol, 2016c, 2017; Koirala & Charoensukmongkol, 2018; Ling Suan & Mohd Nasurdin, 2014), strategic management (Hair et al., 2012; Robins, Tallman, & Fladmoe-Lindquist, 2002; Sasatanun & Charoensukmongkol, 2016), operations management (Peng & Lai, 2012), management information systems (Charoensukmongkol, 2016a; Liu, Guo, & Lee, 2011; Ringle, Sarstedt, & Straub, 2012) and leadership and expatriate management (Linder, 2015;

Vlajčić, Caputo, Marzi, & Dabić, 2019). WarpPLS will be used to perform PLS estimation in this research.



## **CHAPTER 4**

### **DATA ANALYSIS AND RESULTS**

#### **4.1 Data**

The data of this study was collected in Bangkok and Rayong in Thailand. The data was collected from two sources that are Chinese expatriates who take supervisory roles and Thai subordinates who work for these Chinese expatriates. The questionnaires distributed in this study included (1) a copy of cover letter that introduced the researcher as well as the study information, and (2) the questions for Chinese supervisors and Thai subordinates. At the beginning of the collection process, the researcher asked permission from the persons in charge of the Chinese companies. The researcher contacted 48 Chinese companies to participate in the investigation. After receiving the approval for data collection, the questionnaires were distributed to Chinese supervisors and their Thai subordinates by the researcher. Because the dyad data between a Chinese expatriate and a Thai subordinate were collected, it was important to match the questionnaire from the expatriate with the questionnaire from the Thai subordinate. Therefore, the questionnaires that were collected from the Chinese expatriate and the Thai subordinate who worked with each other were coded by using the same running number for the matching purpose. The respondents were informed that the questionnaires were anonymous. The researcher distributed 210 pairs of questionnaires and collected 169 pairs back at the end of the data collection period. The response rate of this study was 80.5%. The researcher started the data collection from the mid-January 2019 and finished it in late March 2019. Although some questions were left blank in questionnaires, the uncompleted questions are less than 10% of any variable. Little and Rubin (2019) suggested that the missing data can be replaced by the column mean in case of the missing data accounting less than 10% of question items. Hence, the researcher used the column mean to fill the missing data. The basic information of respondents is reported in table 8 to 14.

## 4.2 Demographic Characteristics

The data of gender was collected from Chinese supervisors and Thai subordinates. The majority of all respondents are male. There are 186 male respondents (55.0%) and 147 female respondents (43.5%). For Chinese supervisors, there are 128 male respondents accounting for 75.7% of Chinese supervisors, and 41 female respondents accounting for 24.3%. Among 169 Thai subordinates, there are 58 male respondents (34.3%), 106 female respondents (62.7%) and 5 respondents (3%) did not report their gender. The details of respondent's gender are shown in table 4.1.

Table 4.1 Respondents' Gender of Chinese Supervisors and Thai Subordinates

Variable	Categories	Chinese		Thai		Total	
		Supervisor		Subordinate			
		Frequency	%	Frequency	%	Frequency	%
Gender	Male	128	75.7	58	34.3	186	55.0
	Female	41	24.3	106	62.7	147	43.5
	Not - specified		0	5	3.0	5	1.5
	Total	169	100	169	100	338	100

The respondents of Chinese supervisors are in the 20 to 60 age range. There are 3 respondents who did not report their age. The mean value of supervisor's age is 35.04 and standard deviation is equal to 7.595. Age of the Thai subordinate ranges from 17 to 58. Six respondents did not fill in their age. The mean value of subordinate' age is 31.53 and standard deviation is 7.369. Respondents' age is displayed in the following table 4.2.

Table 4.2 Respondents' Age of Chinese Supervisors and Thai Subordinates

Variable	Categories	Min	Max	Mean	Standard Deviation
Age	Supervisor	20	60	35.04	7.595
	Subordinate	17	58	31.53	7.369

Among 169 Chinese supervisors, 21 respondents (12.4%) have worked less than 1 year in the current position. 40 respondents (23.7%) have worked for 1 to 2 years in the current position. 38 respondents (22.5%) have worked for 3 to 4 years in the current position. 24 respondents (14.2%) have worked for 5 to 6 years in the current position. 14 respondents (8.3%) have worked for 7 to 8 years in the current position. 10 respondents (5.9 %) have worked for 9 to 10 years in the current position. 20 respondents (11.8%) have worked more than 10 years in the current position and 2 respondents (1.2%) did not report their job tenure in the current position. For the Thai subordinates, 51 respondents (30.1%) have worked less than 1 year in the company. 54 respondents (32.0%) have worked for 1 to 2 years in the company. 34 respondents (20.1%) have worked for 3 to 4 years in the company. 17 respondents (10.1%) have worked for 5 to 6 years in the company. 7 respondents (4.1%) have worked for 7 to 8 years in the company. 2 respondents (1.2%) have worked for 9 to 10 years. 4 respondents (2.4%) have worked more than 10 ten years in the company. The details of respondents' job tenure are shown in the following table 4.30.

Table 4.3 Job Tenure of Chinese Supervisor and Thai subordinate in the Company

Variable	Categories	Chinese Supervisor		Thai Subordinate	
		Frequency	%	Frequency	%
<b>Job Tenure</b>	Less than 1 year	21	12.4	51	30.1
	1-2 years	40	23.7	54	32.0
	3-4 years	38	22.5	34	20.1
	5-6 years	24	14.2	17	10.1
	7-8 years	14	8.3	7	4.1
	9-10 years	10	5.9	2	1.2
	More than 10 years	20	11.8	4	2.4
	Not - specified	2	1.2		
	Total	169	100	169	100

The job department that Chinese supervisors work in is reported in table 4.4 below. For the Chinese supervisors, there are 55 respondents (32.5%) working in the department of production. 43 respondents (25.4%) are working in the department of marketing/sales. 17 respondents (10.1%) are working in the department of finance/accounting. 10 respondents (6.0%) are working in the department of human



resource. 9 respondents (5.3%) are working in the department of IT. 35 respondents (20.7%) report that they work in other departments.

Table 4.4 The Department that Chinese Supervisors Work in

Variable	Categories	Chinese Supervisor	
		Frequency	%
<b>Job Department</b>	Production	55	32.5
	Marketing/sales	43	25.4
	Finance/accounting	17	10.1
	Human Resource	10	6.0
	IT	9	5.3
	Others	35	20.7
	Not - specified		0
	Total	169	100

The industry that Chinese supervisors work in is reported in table 4.5 below. There are 114 respondents (67.4%) working in manufacturing industry. 2 respondents (1.2%) work in food industry. 30 respondents (17.8%) work in service industry. 4 respondents (2.4%) who are working in airline industry. In addition, there are 19 respondents (11.2%) who work in other industries such as construction, household appliance, IT and others.

Table 4.5 The Industry that Chinese Supervisors Work in

Variable	Categories	Frequency	%
<b>Industry</b>	Manufacturing	114	67.4
	Food	2	1.2
	Service	30	17.8
	Airline	4	2.4
	Others	19	11.2
	Total	169	100

Local language proficiency of Chinese supervisors is displayed in the table 4.6 below. For Chinese supervisors, the mean value of using Thai language in general is 2.65 and standard deviation is 1.08. The mean values of their writing, speaking, reading and listening proficiency are 1.95, 2.57, 2.09 and 2.62 respectively. The values of standard deviation of their writing, speaking, reading and listening proficiency are 1.07, 1.16, 1.16 and 1.07 respectively.

Table 4.6 Thai Proficiency of Chinese Supervisors

Categories	Variable	Mean	Standard Deviation
<b>Chinese supervisor</b>	General	2.65	1.08
	Writing	1.95	1.07
	Speaking	2.57	1.16
	Reading	2.09	1.16
	Listening	2.62	1.17

The table 4.7 below shows the length of relationship that Thai subordinates have worked with Chinese expatriates. The data show that 65 of respondents who are Thai subordinates (38.5%) have worked with their Chinese supervisors less than 1 year. 70 of respondents who are Thai subordinates (41.4%) have worked with their Chinese supervisors for 1 to 2 years. 21 of respondents who are Thai subordinates (12.4%) have worked with their Chinese supervisors for 3 to 4 years. 9 of respondents who are Thai subordinates (5.3%) have worked with their Chinese supervisors for 5 to 6 years. 2 of respondents who are Thai subordinates (1.2%) have worked with their Chinese supervisors for 7 to 8 years. 1 of respondent who is Thai subordinate (0.6%) has worked with Chinese supervisor for 9 to 10 years. Besides, there is 1 of the respondents who is Thai subordinate (0.6%) who did not report the length of relationship with Chinese supervisor.

Table 4.7 The Length of Relationship that Thai Subordinates Work with Chinese Supervisors

Variable	Categories	Frequency	%
<b>Length of Relationship</b>	Less than 1 year	65	38.5
	1-2 years	70	41.4
	3-4 years	21	12.4
	5-6 years	9	5.3
	7-8 years	2	1.2
	9-10 years	1	0.6
	Not - specified	1	0.6
	Total	169	100

### 4.3 Measurement Model Assessment

It is essential to conduct a set of tests to ensure the variables that are measured as the reflective latent variables have a sufficient level of validity and reliability before

analyzing the model. According to Kock and Mayfield (2015), the reflective latent variable is one in which all indicators are expected to be highly correlated with one another as well as with the latent variable itself. In addition, it is vital to confirm the data is not suffering from serious multi collinearity issue before examining the model (Hair et al., 2012; Hair, Hult, Ringle, & Sarstedt, 2016). Convergent validity and discriminant validity tests were used to analyze the validity of this study. In addition, Cronbach's Alpha coefficient and composite reliability were used to evaluate the reliability of this study. Furthermore, this study performed a full Variance Inflation Factor (VIF) test to evaluate whether the model has serious multicollinearity issues.

#### 4.3.1 Validity Test

According to Hair et al. (2016), testing validity is to assess how well the constructs are measured. The validity tests are conducted to confirm that the constructs used measure what they are supposed to measure accurately (Bolarinwa, 2015). The Researcher performs validity tests to check the questions used in this study. Convergent validity and discriminant validity are employed in this study to test validity (Ali, Rasoolimanesh, Sarstedt, Ringle, & Ryu, 2018; Hair et al., 2017).

##### 4.3.1.1 Convergent Validity Test

Convergent validity is to assess how well indicators measure their constructs (Hair et al., 2011). Factor loading values are used to assess the quality of the convergent validity. The ideal value of each item should be above 0.7 (Chin, 1998). However, it is considered acceptable that the minimum value of factor loading is above 0.5 (Hair, Black, Babin, & Anderson, 2009).

This study conducted the factor loadings and cross loadings of all reflective latent variables which are CQ, cross-cultural adjustment, cross-cultural leadership effectiveness, perceived supervisor support, commitment and local language proficiency. The results of factor loadings and cross loadings of the main variables are shown in table 4.8.

Table 4.8 The Factor Loadings and Cross Loadings

Indicators	CQ	CCA	LEDE	PST	COM	LAN
CCQ1	<b>0.607</b>	0.082	-0.249	-0.006	0.155	0.431
CCQ2	<b>0.470</b>	0.060	-0.183	-0.127	0.276	0.444
CCQ3	<b>0.655</b>	0.120	-0.150	-0.074	0.276	0.258

Indicators	CQ	CCA	LEDE	PST	COM	LAN
CCQ4	<b>0.594</b>	0.055	-0.335	-0.011	0.242	0.283
CCQ5	<b>0.677</b>	0.136	-0.253	-0.034	0.249	0.305
CCQ6	<b>0.530</b>	0.115	-0.204	-0.002	0.192	0.377
MCCQ1	<b>0.709</b>	-0.037	-0.085	-0.040	0.113	-0.016
MCCQ2	<b>0.747</b>	-0.019	-0.125	-0.054	0.219	-0.151
MCCQ3	<b>0.750</b>	-0.070	0.193	-0.067	0.015	-0.054
MCCQ4	<b>0.768</b>	-0.094	0.059	0.086	-0.067	-0.146
MCQ1	<b>0.726</b>	0.162	0.223	0.041	-0.236	-0.050
MCQ2	<b>0.781</b>	0.035	0.064	-0.042	-0.060	0.020
MCQ3	<b>0.791</b>	-0.011	0.203	-0.052	-0.162	-0.003
MCQ4	<b>0.761</b>	0.063	0.163	0.022	-0.208	0.036
MCQ5	<b>0.747</b>	0.031	0.077	0.043	-0.107	-0.142
BCQ1	<b>0.871</b>	-0.153	0.263	-0.059	-0.297	-0.249
BCQ2	<b>0.878</b>	-0.119	0.038	0.053	-0.195	-0.195
BCQ3	<b>0.815</b>	-0.021	0.086	0.061	-0.116	-0.269
BCQ4	<b>0.822</b>	-0.110	0.036	0.109	-0.062	-0.339
BCQ5	<b>0.819</b>	-0.124	0.065	0.149	-0.124	-0.191
GA1	0.326	<b>0.704</b>	0.277	0.013	-0.159	0.012
GA2	0.097	<b>0.731</b>	0.319	0.107	-0.278	-0.049
GA3	0.072	<b>0.723</b>	0.141	-0.070	-0.058	0.174
GA4	0.298	<b>0.722</b>	0.113	0.097	-0.075	-0.148
GA5	0.080	<b>0.761</b>	0.149	-0.128	0.002	-0.104
GA6	0.063	<b>0.773</b>	0.000	0.147	-0.194	-0.069
GA7	-0.055	<b>0.735</b>	-0.083	0.092	-0.044	0.171
WA1	-0.054	<b>0.795</b>	0.171	-0.042	-0.160	-0.135
WA2	-0.012	<b>0.767</b>	0.036	0.011	0.011	-0.121
WA3	-0.121	<b>0.810</b>	-0.032	0.050	-0.048	-0.213
IA1	-0.123	<b>0.732</b>	-0.279	-0.093	0.251	0.007
IA2	-0.125	<b>0.725</b>	-0.183	-0.082	0.221	0.071
IA3	-0.110	<b>0.723</b>	-0.245	-0.020	0.262	0.050
IA4	-0.201	<b>0.718</b>	-0.194	0.029	0.040	0.266
LEDE1	-0.028	0.032	<b>0.731</b>	0.024	-0.087	-0.006
LEDE2	-0.028	0.023	<b>0.718</b>	0.004	-0.024	-0.021
LEDE3	-0.025	-0.055	<b>0.731</b>	-0.082	0.069	0.073
LEDE4	0.092	-0.002	<b>0.710</b>	0.058	0.052	-0.050
PST1	0.058	-0.057	-0.001	<b>0.720</b>	0.096	0.052
PST2	-0.048	0.033	-0.030	<b>0.747</b>	-0.045	-0.017
PST3	-0.002	0.016	0.032	<b>0.738</b>	-0.039	-0.029
COM1	-0.037	0.163	-0.142	0.031	<b>0.701</b>	0.031
COM2	-0.064	0.185	-0.208	0.006	<b>0.730</b>	-0.042

Indicators	CQ	CCA	LEDE	PST	COM	LAN
COM3	-0.061	-0.109	0.073	0.092	<b>0.672</b>	0.014
COM4	0.082	-0.152	-0.076	-0.168	<b>0.752</b>	0.078
COM5	0.023	-0.005	0.209	0.007	<b>0.684</b>	-0.038
COM6	0.072	-0.158	0.267	0.060	<b>0.660</b>	-0.064
LAN1	-0.001	0.036	0.010	-0.053	-0.005	<b>0.830</b>
LAN2	0.014	-0.049	-0.056	0.064	0.017	<b>0.804</b>
LAN3	0.016	-0.012	0.065	-0.030	-0.052	<b>0.840</b>
LAN4	-0.005	0.022	-0.048	0.068	0.036	<b>0.798</b>
LAN5	-0.024	-0.000	0.023	-0.041	0.008	<b>0.826</b>

Note: CCQ = Cognitive CQ, MCCQ = Metacognitive CQ, MCQ = Motivational CQ, BCQ = Behavioral CQ, CCA = Cross-cultural Adjustment, GA = General Adjustment, WA = Work Adjustment, IA = Interaction Adjustment, LEDE = Cross-cultural Leadership Effectiveness, PST = Perceived Supervisor Support, COM = Commitment to Supervisor, LAN = Local Language Proficiency.

The results indicate that most of items of each variable have a value higher than 0.5 except one item (CCQ2) which has a value below 0.5. Hence, that item was removed from the analysis. The convergent validity analysis was performed again after that item was removed.

The convergent validity of overall model is shown in the following table 4.9. The value of each variable is above 0.5 after removing the item (CCQ2). Therefore, the results indicate that the convergent validity of this research is acceptable.

Table 4.9 The Factor Loadings and Cross Loadings of Variables after the Low Loading Item was Removed

Indicators	CQ	CCA	LEDE	PST	COM	LAN
CCQ1	<b>0.582</b>	0.091	-0.257	0.013	0.143	0.439
CCQ3	<b>0.641</b>	0.131	-0.156	-0.062	0.274	0.265
CCQ4	<b>0.573</b>	0.063	-0.344	-0.003	0.242	0.287
CCQ5	<b>0.651</b>	0.153	-0.266	-0.018	0.248	0.314
CCQ6	<b>0.501</b>	0.130	-0.215	0.018	0.186	0.389
MCCQ1	<b>0.711</b>	-0.037	-0.101	-0.057	0.142	0.011
MCCQ2	<b>0.751</b>	-0.017	-0.146	-0.077	0.261	-0.122
MCCQ3	<b>0.752</b>	-0.068	0.182	-0.086	0.046	-0.018
MCCQ4	<b>0.771</b>	-0.093	0.040	0.065	-0.031	-0.107
MCQ1	<b>0.727</b>	0.165	0.216	0.045	-0.234	-0.029
MCQ2	<b>0.782</b>	0.041	0.051	-0.046	-0.044	0.048
MCQ3	<b>0.792</b>	-0.007	0.191	-0.055	-0.148	0.024
MCQ4	<b>0.762</b>	0.070	0.150	0.015	-0.190	0.066



MCQ5	<b>0.749</b>	0.033	0.063	0.029	-0.081	-0.107
BCQ1	<b>0.874</b>	-0.156	0.259	-0.067	-0.290	-0.229
BCQ2	<b>0.881</b>	-0.122	0.026	0.043	-0.182	-0.175
BCQ3	<b>0.818</b>	-0.021	0.078	0.049	-0.098	-0.253
BCQ4	<b>0.824</b>	-0.110	0.026	0.104	-0.047	-0.320
BCQ5	<b>0.820</b>	-0.123	0.053	0.143	-0.107	-0.169
GA1	0.327	<b>0.705</b>	0.270	0.006	-0.146	0.027
GA2	0.102	<b>0.731</b>	0.323	0.107	-0.281	-0.046
GA3	0.070	<b>0.724</b>	0.140	-0.068	-0.060	0.175
GA4	0.300	<b>0.722</b>	0.116	0.105	-0.086	-0.145
GA5	0.090	<b>0.760</b>	0.150	-0.138	0.010	-0.098
GA6	0.070	<b>0.772</b>	-0.003	0.139	-0.184	-0.062
GA7	-0.053	<b>0.737</b>	-0.083	0.089	-0.041	0.171
WA1	-0.059	<b>0.796</b>	0.175	-0.025	-0.178	-0.146
WA2	-0.018	<b>0.768</b>	0.038	0.020	0.002	-0.127
WA3	-0.126	<b>0.811</b>	-0.024	0.066	-0.069	-0.226
IA1	-0.126	<b>0.733</b>	-0.279	-0.091	0.249	0.002
IA2	-0.125	<b>0.727</b>	-0.184	-0.087	0.227	0.071
IA3	-0.108	<b>0.724</b>	-0.246	-0.027	0.269	0.051
IA4	-0.201	<b>0.720</b>	-0.195	0.022	0.049	0.263
LEDE1	-0.028	0.032	<b>0.731</b>	0.025	-0.088	-0.007
LEDE2	-0.027	0.021	<b>0.718</b>	0.005	-0.026	-0.022
LEDE3	-0.026	-0.055	<b>0.731</b>	-0.080	0.067	0.071
LEDE4	0.091	0.000	<b>0.710</b>	0.055	0.057	-0.046
PST1	0.060	-0.057	-0.003	<b>0.720</b>	0.101	0.057
PST2	-0.049	0.033	-0.028	<b>0.747</b>	-0.050	-0.021
PST3	-0.002	0.016	0.032	<b>0.738</b>	-0.039	-0.029
COM1	-0.034	0.161	-0.142	0.024	<b>0.701</b>	0.034
COM2	-0.056	0.180	-0.207	-0.006	<b>0.730</b>	-0.034
COM3	-0.062	-0.109	0.074	0.092	<b>0.672</b>	0.012
COM4	0.081	-0.152	-0.076	-0.167	<b>0.752</b>	0.080
COM5	0.020	-0.006	0.213	0.016	<b>0.684</b>	-0.044
COM6	0.066	-0.158	0.273	0.073	<b>0.660</b>	-0.071
LAN1	0.000	0.036	0.009	-0.056	-0.001	<b>0.832</b>
LAN2	0.013	-0.048	-0.056	0.066	0.014	<b>0.806</b>
LAN3	0.016	-0.012	0.065	-0.030	-0.053	<b>0.842</b>
LAN4	-0.007	0.022	-0.047	0.073	0.030	<b>0.800</b>
LAN5	-0.022	0.000	0.022	-0.045	0.013	<b>0.827</b>

Note: CCQ = Cognitive CQ, MCCQ = Metacognitive CQ, MCQ = Motivational CQ, BCQ = Behavioral CQ, CCA = Cross-cultural Adjustment, GA = General Adjustment, WA = Work Adjustment, IA =

Interaction Adjustment, LEDE = Cross-cultural Leadership Effectiveness, PST = Perceived Supervisor Support, COM = Commitment to Supervisor, LAN = Local Language Proficiency,

#### 4.3.1.2 Discriminant Validity Test

The discriminant validity is to prove whether a variable discriminates from other variables (Ali et al., 2018; Farrell, 2010). The researcher used the value of Average Variance Extracted (AVE) to test the discriminant validity of all variables. To prove that the level of discriminant validity is adequate, the square root of AVE of each variable is higher than any correlation involving that variable (Fornell & Larcker, 1981). The results of discriminant validity of this study are shown in the following table 4.10. The result is satisfactory since the square root of AVE of each variable is higher than other correlations that involved in the particular variable.

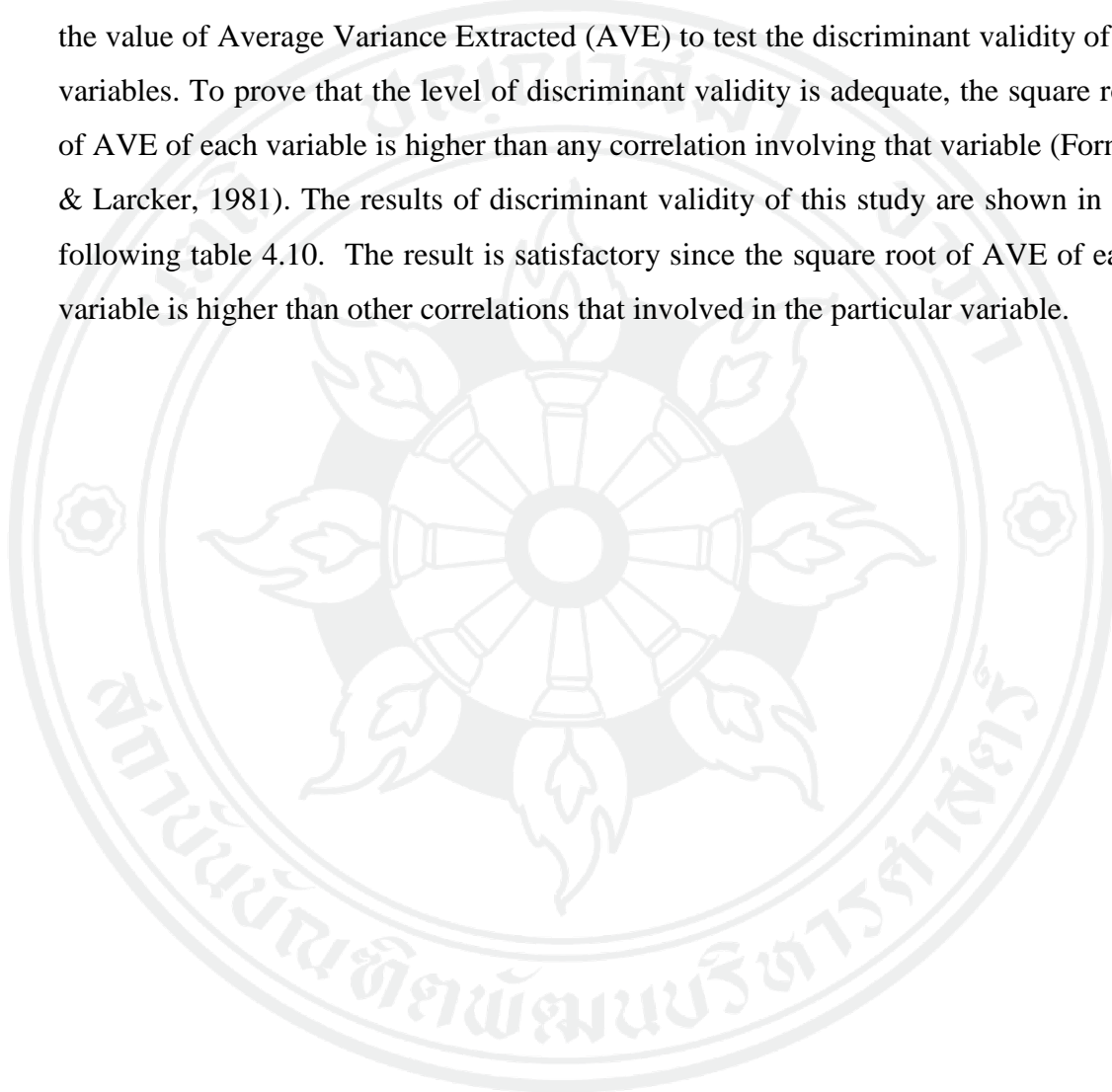


Table 4.10 Correlation among Constructs VS Square root of Average Variance Extracted (AVE)

Variables	CQ	CCA	LEDE	PST	COM	LAN	GEN	AGE	JT	WRT	JFP	JFM	JFA	JFH	JFIT
<b>CQ</b>	<b>(0.648)</b>														
<b>CCA</b>	0.611	<b>(0.718)</b>													
<b>LEDE</b>	0.119	0.145	<b>(0.919)</b>												
<b>PST</b>	0.174*	0.101	0.553	<b>(0.943)</b>											
<b>COM</b>	0.206**	0.110	0.684	0.653	<b>(0.800)</b>										
<b>LAN</b>	0.200**	0.322	0.122	0.104	0.074	<b>(0.934)</b>									
<b>GEN</b>	-0.014	-0.077	0.061	0.040	0.074	-0.322	<b>(1.000)</b>								
<b>AGE</b>	-0.050	-0.075	-0.042	0.031	-0.079	-0.245**	0.286	<b>(1.000)</b>							
<b>JT</b>	-0.097	0.007	-0.020	-0.108	-0.104	0.034	0.139	0.342	<b>(1.000)</b>						
<b>WRT</b>	0.054	0.149	0.051	-0.096	-0.049	0.231*8	0.045	0.107	0.394	<b>(1.000)</b>					
<b>JFP</b>	-0.123	-2.241**	0.041	0.058	-0.002	-0.208**	0.305	0.049	-0.016	-0.142	<b>(1.000)</b>				
<b>JFM</b>	0.168*	0.259	0.147	0.026	0.103	0.125	-0.081	-0.070	-0.016	0.101	-0.406	<b>(1.000)</b>			
<b>JFA</b>	-0.169*	-0.144	-0.201**	-0.159*	-0.150	-0.007	-0.132	0.090	0.105	0.114	-0.232**	-0.195*	<b>(1.000)</b>		
<b>JFH</b>	0.020	0.081	0.009	0.052	-0.010	0.067	-0.209*	-0.085	-0.160(*)	-0.054	-0.174*	-0.147	-0.084	<b>(1.000)</b>	
<b>JFIT</b>	-0.103	-0.089	-0.075	-0.057	-0.021	0.054	-0.112	-0.099	-0.033	0.024	-0.165*	-0.139	-0.079	-0.059	<b>(1.000)</b>

Notes: CCQ = Cognitive CQ, MCCQ = Metacognitive CQ, MCQ = Motivational CQ, BCQ = Behavioral CQ, CCA = Cross-cultural Adjustment, GA = General Adjustment, WA = Work Adjustment, IA = Interaction Adjustment, LEDE = Cross-cultural Leadership Effectiveness, PST = Perceived Supervisor Support, COM = Commitment to Supervisor, LAN = Local Language Proficiency, GEN = Chinese Expatriate Gender, AGE = Chinese Expatriate Age, JT = Chinese Expatriate's Job Tenure, WRT=Length of Work Relationship, JFP = Production Department Dummy Variable, JFMD = Marketing/Sales Department Dummy Variable, JFA = Accounting/Finance Department Dummy Variable, JFHR = Human Resource Department Dummy Variable, JFIT = IT Department Dummy Variable.

Square roots of average variance extracted of latent variables are shown in the parentheses

\*p-value<0.05, \*\* p-value < 0.01

### 4.3.2 Reliability Test

The reliability test ensures the adequate quality of the scales used in studies. The items that measure a reflective latent variable have to be consistent with one another so that respondents can understand the measurement scales in the same way. This study uses Cronbach's Alpha coefficient and composite reliability to measure the reliability of the scales.

#### 4.3.2.1 Cronbach's Alpha Coefficient

Cronbach's Alpha coefficient is the indicator to estimate the internal consistency of the scales (Hair et al., 2012). It evaluates the reliability of the items measuring the same variable. According to Fornell and Larcker (1981), the acceptable value of the reliability is 0.7 or above. The results show that the Cronbach's Alpha coefficient of all reflective latent variables of this study are higher than 0.7.

#### 4.3.2.2 Composite Reliability

According to Fornell and Larcker (1981), because PLS analysis takes factor loadings into consideration, composite reliability is recommended by researchers to measure the internal consistency. The value of composite reliability is acceptable at 0.7 or above (Hair et al., 2012). Additionally, the value of composite reliability should be higher than Cronbach's Alpha coefficient (Kock, 2017). The composite reliability of all reflective latent variables of this study is higher than 0.7. Besides, the values of composite reliability of all reflective latent variables are higher than Cronbach's Alpha coefficient. The results of the reliability of this research is shown in table 4.11.

Table 4.11 Cronbach's Alpha Coefficient and Composite Reliability

Variables	CQ	CCA	LEDE	PST	COM	LAN
<b>Cronbach's Alpha(<math>\alpha</math>)</b>	0.917	0.927	0.939	0.938	0.887	0.963
<b>Composite Reliability</b>	0.928	0.937	0.956	0.960	0.914	0.972

Note: CCA = Cross-cultural Adjustment, LEDE = Cross-cultural Leadership Effectiveness, PST = Perceived Supervisor Support, COM = Commitment to Supervisor, LAN = Local Language Proficiency.

The above results demonstrated that Cronbach's Alpha coefficient and composite reliability of all variables are above 0.7, which means that the scales of all variables are reliable in this research model.

#### 4.4 Multicollinearity

Multicollinearity is a statistical phenomenon that two or more independent variables have high correlations in the model estimation (Farrar & Glauber, 1967; Yoo et al., 2014). Full Variance Inflation Factor (VIF) is used to examine the multicollinearity issues of a research (Kock & Lynn, 2012). Besides, the full VIF is also used to test whether the collinearity of the research model might lead to common method bias in PLS analysis. It is recommended that the value of full VIF should be lower than 3.3, which means that multicollinearity is not a serious issue in the PLS estimation (Kock & Lynn, 2012). The full VIF results of this study are reported in table 4.12. The results of the full VIF value of each variable are below 3.3, which indicates a satisfactory result. Hence, there is no serious multicollinearity in the analysis.

Table 4.12 The Full Collinearity VIF Statistics of all Variables

Variables	CQ	CCA	LEDE	SPT	COM	LAN	GEN	AGE	JT	WRT	JFP	JFM	JFM	JFH	JFIT
Full VIF	1.732	1.858	2.110	1.936	2.519	1.396	1.371	1.327	1.399	1.335	1.892	1.723	1.476	1.299	1.260

Note: CCA = Cross-cultural Adjustment, LEDE = Cross-cultural Leadership Effectiveness, PST = Perceived Supervisor Support, COM = Commitment to Supervisor, LAN = Local Language Proficiency, GEN = Chinese Expatriate Gender, AGE = Chinese Expatriate Age, JT = Chinese Expatriate's Job Tenure, WRT= Length of Work Relationship, JFP = Production Department Dummy Variable, JFM = Marketing/Sales Department Dummy Variable, JFA = Accounting/Finance Department Dummy Variable, JFHR = Human Resource Department Dummy Variable, JFIT = IT Department Dummy Variable.

#### 4.5 Normal Distribution

There are two tests for investigating the normality, which are the Jarque-Bera test (Normal-JB) and the Robust Jarque-Bera test (Normal-RJB). In the results, *Yes* represents the variable that was a normal distribution and *No* represents that the data is not normally distributed. The normality results of this research are shown as following table 4.13. Beside this, other results indicate normality which are skewness, exc.kurtosis as well as histogram which will be shown below. The results show that PLS might be appropriate for this research due to the non-normal distribution data (Hair et al., 2012; Pandey & Charoensukmongkol, 2019; Richter et al., 2016).

Table 4.13 The Normalization of the Variables

Variables	C	CC	LED	SP	CO	LA	GE	AG	J	WR	JF	JF	JF	JF	JFI
	Q	A	E	T	M	N	N	E	T	T	P	M	A	H	T



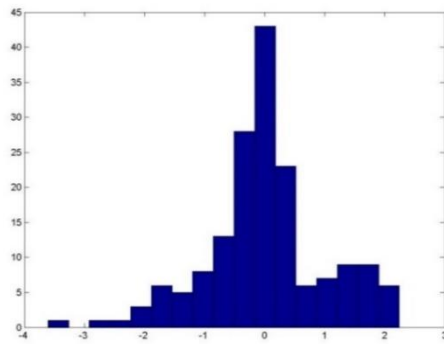
<b>Normal-JB</b>	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No
<b>Normal-RJB</b>	No	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No

Note: CCA = Cross-cultural Adjustment, LEDE = Cross-cultural Leadership Effectiveness, PST = Perceived Supervisor Support, COM = Commitment to Supervisor, LAN = Local Language Proficiency, GEN = Chinese Expatriate Gender, AGE = Chinese Expatriate Age, JT = Chinese Expatriate's Job Tenure, WRT=Length of Work Relationship, JFP = Production Department Dummy Variable, JFM = Marketing/Sales Department Dummy Variable, JFA = Accounting/Finance Department Dummy Variable, JFHR = Human Resource Department Dummy Variable, JFIT = IT Department Dummy Variable.

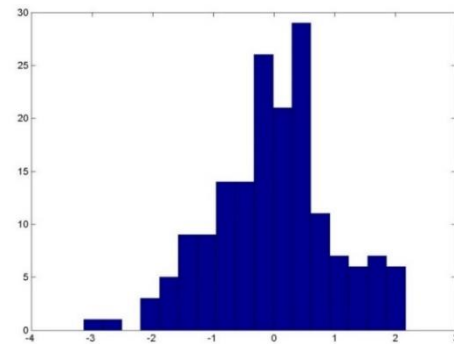
Table 4.14 Skewness and Exc. kurtosis Coefficients

Variables	CQ	CCA	LEDE	SPT	COMMIT	LAN	GEN	AGE	JT	WRT	JFP	JFM	JFA	JFH	JFIT
<b>Skewness</b>	-0.206	-0.1	-0.955	-0.62	-0.428	0.814	-1.201	0.811	0.595	1.288	0.745	1.128	2.656	3.737	3.979
<b>Exc.kurtosis</b>	0.882	0.234	1.268	0.835	1.256	-0.144	-0.558	0.462	-0.684	2.043	-1.445	-0.728	5.053	11.963	13.834

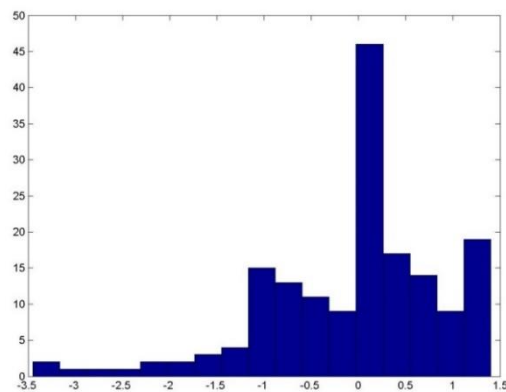
Note: CCA = Cross-cultural Adjustment, LEDE = Cross-cultural Leadership Effectiveness, PST = Perceived Supervisor Support, COM = Commitment to Supervisor, LAN = Local Language Proficiency, GEN = Chinese Expatriate Gender, AGE = Chinese Expatriate Age, JT = Chinese Expatriate's Job Tenure, WRT= Length of Work Relationship, JFP = Production Department Dummy Variable, JFM = Marketing/Sales Department Dummy Variable, JFA = Accounting/Finance Department Dummy Variable, JFHR = Human Resource Department Dummy Variable, JFIT = IT Department Dummy Variable.



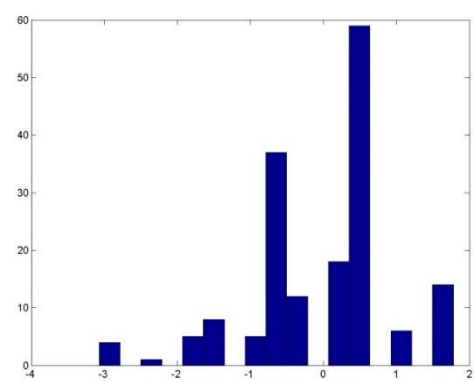
CQ



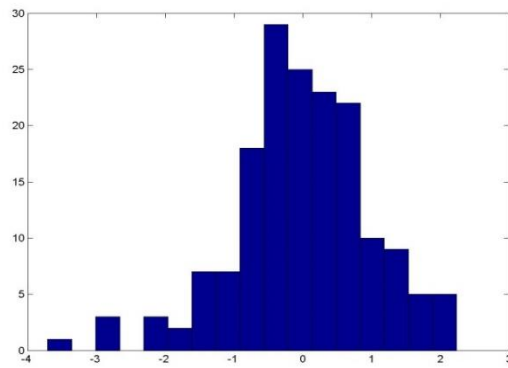
Cross-cultural Adjustment



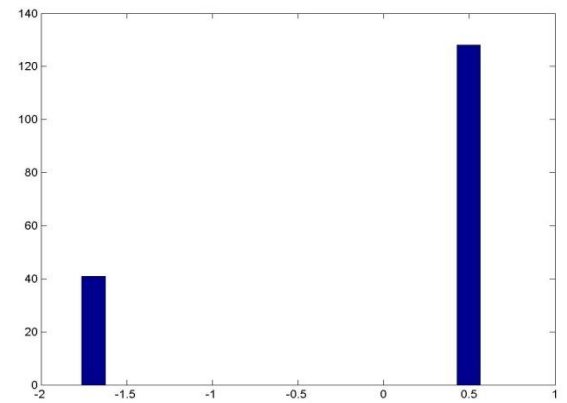
Cross-cultural Leadership Effectiveness



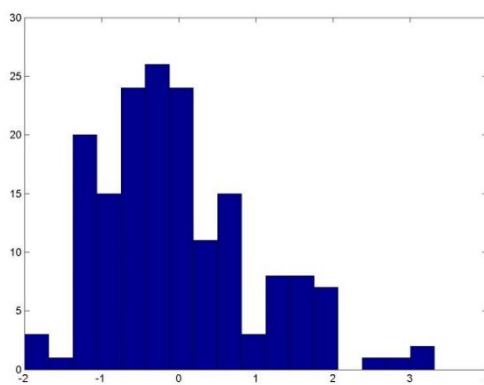
Perceived Supervisor Support



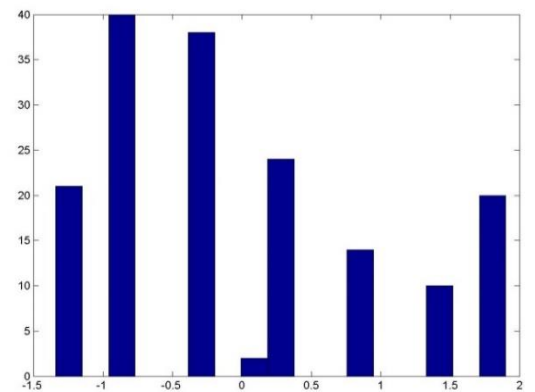
Commitment to Supervisor



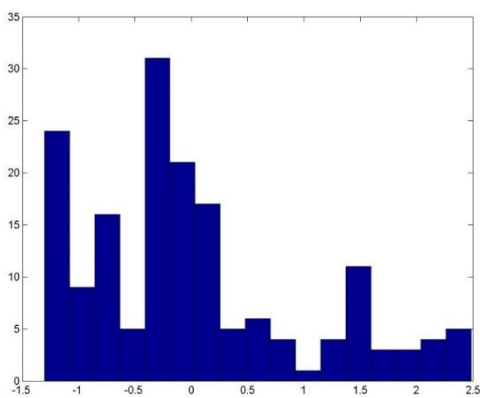
Gender



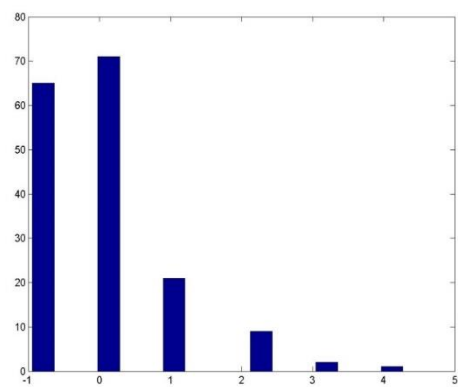
Age



Job Tenure



Local Language Proficiency



Length of Work Relationship

Figure 4.1 Histograms for Data Distribution

#### 4.6 Test of Hypotheses

This study has eight hypotheses that were presented in table 2 before. PLS analysis results of this study will be shown in this part. Beta coefficient, p-value and r-square are used to explain the results. Beta coefficient ( $\beta$ ) is widely used as the term to indicate the path coefficient of analysis. The value of beta coefficient is to show the strength of the effect that an independent variable causes to a dependent variable. Positive beta coefficient illustrates the effect of the independent variable on the dependent variable is in a positive direction. On the contrary, negative beta coefficient shows a negative effect of the independent variable on the dependent variable. P-value obtained from statistical analysis, is widely used as the indicator to accept or reject the null hypothesis. The p-value ranges from 0 to 1. A lower p-value indicates more probability to reject the null hypothesis. In the field of behavioral sciences, if the p-value is lower than 0.05, the null hypothesis can be rejected, and the alternative hypothesis is statistically supported (Kline, 2004). On the other hand, the null hypothesis cannot be rejected when the p-value is higher than 0.05, which implies that the alternative hypothesis is not statistically supported. There are different levels of statistical significance such as at 5 percent level, at 1 percent level and 0.1 percent level. The level of statistical significance at 0.1 percent is the strongest. R-square coefficient indicates the percentage of the dependent variable that can be explained by the independent variables in the research model. R-squared shows how well the dependent variable can be explained by the independent variable (Chatterjee & Hadi, 2015). The value of R-square ranges from 0 to 1. Higher value means that the research model has a better explanatory power. The results from hypotheses testing are reported as follows. H1: CQ of Chinese expatriates is positively related to Thai subordinates' perception of cross-cultural leadership effectiveness.

The result indicates that there is a negative relationship between these two variables, which means that Chinese expatriates who possess a higher level of CQ are likely to exhibit a lower level of cross-cultural leadership effectiveness. The value of the beta coefficient is negative ( $\beta = -0.060$ ,  $p = 0.169$ ), which is contradict with the positive correlation between the two variables ( $r = 0.119$ ,  $p = 0.124$ ) that was shown in table 4.10 above. The wrong sign of the beta

coefficient in the regression result could be explained by the suppression effect in the multiple regression, which could be observed when the correlation between two independent variables is enhanced or diminished when other variables are added to the research (Tu, Gunnell, & Gilthorpe, 2008). The suppression effect may occur when there is a high association among two or more independent variables in research model, and one of them explains the dependent variable better than others (Lancaster, 1999). Nonetheless, considering that the beta coefficient from PLS is not statistically significant, hypothesis 1 is not supported. The results regarding the relationship between CQ of Chinese expatriates and Thai subordinates' perception of cross-cultural leadership effectiveness are reported in table 4.15.

Table 4.15 Effect of Cultural Intelligence, Cross-cultural Adjustment and Perceived Supervisor Support on Cross-cultural Leadership Effectiveness

			Dependent Variable: Cross-cultural Leadership Effectiveness
Variable			Beta Coefficients
Main Independent Variables			
Cultural Intelligence			-0.060
Cross-cultural Adjustment			0.070
Perceived Supervisor Support			0.545***
Control Variables			
Age			-0.071
Gender			0.045
Job Tenure			0.024
Local Language Proficiency			0.026
Length of Work Relationship			0.092
Production Department Dummy Variable			0.047
Marketing/Sales	Department	Dummy	0.110*
Variable			

<b>Accounting/Finance Department Dummy Variable</b>	-0.085
<b>Human Resource Department Dummy Variable</b>	0.002
<b>IT Department Dummy Variable</b>	-0.032
<b>R-squared</b>	0.355

Note: \*\*\* p-value < 0.001, \* p-value < 0.05

H2: CQ of Chinese expatriates is positively related to Thai subordinates' perceived supervisor support.

The result shows that there is a positive association between these two variables. This indicates that Chinese expatriates with higher level of CQ tend to receive better evaluations from Thai subordinates in terms of the leadership's supportive behavior. The result is statistically supported ( $\beta = 0.139$ ,  $p < 0.05$ ), which means that there is a low potential that the positive association may accidentally occur. Therefore, hypothesis 2 is statistically supported. The results regarding the relationship between CQ of Chinese expatriates and Thai subordinates' perceived supervisor support are reported in table 4.16.

Table 4.16 Effect of Cultural Intelligence and Cross-cultural Adjustment on Perceived Supervisor Support

<b>Variable</b>	<b><i>Dependent Variable:</i></b>
	<b>Perceived Supervisor Support</b>
	<b>Beta Coefficients</b>
<b><i>Main Independent Variables</i></b>	
<b>Cultural Intelligence</b>	0.139*
<b>Cross-cultural Adjustment</b>	-0.021
<b><i>Control Variables</i></b>	
<b>Age</b>	0.109*
<b>Gender</b>	0.054
<b>Job Tenure</b>	-0.090
<b>Local Language Proficiency</b>	0.159**



<b>Length of Work Relationship</b>	-0.095
<b>Production Department Dummy Variable</b>	0.044
<b>Marketing/Sales Department Dummy Variable</b>	0.006
<b>Accounting/Finance Department Dummy Variable</b>	-0.108*
<b>Human Resource Department Dummy Variable</b>	0.039
<b>IT Department Dummy Variable</b>	-0.036
<b>R-squared</b>	0.087

Note: \*\* p-value < 0.01, \* p-value < 0.05

H3: CQ of Chinese expatriates is positively related to Thai subordinates' commitment to supervisors.

The result reveals a positive association between these two variables. This indicates that Chinese expatriates possessing a higher level of CQ tend to receive a higher level of commitment from Thai subordinates. However, this positive association is not statistically significant ( $\beta = 0.092$ ,  $p = 0.072$ ). Thus, hypothesis 3 is not statistically support. The results regarding the relationship between CQ of Chinese expatriates and Thai subordinates' commitment to supervisor are reported in table 4.17.

Table 4.17 Effect of Cultural Intelligence, Cross-cultural Leadership Effectiveness and Perceived Supervisor Support on Commitment to Supervisor

<b>Variable</b>	<b><i>Independent Variable:</i></b>
	<b>Commitment to Supervisor</b>
	Beta Coefficients
<b><i>Main Independent Variables</i></b>	
<b>Cultural Intelligence</b>	0.092
<b>Cross-cultural Leadership Effectiveness</b>	0.467***
<b>Perceived Supervisor Support</b>	0.391***
<b><i>Control Variables</i></b>	
<b>Age</b>	-0.086

<b>Gender</b>	0.062
<b>Job Tenure</b>	-0.017
<b>Local Language Proficiency</b>	-0.046
<b>Length of Work Relationship</b>	-0.030
<b>Production Department Dummy Variable</b>	-0.055
<b>Marketing/Sales Department Dummy Variable</b>	-0.000
<b>Accounting/Finance Department Dummy Variable</b>	0.030
<b>Human Resource Department Dummy Variable</b>	-0.037
<b>IT Department Dummy Variable</b>	0.039
<b>R-squared</b>	0.600

Note: \*\*\* p-value < 0.001

H4: Cross-cultural leadership effectiveness of Chinese expatriates is positively associated with Thai subordinates' commitment to their supervisor.

The result shows that there is a positive association between these two variables. This demonstrates that Chinese expatriates who were perceived by Thai subordinates as having a high level of cross-cultural leadership effectiveness tend to receive a higher level of commitment from their Thai subordinates. This result is also statistically significant ( $\beta = 0.467$ ,  $p < 0.001$ ). Thus, hypothesis 4 is statistically supported. The results regarding the relationship between cross-cultural leadership effectiveness of Chinese expatriates and Thai subordinates' commitment to supervisor are also reported in table 4.16.

H5: Thai subordinates' perceived supervisor support is positively related to their commitment to Chinese expatriates.

The result demonstrates a positive relationship between perceived supervisor support of the Chinese expatriate and the commitment from the Thai subordinates. This indicates that Thai subordinates who perceived that the Chinese expatriates demonstrate a higher level of supportive behavior are more likely to develop commitment to their Chinese expatriates. The result is statistically significant ( $\beta = 0.391$ ,  $p < 0.001$ ). Therefore, hypothesis 5 is

statistically supported. The results regarding the relationship between Thai subordinates' perceived supervisor support and their commitment to Chinese expatriates are reported in table 4.16.

H6: CQ of Chinese expatriates is positively related to their cross-cultural adjustment in Thailand.

The result reveals there is a positive association between these two variables. This means that Chinese expatriates who hold a higher level of CQ tend to demonstrate a higher level of cross-cultural adjustment in Thailand. This result is also statistically significant ( $\beta = 0.611$ ,  $p < 0.001$ ). Thus, hypothesis 6 is statistically supported. The results regarding the relationship between CQ of Chinese expatriates and their cross-cultural adjustment in Thailand are reported in table 4.18.

Table 4.18 Effect of Cultural Intelligence on Cross-cultural Adjustment

Variable	<i>Dependent Variable:</i>
	Cross-cultural Adjustment
	Beta Coefficients
<i>Main Independent Variable</i>	
Cultural Intelligence	0.611***
R-squared	0.373

Note: \*\*\* p-value < 0.001

H7: Cross-cultural adjustment of Chinese expatriates is positively related to their cross-cultural leadership effectiveness.

The result shows a positive relationship between cross-cultural adjustment and cross-cultural leadership effectiveness. This means that Chinese expatriates who demonstrated a higher level of cross-cultural adjustment in Thailand tend to be perceived by the Thai subordinates as having a high level of cross-cultural leadership effectiveness. However, the result from PLS analysis is not statistically significant ( $\beta = 0.070$ ,  $p = 0.132$ ). Therefore, hypothesis 7 is not statistically supported. The results regarding the relationship between cross-cultural adjustment of Chinese expatriates and their cross-cultural leadership effectiveness are reported in table 4.15.

H8: Cross-cultural adjustment of Chinese expatriates is positively related to Thai subordinates' perceived supervisor support.

The result reveals that cross-cultural adjustment and perceived supervisor support have a negative association. This indicates that Chinese expatriates who had a better adjustment in Thailand tend to receive less favorable evaluation from Thai subordinates in terms of the leadership's supportive behavior ( $\beta = -0.021$ ,  $p = 0.367$ ). However, the value of the beta coefficient is negative, which is contradict with the correlation between the two variables ( $r = 0.101$ ,  $p = 0.192$ ) that was shown in table 18 above. The contradict result could be explained by the suppression effect in the multiple regression. Nonetheless, considered that the beta coefficient from PLS is not statistically significant, hypothesis 8 is not supported. The results regarding the relationship between cross-cultural adjustment of Chinese expatriates and Thai subordinate perceived supervisor support are reported in table 4.16.

#### 4.6.1 Control Variables

In addition to the results from the main hypotheses, the association that each control variable has with cross-cultural leadership effectiveness, perceived supervisor support and commitment to supervisors are reported as follows. The results show that the age of Chinese expatriate supervisor has a positive association with Thai subordinates' perceived supervisor support ( $\beta = 0.109$ ,  $p < 0.05$ ). It indicates that older Chinese expatriates tend to be perceived by the Thai subordinate as having a higher level of supportive behavior. This result is statistically significant. In addition to this, the results from PLS analysis reveals that the Thai language proficiency of Chinese expatriates is positively related to Thai subordinates' perceived supervisor support ( $\beta = 0.159$ ,  $p < 0.01$ ). This result implies that the Chinese expatriates who possessed a higher level of Thai language proficiency tend to be perceived by the Thai subordinates as having a higher level of supportive behavior. This result is also statistically supported. Regarding the effect of job function on the dependent variables, the results show that the degree to which the Chinese expatriates were evaluated in terms of perceived supervisor support and cross-cultural leadership effectiveness tended to be significantly more or less favorable in some job functions. In particular, the result shows that the dummy variable that represents accounting/finance department has a negative

relationship with Thai subordinates' perceived supervisor support ( $\beta = -0.108$ ,  $p < 0.05$ ). The result implies that Chinese expatriates who worked in the accounting/finance department tended to be perceived by the Thai subordinate as having a low level of supportive behavior. This result is statistically significant. PLS analysis also shows that the dummy variable that represents marketing/sales department has a positive relationship with cross-cultural leadership effectiveness ( $\beta = 0.110$ ,  $p < 0.05$ ). This result implies that Chinese expatriates who worked in marketing/sales department tend to be perceived by the Thai subordinate as having a higher level of cross-cultural leadership effectiveness. This result is statistically supported. The beta coefficient of other control variables is not statistically supported in this research.

#### **4.6.2 Total Effect Analysis**

Total effect analysis could reveal the effects of all latent variables in research model that can be linked through one or more paths with segments (Kock, 2017). It is suggested to use total effect analysis to conduct the analysis for a complex research model which includes many mediating variables and paths. This research also conducts the total effect analysis to investigate the contribution of CQ of Chinese expatriates to Thai employees' commitment through counting all direct as well as indirect paths which link them through cross-cultural adjustment, cross-cultural leadership effectiveness and perceived supervisor support. The total effect analysis used in this study is to evaluate whether these variables could explain why Chinese expatriates possessing a higher level of CQ can receive a higher level of Thai subordinates' commitment. The results from PLS analysis displayed a positive sign of the total effects, and it is statistically significant ( $\beta = 0.165$ ,  $p < 0.01$ ). It indicates that cross-cultural adjustment, cross-cultural leadership effectiveness and perceived supervisor support altogether can explain the linkage between CQ of Chinese expatriates and Thai subordinates' commitment to the Chinese expatriates. However, given that there are some links in figure 3 that are statistically significant, it can be concluded that the total effect that CQ has on commitment to supervisor seems to be explained significantly by perceived supervisor support and cross-cultural leadership effectiveness.



#### 4.6.3 R-squared

The results from PLS analysis shows that R-square of cross-cultural adjustment is 0.373. Given that only CQ was used as the independent variable to explain cross-cultural adjustment, this value of r-square means CQ alone can explain cross-cultural adjustment by 37.3%. The r-square of cross-cultural leadership effectiveness is 0.355, which indicates that its independent variables including CQ, cross-cultural adjustment, perceived supervisor support, age, gender, job tenure, local language proficiency, work relationship time and job function altogether can explain cross-cultural leadership effectiveness by 35.5%. The r-square of perceived supervisor support is 0.087. Given that CQ, cross-cultural adjustment, age, gender, job tenure, local language proficiency, work relationship time as well as job function were used as the independent variables to explain perceived supervisor support, this value of r-square implies that these independent variables can explain perceived supervisor support by 8.7%. The r-square of commitment is 0.600, which means that all predicting variables that are CQ, cross-cultural adjustment, cross-cultural leadership effectiveness, perceived supervisor support, age, gender, job tenure, local language proficiency, work relationship time and job function can explain commitment by 60%.

The results from PLS analysis of this study above are summarized in figure 4.

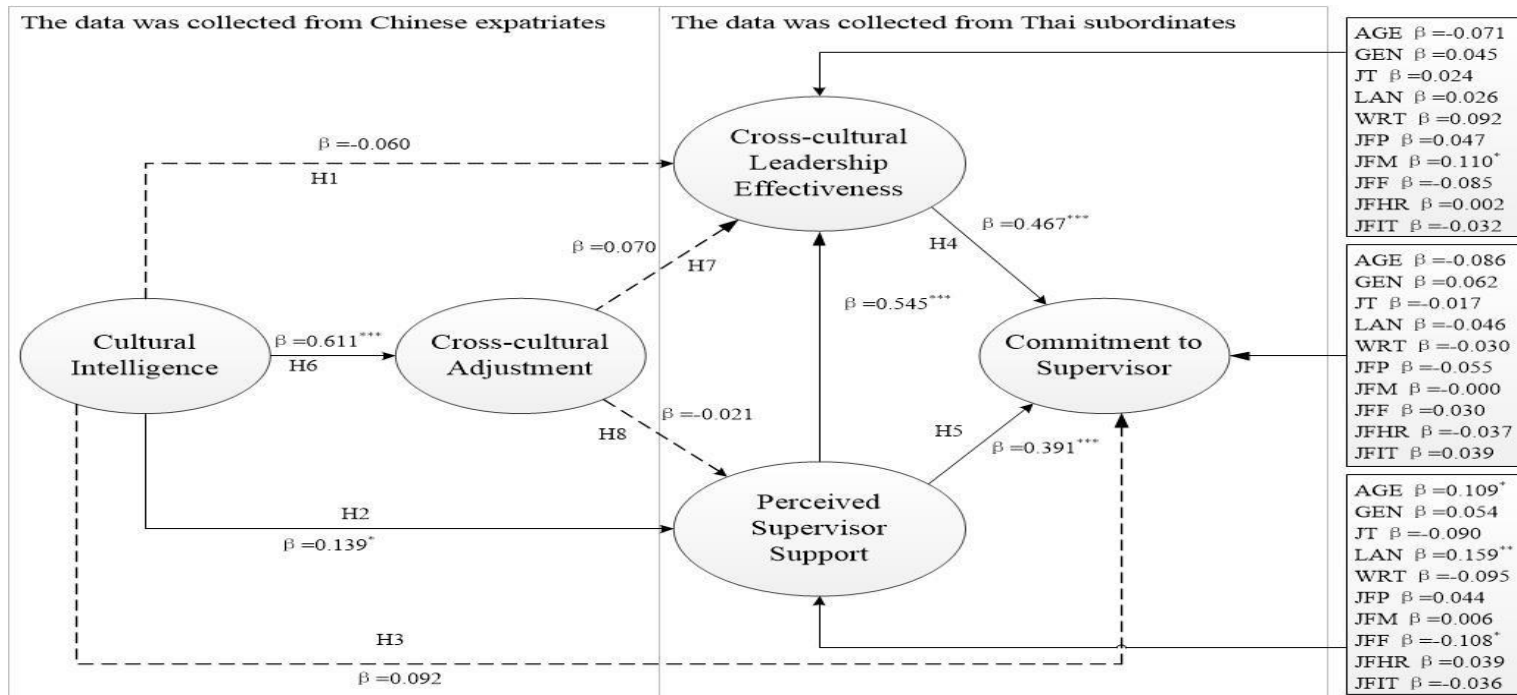


Figure 4.2 Main Model Results

Note: - \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

- Solid lines refers to significant paths and dashed lines refer to non-significant paths

- AGE = Chinese Expatriate Age, GEN = Chinese Expatriate Gender (male is code as 1 and female is code as 0), JT = Chinese Expatriate's Job Tenure, LAN = Local Language Proficiency, WRT= Length of Work Relationship, JFP = Production Department Dummy Variable, JFM = Marketing/Sales Department Dummy Variable, JFA = Accounting/Finance Department Dummy Variable, JFHR = Human Resource Department Dummy Variable, JFIT = IT Department Dummy Variable

## **4.7 Model Fit Indices**

This study used model fit indices to evaluate the quality of the research model. WarpPLS 6.0 provide 10 model fit indices to analyze the PLS results of this study.

### **4.7.1 Average path coefficient (APC)**

The average path coefficient (APC) represents the path strength of the research model. The p-value of APC is suggested to be equal to or below 0.05. This study shows that the p-value of APC is 0.024 which is lower than 0.05. Thus, APC of this research is statistically significant.

### **4.7.2 Average R-squared (ARS)**

Average R-squared (ARS) represents the overall explanatory degree of the research model. It is recommended that the p-value of ARS should be equal to or lower than 0.05. The result shows that ARS value is 0.354 with p-value below 0.001. Hence, ARS of this research is statistically significant.

### **4.7.3 Average adjusted R-squared (AARS)**

Average adjusted R-squared (AARS) is used to correct the spurious increase in research model in case predicting variables added may not improve the overall model (Henseler & Sarstedt, 2013; Kock, 2017). The p-value of AARS is suggested to be equal to or below 0.05. The result reveals that AARS value is 0.314 and p-value is lower than 0.001. Thus, AARS of this research is statistically significant.

### **4.7.4 Average variance inflation factor (AVIF)**

Average variance inflation factor (AVIF) is an indicator used to examine whether the research model has serious collinearity issues. AVIF value is accepted when it is lower than 5 and ideal value is at 3.3 or below. The result shows that the value of AVIF is 1.456 which is lower than 3.3. Therefore, the collinearity in this study is ideally acceptable.

### **4.7.5 Average full variance inflation factor VIF (AFVIF)**

Average full variance inflation factor VIF (AFVIF) investigates the collinearity of the research model. It is suggested that the acceptable AFVIF value equals 5.5 or lower. The result from PLS analysis reveals that the value of AFVIF is

1.642 which is lower than 3.3. Thus, this ideal indicator confirms that multicollinearity is not a serious concern in the model assessment.

#### **4.7.6 Tenenhaus GoF (GoF)**

GoF, grounded on the square root of the average communality index and ARS, is used to assess the explanatory power of the research model (Kock, 2017). If GoF index is equal to or higher than 0.1, explanatory power is small. Medium explanatory is considered when GoF index is equal to or greater than 0.25. Explanatory is considered large if GoF index equals or greater than 0.36. The result shows that the index of GoF is 0.558 which is higher than 0.36. Therefore, this research model has a large explanatory power.

#### **4.7.7 Simpson's paradox ratio (SPR)**

Simpson's paradox ratio (SPR) is used to investigate the possibility of the research model to experience a Simpson's paradox (Kock, 2017). It is acceptable if the value of SPR greater than 0.7. The result shows that SPR value is 0.821 which is higher than 0.7. Thus, the SPR index of this research is acceptable.

#### **4.7.8 R-squared contribution ratio (RSCR)**

R-squared contribution ratio (RSCR) is used to measure whether the model experiences a negative r-squared contribution (Kock, 2017). RSCR value is acceptable at 0.9 or above, which means 90 percent of r-squared of paths have a positive sign. The result reveals that RSCR value of this research equals to 0.987 which indicates that 98.7% of paths have a positive sign in this study. Therefore, the value of RSCR is acceptable in this research.

#### **4.7.9 Statistical suppression ratio (SSR)**

Statistical suppression ratio (SSR) is an indicator to examine the possibility of having a causality problem in research model (Kock, 2017). It is suggested that SSR value demonstrates whether the proposed path in the research is not reasonable or should be reversed. The acceptable SSR value is higher than 0.7. The result reveals that the SSR value is 0.795 which is higher than 0.7. Thus, SSR value is acceptable in this research.

#### **4.7.10 Nonlinear bivariate causality direction ratio (NLBCDR)**

Nonlinear bivariate causality direction ratio (NLBCDR) is to assess the correctness of proposed direction in non-linear relationship of the research model. The

acceptable NLBCDR value is equal to 0.7 or above. The result indicates that NLBCDR index is 0.962, which means that the non-linear of direction of causality of this study is acceptable. Because this study is to focus on linear relationship, NLBCDR should not be taken into consideration. The results of model fit indices are shown in the following table 4.19.

Table 4.19 Model Fit Indices

Model Fit Indices	Coefficient	Result
Average path coefficient (APC)	0.104*	Significantly
Average R-squared (ARS)	0.354***	Significantly
Average adjusted R-squared (AARS)	0.314***	Significantly
Average variance inflation factor (AVIF)	1.456	Ideally
Average full variance inflation factor VIF (AFVIF)	1.642	Ideally
Tenenhaus GoF (GoF)	0.558	Large
Sympson's paradox ratio (SPR)	0.821	Acceptable
R-squared contribution ratio (RSCR)	0.987	Acceptable
Statistical suppression ratio (SSR)	0.795	Acceptable
Nonlinear bivariate causality direction ratio (NLBCDR)	0.962	Acceptable

Note: \* p-value < 0.05, \*\*\* p-value < 0.001



## CHAPTER 5

### DISCUSSION AND CONCLUSION

#### 5.1 Findings

The results of hypotheses from PLS analysis are summarized in the following table 5.1. In addition, this part includes the findings and discussions related to the previous studies.

Table 5.1 Summary of Hypotheses Test Results

Hypotheses	Results
<b>H1: CQ of Chinese expatriates is positively related to Thai subordinates' perception of cross-cultural leadership effectiveness.</b>	Not supported
<b>H2: CQ of Chinese expatriates is positively related to Thai subordinates' perceived supervisor support.</b>	Supported
<b>H3: CQ of Chinese expatriates is positively related to Thai subordinates' commitment to supervisors.</b>	Not supported
<b>H4: Cross-cultural leadership effectiveness of Chinese expatriates is positively associated with Thai subordinates' commitment to their supervisor.</b>	Supported
<b>H5: Thai subordinates' perceived supervisor support is positively related to their commitment to Chinese expatriates.</b>	Supported
<b>H6: CQ of Chinese expatriates is positively related to their cross-cultural adjustment in Thailand.</b>	Supported
<b>H7: Cross-cultural adjustment of Chinese expatriates is positively related to their cross-cultural leadership effectiveness.</b>	Not supported

---

**H8: Cross-cultural adjustment of Chinese expatriates is Not supported positively related to Thai subordinates' perceived supervisor support.**

---

Four out of eight hypotheses were supported. The results show the evidence that CQ is positively related to cross-cultural adjustment and perceived supervisor support. The results also indicate that cross-cultural leadership effectiveness and perceived supervisor support are positively related to commitment. The details of the results will be discussed in the following parts.

The results provide the evidence that there was a positive relationship between CQ and cross-cultural adjustment. The result indicates that Chinese expatriates with a higher level CQ are likely to have the ability to make a better adjustment to the new environment they are involved in in Thailand. This finding related to the positive contribution of CQ to cross-cultural adjustment provides additional support to prior research which suggested that CQ was an important characteristic of expatriates that help them to adjust effectively when working in foreign countries (Barakat et al., 2015; Jyoti & Kour, 2015; Wu & Ang, 2011). In particular, the result is consistent with the study of Nunes et al. (2017) which confirmed that foreign expatriates worked in Brazil tended to have a high level of cross-cultural adjustment when they possessed high level of CQ. Besides this, the result is also in line with the study of Guðmundsdóttir (2015) which demonstrated that Nordic expatriates who possess a high level of CQ are like to have a higher level of ability to adjust themselves when working in the US. In addition, the result is consistent with the study of Marlin and Budhwar (2013) which showed that expatriates with high level of CQ working in multinational companies in Malaysia had a high level of cross-cultural adjustment. Furthermore, the result is also congruous with the study of Konanahalli et al. (2014) which confirmed that British expatriates with high CQ had a better cross-cultural adjustment when they worked in foreign countries.

In addition, this study also supports that CQ of Chinese expatriate was positively related to perceived supervisor support from the evaluation of the subordinate. This is in line with the research of Groves and Feyerherm (2011), which indicated that expatriates with high CQ are sensitive to cultural cues to connect with their subordinates. Besides, the result is consistent with the earlier study of Earley et al.

(2006) which demonstrated that expatriates who possess a high-level of CQ have the ability to display proper behavior to show their care and recognition regarding their subordinates' performance. The results of this study revealed that Chinese expatriates holding a higher level of CQ tend to receive better evaluations from Thai subordinates regarding supportive behavior. Since high level CQ could facilitate Chinese expatriates in understanding Thai cultures as well as to know the expectation and needs of Thai subordinates during the working process, Chinese expatriates possessing high CQ tend to exhibit adaptive behavior to show their support to Thai subordinates. In return, Thai subordinates who worked for the Chinese expatriates with high CQ may notice that the Chinese expatriate was concerned about their wellbeing; thus, they were more likely to recognize the supportive behavior of Chinese expatriates easily.

This study also verifies that cross-cultural leadership effectiveness was positively related to commitment to supervisor. The result indicates that Chinese expatriates who were perceived by Thai subordinates as having a high level of cross-cultural leadership effectiveness tend to receive a higher level of commitment from their Thai subordinates. This finding is consistent with the study of Gill (2011) which showed that an effective leader could obtain the commitment from subordinates. Besides, the result supports the finding of the study of Gatling, Kang, and Kim (2016) which proved that employees in hospitality business in America were likely to increase their commitment when their leaders exerted effective leadership behaviors. Moreover, the result also corresponds with the study of Ding, Li, Zhang, Sheng, and Wang (2017) that showed that the project managers who displayed effective leadership behaviors could lower the propensity of subordinates' turnover intention. In addition, the result is consistent with the study of Herman, Huang, and Lam (2013) which confirmed that effective leaders can strengthen their employees' attachment to supervisors, thereby motivating employees to stay longer with their supervisors.

Moreover, this research also supports the positive relationship between perceived supervisor support and commitment to supervisor. This result indicates that Thai subordinates who perceived that the Chinese expatriates demonstrate a higher level of supportive behavior are more likely to develop commitment to their Chinese expatriates. It is in line with the earlier study of Graen and Uhl-Bien (1995) which showed that subordinates tend to show their commitment to supervisors when they

received direct support from supervisors. This result is also consistent with the previous research of Kalidass and Bahron (2015) which found that leaders' supportive behaviors reduced turnover intention of subordinates. Moreover, the result is also in line with the study of Hassan, Mahsud, Yukl, and Prussia (2013) which showed that subordinates tend to increase their attachment to leaders when the leader pays attention to their needs.

However, the results of this study did not significantly support the contribution of CQ to leadership effectiveness and commitment to supervisor. The result indicates that CQ of the Chinese expatriates didn't directly affect their leadership effectiveness and subordinates' commitment to supervisor. This finding is contradictory with the previous study of Rockstuhl et al. (2011) which founded that CQ facilitated cross-cultural leadership effectiveness. However, when considering the significant relationship between CQ and perceived supervisor support as well as the significant relationship between perceived supervisor support and leadership effectiveness, it could be possible that CQ may determine leadership effectiveness indirectly through the role of perceived supervisor support. As expatriates with high CQ have the ability to understand the culture of the host country, then they can effectively adapt to the new culture and demonstrate supportive behaviors to their subordinates in the cross-cultural interaction. Accordingly, subordinates are more likely to perceive these supportive expatriates as effective leaders and develop positive attitudes and behaviors towards them. Some possible reasons that might explain why CQ did not relate directly with leadership effectiveness and commitment to supervisor, but was mediated by perceived supervisor support, are the characteristics of people in Thailand that tends to put more emphasis on people-oriented characteristic of a leader when evaluating leadership effectiveness. Generally, Thailand is a collectivist culture where people tend to be concerned about the wellbeing of members in their own group (AU, Bunchapattanasakda, & Wong, 2010). A strong value of interpersonal relationship prevails over tasks in Thailand (Yukongdi, 2010). Therefore, Thai people always take other persons' feelings into consideration in work context, which helps to maintain good interpersonal relationships (Tsai, Carr, Qiao, & Supprakit, 2019). For this reason, Chinese expatriates with high CQ may not be perceived as effective leaders if they could not use their cultural knowledge and skills to demonstrate supportive behavior toward the Thai subordinate. On the other hand, when Chinese expatriates with high

CQ can use their cultural knowledge and skills to demonstrate supportive behavior toward the Thai subordinates, it can create an impression to Thai subordinates that the Chinese expatriate is effective in understanding the needs of local people, and that can cause Thai subordinates to evaluate Chinese expatriates more favorably. As a result, Thai subordinates tend to perceive their supportive supervisors as effective leaders and develop commitment to them.

Besides, the results of this study do not provide evidence of the statistical support of the direct relationship between cross-cultural adjustment and cross-cultural leadership effectiveness as well as the direct relationship between cross-cultural adjustment and perceived supervisor support. This finding is in contradiction to the study of Nunes et al. (2017) which confirmed that high level of cross-cultural adaption of expatriates was positively related to their effectiveness in managing local employees. The contradictory results may possible be explained by the nature of cross-cultural adjustment that tend to reflect the adjustment to foreign country environment, which may not directly relate to interpersonal interaction in a workplace setting. Cross-cultural adjustment involves general adjustment, work adjustment and interaction adjustment. Although cross-cultural adjustment allows expatriates to adjust themselves to foreign country environment, it may not allow expatriates to know how to manage people from different cultures. Moreover, it could be likely that Chinese expatriates might not turn their cross-cultural adjustment into the operational capabilities of subordinates in Thailand. Because effective cross-cultural management tends to require more subtle and flexible knowledge and skill in understanding how to work well with foreign subordinates, just being able to adapt to foreign country environment may not be sufficient for expatriates to accomplish this goal. This could be a possible explanation for the unsupported results regarding the insignificant contribution of cross-cultural adjustment.

Along with the findings regarding main variables, this study also indicated other results related to control variables of job function. The result implies that Chinese expatriates who worked in the accounting/finance department tended to be perceived by the Thai subordinate as having a low level of supportive behavior. This could be explained by the job nature related to accounting/finance department. Employees in accounting/finance department always provide visual results. The communication



between Chinese expatriates and Thai subordinates might be more direct since their accountability is to report and calculate the financial or sales performance of their company. To some extent, Chinese expatriates may not notice that Thai subordinates expect to receive positive recognition from the management. There may not have been the effective reward systems to motivate employees in accounting/finance department. Hence, Thai subordinates tend to evaluate their Chinese expatriates as having a lower level of supportive behaviors. In addition to this, the result implies that Chinese expatriates who worked in marketing/sales department tend to be perceived by the Thai subordinate as having a higher level of cross-cultural leadership effectiveness. This could be explained by the nature of people in marketing department who tend to be more people oriented. Basically, people who work in marketing function tend to have good communication and interpersonal skills. Well-developed communication skills of employees in marketing department facilitate effective and adequate. In addition, most of the tasks in marketing department tend to require people in the department to work closely with one another as a team. These characteristics of marketing tasks provide a favorable condition for supervisors and subordinates to work closely together. Besides, good interpersonal skills and work cooperation may help Chinese supervisor to know the expectations of Thai subordinates from various perspectives. This might possibly allow them to develop good interpersonal relationships, thereby making Thai subordinates in the marketing department develop more favorable perceptions of the Chinese expatriates.

Additionally, the results of this study provide the support to social identity theory. According to social identity theory, people always categorize themselves and others to understand the social environment. Once individuals realize which category they belong to, they will adopt the identity of that group and behave in the ways of the group members. In the leader-subordinate relationship context, leaders always share different memberships with others they lead. Hence, subordinates tend to stay and cooperate with the ingroup leader. As a cross-cultural competence, CQ enables individuals to effectively adjust in the cross-cultural interactions, distract from the concentration of in group and out group as well as enhance the perceived similarity in cross-cultural settings. The finding confirmed that expatriates with high CQ have a better adjustment in the cross-cultural interaction, which helped them behave in the

ways that local people act. Accordingly, the perceived dissimilarities between expatriates and local subordinates tended to be reduced and local subordinates were likely to perceive that the expatriates are in group leaders. In addition, expatriates with high CQ knew what the local subordinates needed and tended to show adaptive as well as supportive behaviors to their subordinates. As a result, local subordinates enhanced their feelings of similarity toward expatriates and perceived them as the effective leaders.

## **5.2 Contribution**

The result of this study can provide some academic and practical contributions. The details of contributions are reported as follows.

### **5.2.1 Academic Contribution**

The results of this study provide additional evidence related to the contributions of CQ. Given that there is no research done focusing on the contribution of CQ on Chinese expatriate effectiveness in Thailand, this study filled the gap by adding extra evidence on the role of CQ in this unexplored research context. The results confirmed that CQ of Chinese expatriates can help them to make an effective cross-cultural adjustment in Thailand which is similar to the results that were found in expatriates in other countries. Besides, given that prior research that analyzed the effect of CQ on expatriate effectiveness did not consider the mediating factors that explain why the expatriate with high CQ tended to be perceived as the effective leader, this study filled this gap by showing some possible reasons why the expatriate with high CQ tended to be perceived as the effective leader could be explained by the ability of the expatriate to show good support to local subordinates. In addition, the results provide extra evidence that expatriates who display supportive behaviors have a high potential to gain the sense of commitment from their subordinates in the host country. Given that prior research did not clearly explain why expatriates with high CQ tended to be effective in cross-cultural work assignments, this added to prior CQ research by showing that local subordinates tended to develop their commitment to high CQ expatriates who have a better understanding of their work nature in the work setting. This study also provided support to the social identity theory that can explain the

positive contribution of CQ that helps expatriates work effectively with local subordinates.

### **5.2.2 Practical Contribution**

In addition to the academic contributions, this study provided some practical contributions for Chinese multinational corporations in terms of expatriation development. Considering the different cultures in China and Thailand, it is necessary for Chinese expatriates to understand the Thai culture so that they can lessen the problems caused by cultural differences. Therefore, it is important for the management of Chinese companies to provide cultural training and development programs for expatriates to have a better understanding of cultural values and cultural issues existing in Thailand before they are sent to Thailand. The cultural training and development program can help Chinese expatriates effectively adjust to the new environment and deal with the problems that may occur in the cross-cultural assignment. In addition, it is an essential issue for Chinese multinational corporations to consider the qualification of expatriates who will be sent to conduct the overseas operations in Thailand. Expatriates should possess high level of cross-cultural competencies, and CQ is considered as a crucial competency that supports effective cross-cultural interactions. The results showed that Chinese expatriates possessing high CQ could adjust generally in Thailand, adapt well to their work environment and interact effectively with Thai people. Therefore, it is vital for Chinese companies to select appropriate employees who hold a high level of CQ and are capable of operating international assignment in Thailand. Previous studies revealed that CQ can be learned and developed through effective CQ training (MacNab, 2012; Rehg, Gundlach, & Grigorian, 2012). Scholars suggested that individuals can develop cultural knowledge, gain experience related to cross-cultural interaction and practice to perform in intercultural settings through CQ training programs (Earley & Peterson, 2004). Thus, CQ training serves a vital role in developing the CQ of Chinese expatriates. Chinese companies can provide training programs for expatriates to know the cultural knowledge through reading relative materials, watching videos and learning from the case study. Then, Chinese companies should ask expatriates to analyze the cross-cultural situations and ask them what they would do based on their cultural knowledge when experiencing the situations in Thailand. The training should also focus on developing the self-efficacy of expatriates

to guide them to know how to effectively interact in the cross-cultural context in Thailand. Chinese companies can give some guidance for expatriates on how to effectively interact with individuals from different cultural backgrounds. For example, case studies can be used to guide expatriates in how to successfully perform in Thai culture. Chinese companies could show real cases related to cross-cultural interaction that happened in working settings in Thailand to their expatriates. Then the expatriates can analyze the situations grounded on their knowledge, and they can express their views on the case. Once Chinese expatriates develop a better understanding of Thai culture, they tend to apply what they have learned to deal with the real cross-cultural situations in Thailand. Furthermore, Chinese companies should allow expatriates to practice displaying appropriate actions in the culturally diverse situations. Chinese companies can simulate cross-cultural working scenarios that may occur in Thailand with different roles. Then expatriates could act out the situations based on their knowledge and skills, which could help them to have a deeper understanding of proper behaviors when managing Thai employees. The CQ development should not only help Chinese expatriates to adjust well in Thailand, but also facilitate them in adjusting their working styles to support the cultural nature of Thai subordinates. Once Chinese expatriates can effectively express supportive behaviors by applying their cultural knowledge and skills, their Thai employees are more willing to show positive attitudes and increase attachment to them, thereby contributing to the good expatriate performance in the Thai subsidiary.

Moreover, considering the results that significantly supported the positive effect of local language proficiency on perceived supervisor support, this research also recommended that local language proficiency might be important for Chinese expatriates to be successful in managing local people. In particular, for Chinese expatriates who will be sent to work in Thailand, the ability to understand Thai language is essential because it can help Chinese expatriates to communicate effectively with and understand Thai employees. Therefore, it is essential for human resource management to enhance the local language proficiency of expatriates. For example, companies can provide Thai language courses for Chinese expatriates who will operate the overseas tasks in Thailand to learn, which can make sure that the expatriates possess the ability to communicate with the Thai people. Beside this, Chinese companies should also

provide Thai language training after their expatriates arriving in Thailand so that they can continue to improve their Thai language proficiency. Additionally, given that the result indicated that the age of Chinese expatriates positively associated with Thai subordinates' perceived supervisor support, Chinese companies may have to assign older expatriates for overseas assignment in Thailand. Because the older expatriates tend to have more experience, they may possess the ability to provide more appropriate support to Thai subordinates than younger expatriates. Finally, the management of Chinese companies should organize the session so that older expatriates share their experiences in order to help younger expatriates gain knowledge and understanding about cross-cultural management in Thailand.

### **5.3 Limitations**

There are several limitations that need to be discussed. First, cross-sectional data was used in this research. It is difficult for this method to test the causal relationship between variables (Maxwell, Cole, & Mitchell, 2011). Second, although this research collected data from two sources to alleviate single source bias and social desirability, the results of the questionnaire from Chinese expatriates may still contain the subjective bias. For example, because the self-evaluated questionnaire was used to collect the data related to the CQ of Chinese expatriates, they may give socially desirable answers instead of showing their accurate level of cultural competence. Finally, it is possible to limit the generalizability of the results due to the small-scale data collection of this research. Considered that it is vital to demonstrate more reliable and generalized results, the sample size needs to be expanded.



## 5.4 Future Research

This study provides some suggestions for future research. Future study may explore the contribution of CQ to expatriate effectiveness in other cultural contexts to make comparisons with this study to confirm whether the contribution of CQ might be consistent across different country-contexts. For example, future study could investigate whether CQ will help Chinese expatriates to develop good relationships with local subordinates in the US or European countries, as the cultures between Thailand and the US or European countries are different. Future studies that explore the contribution of CQ to the effectiveness of expatriate in various contexts could provide evidence to confirm whether CQ is an essential competence affecting the expatriate effectiveness in cross-cultural situations. Moreover, considering that it is a crucial factor for expatriates to build good work relationships with local subordinates, future research can explore whether CQ might explain the quality of interpersonal relationship that expatriates develop with other persons in the workplace. For example, future research will need to explore whether CQ may affect the quality of trust and interpersonal relationship that local subordinates have toward the expatriates.

## BIBLIOGRAPHY

- Abdi, H. (2007). Partial least squares regression. *Encyclopedia of measurement and statistics*, 2, 740-744.
- Adair, W. L., Hideg, I., & Spence, J. R. (2013). The culturally intelligent team: The impact of team cultural intelligence and cultural heterogeneity on team shared values. *Journal of Cross-Cultural Psychology*, 44(6), 941-962.
- Adler, N. J., & Gundersen, A. (2007). *International dimensions of organizational behavior*: Cengage Learning.
- Agrawal, V. (2012). Managing the diversified team: challenges and strategies for improving performance. *Team Performance Management: An International Journal*, 18(7/8), 384-400.
- Ali, F., Rasoolimanesh, S. M., Sarstedt, M., Ringle, C. M., & Ryu, K. (2018). An assessment of the use of partial least squares structural equation modeling (PLS-SEM) in hospitality research. *International Journal of Contemporary Hospitality Management*, 30(1), 514-538.
- Alon, I., & Higgins, J. M. (2005). Global leadership success through emotional and cultural intelligences. *Business horizons*, 48(6), 501-512.
- Ang, S., & Van Dyne, L. (2015). Conceptualization of cultural intelligence: Definition, distinctiveness, and nomological network. In *Handbook of cultural intelligence* (pp. 21-33): Routledge.
- Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Rockstuhl, T., & Tan, M. L. (2012). Sub-Dimensions of the Four Factor Model of Cultural Intelligence: Expanding the Conceptualization and Measurement of Cultural Intelligence. *Social and Personality Psychology Compass*, 6(4), 295-313.
- Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C., & Chandrasekar, N. A. (2007). Cultural intelligence: its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance *Management and Organization Review*, 3(3), 335-371.
- Anvari, R., Irum, S., Ashfaq, M., & Atiyaye, D. M. (2014). The impact of leader's cultural intelligence on organizational commitment. *Asian Social Science*, 10(17), 45.
- Araujo-Cabrera, Y., Suarez-Acosta, M. A., & Aguiar-Quintana, T. (2017). Exploring the influence of CEO extraversion and openness to experience on firm performance: The mediating role of top management team behavioral integration. *Journal of Leadership & Organizational Studies*, 24(2), 201-215.
- Aryanto, R., Fontana, A., & Afiff, A. Z. (2015). Strategic human resource management, innovation capability and performance: An empirical study in Indonesia software industry. *Procedia-Social and Behavioral Sciences*, 211, 874-879.
- AU, A. K. M., Bunchapattanasakda, C., & Wong, P. (2010). Management practices of Chinese managers in Chinese MNCs operating in Bangkok. *Cross Cultural Management: An International Journal*.
- Avery, G. C. (2004). *Understanding leadership: Paradigms and cases*: Sage.
- Awais Bhatti, M., Mohamed Battour, M., & Rageh Ismail, A. (2013). Expatriates adjustment and job performance: an examination of individual and organizational factors. *International Journal of Productivity and Performance Management*, 62(7), 694-717.

- Aytemiz Seymen, O. (2006). The cultural diversity phenomenon in organisations and different approaches for effective cultural diversity management: a literary review. *Cross Cultural Management: An International Journal*, 13(4), 296-315.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological review*, 84(2), 191.
- Bandura, A. (2002). Social cognitive theory in cultural context. *Applied psychology*, 51(2), 269-290.
- Barakat, L. L., Lorenz, M. P., Ramsey, J. R., & Cretoiu, S. L. (2015). Global managers: An analysis of the impact of cultural intelligence on job satisfaction and performance. *International Journal of Emerging Markets*, 10(4), 781-800.
- Barbuto, J. E., Fritz, S. M., Matkin, G. S., & Marx, D. B. (2007). Effects of gender, education, and age upon leaders' use of influence tactics and full range leadership behaviors. *Sex Roles*, 56(1-2), 71-83.
- Barry Hocking, J., Brown, M., & Harzing, A.-W. (2004). A knowledge transfer perspective of strategic assignment purposes and their path-dependent outcomes. *The International Journal of Human Resource Management*, 15(3), 565-586.
- Baruch, Y., & Altman, Y. (2002). Expatriation and repatriation in MNCs: A taxonomy. *Human Resource Management*, 41(2), 239-259.
- Bass, B. M. (1985). *Leadership and performance beyond expectations*: Collier Macmillan.
- Beamer, L., & Varner, I. I. (2001). *Intercultural communication in the global workplace*: McGraw-Hill/Irwin New York, NY.
- Becker, T. E. (1992). Foci and bases of commitment: Are they distinctions worth making? *Academy of management Journal*, 35(1), 232-244.
- Becker, T. E., Billings, R. S., Eveleth, D. M., & Gilbert, N. L. (1996). Foci and bases of employee commitment: Implications for job performance. *Academy of management journal*, 39(2), 464-482.
- Becker, T. E., & Kernan, M. C. (2003). Matching commitment to supervisors and organizations to in-role and extra-role performance. *Human performance*, 16(4), 327-348.
- Bell, B. S., & Kozlowski, S. W. (2008). Active learning: effects of core training design elements on self-regulatory processes, learning, and adaptability. *Journal of Applied psychology*, 93(2), 296.
- Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods*: Oxford university press.
- Bell, M. P., & Harrison, D. A. (1996). Using intra-national diversity for international assignments: A model of bicultural competence and expatriate adjustment. *Human Resource Management Review*, 6(1), 47-74.
- Bird, A., & Mendenhall, M. E. (2016). From cross-cultural management to global leadership: Evolution and adaptation. *Journal of World Business*, 51(1), 115-126.
- Black, J., Gregersen, H., Mendenhall, M., & Stroh, L. (2001). Globalizing People through International Assignments (1999). Reading, MA: Addison-Wedley Publishing.
- Black, J. S. (1988). Work role transitions: A study of American expatriate managers in Japan. *Journal of International Business Studies*, 19(2), 277-294.
- Black, J. S., & Gregersen, H. B. (1992). Serving two masters: Managing the dual allegiance of expatriate employees. *Sloan Management Review*, 33(4), 61.

- Black, J. S., Mendenhall, M., & Oddou, G. (1991). Toward a comprehensive model of international adjustment: An integration of multiple theoretical perspectives. *Academy of management review*, 16(2), 291-317.
- Black, J. S., & Stephens, G. K. (1989). The influence of the spouse on American expatriate adjustment and intent to stay in Pacific Rim overseas assignments. *Journal of management*, 15(4), 529-544.
- Bochner, S. (1981). *The mediating person: Bridges between cultures*: GK Hall & Co.
- Bolarinwa, O. A. (2015). Principles and methods of validity and reliability testing of questionnaires used in social and health science researches. *Nigerian Postgraduate Medical Journal*, 22(4), 195.
- Bowe, H., Martin, K., & Manns, H. (2014). *Communication across cultures: Mutual understanding in a global world*: Cambridge University Press.
- Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological bulletin*, 86(2), 307.
- Brislin, R., Worthley, R., & Macnab, B. (2016). Cultural Intelligence. *Group & Organization Management*, 31(1), 40-55.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of cross-cultural psychology*, 1(3), 185-216.
- Brislin, R. W. (1981). *Cross-cultural encounters: Face-to-face interaction*: Allyn & Bacon.
- Bruins, J., Ellemers, N., & De Gilder, D. (1999). Power use and differential competence as determinants of subordinates' evaluative and behavioural responses in simulated organizations. *European Journal of Social Psychology*, 29(7), 843-870.
- Bücker, J., Furrer, O., & Lin, Y. (2015). Measuring cultural intelligence (CQ) A new test of the CQ scale. *International Journal of Cross Cultural Management*, 15(3), 259-284.
- Bücker, J. J., Furrer, O., Poutsma, E., & Buyens, D. (2014). The impact of cultural intelligence on communication effectiveness, job satisfaction and anxiety for Chinese host country managers working for foreign multinationals. *The International Journal of Human Resource Management*, 25(14), 2068-2087.
- Bunchapattanasakda, C., & Wong, P. (2010). Management practices of Chinese managers in Chinese MNCs operating in Bangkok. *Cross Cultural Management: An International Journal*, 17(3), 268-282.
- Caligiuri, P., & Lazarova, M. (2002). A model for the influence of social interaction and social support on female expatriates' cross-cultural adjustment. *International Journal of Human Resource Management*, 13(5), 761-772.
- Caligiuri, P., & Tarique, I. (2012). Dynamic cross-cultural competencies and global leadership effectiveness. *Journal of World Business*, 47(4), 612-622.
- Carmeli, A., Ben-Hador, B., Waldman, D. A., & Rupp, D. E. (2009). How leaders cultivate social capital and nurture employee vigor: Implications for job performance. *Journal of Applied Psychology*, 94(6), 1553.
- Chan, D. K. S., & Goto, S. G. (2003). Conflict resolution in the culturally diverse workplace: Some data from Hong Kong employees. *Applied Psychology*, 52(3), 441-460.
- Charoensukmongkol, P. (2014). Effects of support and job demands on social media use and work outcomes. *Computers in Human Behavior*, 36, 340-349. doi:<https://doi.org/10.1016/j.chb.2014.03.061>



- Charoensukmongkol, P. (2015). Cultural intelligence of entrepreneurs and international network ties: the case of small and medium manufacturing firms in Thailand. *Management Research Review*, 38(4), 421-436.
- Charoensukmongkol, P. (2016a). Contribution of Mindfulness to Individuals' Tendency to Believe and Share Social Media Content. *International Journal of Technology and Human Interaction (IJTHI)*, 12(3), 47-63.
- Charoensukmongkol, P. (2016b). Cultural intelligence and export performance of small and medium enterprises in Thailand: Mediating roles of organizational capabilities. *International Small Business Journal*, 34(1), 105-122.
- Charoensukmongkol, P. (2016c). The interconnections between bribery, political network, government supports, and their consequences on export performance of small and medium enterprises in Thailand. Las interconexiones entre sobornos, contactos políticos, apoyos gubernamentales y sus consecuencias en el rendimiento exportador de pequeñas y medianas empresas en Tailandia. *Journal of International Entrepreneurship*, 14(2), 259-276.
- Charoensukmongkol, P. (2017). Contributions of mindfulness during post-merger integration. *Journal of Managerial Psychology*, 32(1), 104-118.
- Charoensukmongkol, P. (2019). The Efficacy of Cultural Intelligence for Adaptive Selling Behaviors in Cross-Cultural Selling: The Moderating Effect of Trait Mindfulness. *Journal of Global Marketing*. doi:10.1080/08911762.2019.1654586
- Charoensukmongkol, P., Murad, M., & Gutierrez-Wirsching, S. (2016). The Role of Coworker and Supervisor Support on Job Burnout and Job Satisfaction. *Journal of Advances in Management Research*, 13(1), 4-22.
- Chatterjee, S., & Hadi, A. S. (2015). *Regression analysis by example*: John Wiley & Sons.
- Chemers, M. M. (2001). Leadership effectiveness: An integrative review. *Blackwell handbook of social psychology: Group processes*, 376-399.
- Chen, A. S.-y. (2015). CQ at work and the impact of intercultural training: An empirical test among foreign laborers. *International Journal of Intercultural Relations*, 47, 101-112.
- Chen, G., Kirkman, B. L., Kim, K., Farh, C. I., & Tangirala, S. (2010). When does cross-cultural motivation enhance expatriate effectiveness? A multilevel investigation of the moderating roles of subsidiary support and cultural distance. *Academy of Management Journal*, 53(5), 1110-1130.
- Chen, X.-P., Liu, D., & Portnoy, R. (2012). A multilevel investigation of motivational cultural intelligence, organizational diversity climate, and cultural sales: Evidence from US real estate firms. *Journal of applied psychology*, 97(1), 93.
- Chen, Z. (2001). Further investigation of the outcomes of loyalty to supervisor: Job satisfaction and intention to stay. *Journal of Managerial Psychology*, 16(8), 650-660.
- Cheng, B. S., Jiang, D. Y., & Riley, J. H. (2003). Organizational commitment, supervisory commitment, and employee outcomes in the Chinese context: proximal hypothesis or global hypothesis? *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 24(3), 313-334.
- Cheng, C.-Y., Jiang, D.-Y., Cheng, B.-S., Riley, J. H., & Jen, C.-K. (2015). When do subordinates commit to their supervisors? Different effects of perceived



- supervisor integrity and support on Chinese and American employees. *The Leadership Quarterly*, 26(1), 81-97.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Chua, R. Y., Morris, M. W., & Mor, S. (2012). Collaborating across cultures: Cultural metacognition and affect-based trust in creative collaboration. *Organizational behavior and human decision processes*, 118(2), 116-131.
- Chughtai, A. A. (2013). Linking affective commitment to supervisor to work outcomes. *Journal of Managerial Psychology*, 28(6), 606-627.
- Cicero, L., Pierro, A., & Van Knippenberg, D. (2010). Leadership and uncertainty: How role ambiguity affects the relationship between leader group prototypicality and leadership effectiveness. *British Journal of Management*, 21(2), 411-421.
- Cohen, A. (1999). Relationships among five forms of commitment: An empirical assessment. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 20(3), 285-308.
- Collings, D. G., & Sculling, H. (2006). International recruitment and selection. In *Global Staffing* (pp. 75-102): Routledge.
- Cragan, J., Wright, D. W., & Kasch, C. (2008). *Communication in small groups: Theory, process, and skills*: Nelson Education.
- Dalluay, V. S., & Jalagat, R. C. (2016). Cross-Cultural Management of Culturally Diverse Workforce: A Challenge Facing Managers in the Global Workplace *International Journal of Science and Research*, 5(11).
- Dansereau Jr, F., Graen, G., & Haga, W. J. (1975). A vertical dyad linkage approach to leadership within formal organizations: A longitudinal investigation of the role making process. *Organizational behavior and human performance*, 13(1), 46-78.
- Davies, S., Kraeh, A., & Froese, F. (2015). Burden or support? The influence of partner nationality on expatriate cross-cultural adjustment. *Journal of Global Mobility*, 3(2), 169-182.
- Deci, E., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*: Springer Science & Business Media.
- DeConinck, J. B. (2010). The effect of organizational justice, perceived organizational support, and perceived supervisor support on marketing employees' level of trust. *Journal of Business Research*, 63(12), 1349-1355.
- Deng, L., & Gibson, P. (2008). A qualitative evaluation on the role of cultural intelligence in cross-cultural leadership effectiveness. *International journal of leadership studies*, 3(2), 181-197.
- Deng, P. (2013). Chinese outward direct investment research: Theoretical integration and recommendations. *Management and Organization Review*, 9(3), 513-539.
- Derr, C. B., & Oddou, G. (1993). Internationalizing managers: Speeding up the process. *European Management Journal*, 11(4), 435-442.
- Ding, X., Li, Q., Zhang, H., Sheng, Z., & Wang, Z. (2017). Linking transformational leadership and work outcomes in temporary organizations: A social identity approach. *International Journal of Project Management*, 35(4), 543-556.
- Ditchburn, G., & Brook, E. R. (2015). Cross-cultural adjustment and fundamental interpersonal relations orientation behaviour (FIRO-B). *Journal of Global Mobility*, 3(4), 336-349.

- Doherty, A. J. (1997). The effect of leader characteristics on the perceived transformational/transactional leadership and impact of interuniversity athletic administrators. *Journal of Sport Management*, 11(3), 275-285.
- Dong, K., & Liu, Y. (2010). Cross-cultural management in China. *Cross Cultural Management: An International Journal*, 17(3), 223-243.
- Dörnyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative, and mixed methodologies*: Oxford University Press.
- Druskat, V. U. (1994). Gender and leadership style: Transformational and transactional leadership in the Roman Catholic Church. *The Leadership Quarterly*, 5(2), 99-119.
- Du, M. M. (2016). China's "One Belt, One Road" Initiative: Context, Focus, Institutions, and Implications. *The Chinese Journal of Global Governance*, 2(1), 30-43.
- Dysvik, A., & Kuvaas, B. (2013). Perceived job autonomy and turnover intention: The moderating role of perceived supervisor support. *European Journal of Work and Organizational Psychology*, 22(5), 563-573.
- Eagly, A. H., & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. *Psychological bulletin*, 108(2), 233.
- Earley, C. P., & Mosakowski, E. (2000). Creating hybrid team cultures: An empirical test of transnational team functioning. *Academy of Management Journal*, 43(1), 26-49.
- Earley, P. C. (2002). Redefining interactions across cultures and organizations: Moving forward with cultural intelligence. *Research in organizational behavior*, 24, 271-299.
- Earley, P. C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Palo Alto: Stanford University Press.
- Earley, P. C., Ang, S., & Tan, J.-S. (2006). *CQ: Developing cultural intelligence at work*: Stanford University Press.
- Earley, P. C., & Gardner, H. K. (2005). Internal dynamics and cultural intelligence in multinational teams. In *Managing multinational teams: Global perspectives* (pp. 3-31): Emerald Group Publishing Limited.
- Earley, P. C., & Peterson, R. S. (2004). The elusive cultural chameleon: Cultural intelligence as a new approach to intercultural training for the global manager. *Academy of Management Learning & Education*, 3(1), 100-115.
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual review of psychology*, 53(1), 109-132.
- Edelman, P., & van Knippenberg, D. (2018). Emotional intelligence, management of subordinate's emotions, and leadership effectiveness. *Leadership & Organization Development Journal*.
- Edström, A., & Galbraith, J. R. (1977). Transfer of managers as a coordination and control strategy in multinational organizations. *Administrative science quarterly*, 248-263.
- Egel, E., & Fry, L. W. (2017). Spiritual leadership as a model for Islamic leadership. *Public Integrity*, 19(1), 77-95.
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, I. L., & Rhoades, L. (2002). Perceived supervisor support: Contributions to perceived organizational support and employee retention. *Journal of applied psychology*, 87(3), 565.

- Elenkov, D., & McMahan, C. (2005). Investigating the role of cultural intelligence on the effect of executive leadership on marketing innovation in a multi-cultural context. *Journal of International Business and Economics*, 3, 19-23.
- Elenkov, D. S., & Manev, I. M. (2009). Senior expatriate leadership's effects on innovation and the role of cultural intelligence. *Journal of World Business*, 44(4), 357-369.
- Ellemers, N., De Gilder, D., & Haslam, S. A. (2004). Motivating individuals and groups at work: A social identity perspective on leadership and group performance. *Academy of Management review*, 29(3), 459-478.
- Ellemers, N., Van Rijswijk, W., Bruins, J., & De Gilder, D. (1998). Group commitment as a moderator of attributional and behavioural responses to power use. *European Journal of Social Psychology*, 28(4), 555-573.
- Emmerik, I. H. V., & Euwema, M. C. (2009). The international assignments of peacekeepers: What drives them to seek future expatriation? *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, 48(1), 135-151.
- Engle, E. M., & Lord, R. G. (1997). Implicit theories, self-schemas, and leader-member exchange. *Academy of Management Journal*, 40(4), 988-1010.
- Ersoy, A. (2014). The Role of Cultural Intelligence in Cross-Cultural Leadership Effectiveness: A Qualitative Study in the Hospitality Industry. *Journal of Yasar University*, 35(9).
- Ewen, C., Wihler, A., Blickle, G., Oerder, K., Ellen III, B. P., Douglas, C., & Ferris, G. R. (2013). Further specification of the leader political skill–leadership effectiveness relationships: Transformational and transactional leader behavior as mediators. *The Leadership Quarterly*, 24(4), 516-533.
- Fan, S. X., Cregan, C., Harzing, A. W., & Köhler, T. (2018). The benefits of being understood: The role of ethnic identity confirmation in knowledge acquisition by expatriates. *Human Resource Management*, 57(1), 327-339.
- Farndale, E., Pai, A., Sparrow, P., & Scullion, H. (2014). Balancing individual and organizational goals in global talent management: A mutual-benefits perspective. *Journal of World Business*, 49(2), 204-214.
- Farrar, D. E., & Glauber, R. R. (1967). Multicollinearity in regression analysis: the problem revisited. *The Review of Economic and Statistics*, 92-107.
- Farrell, A. M. (2010). Insufficient discriminant validity: A comment on Bove, Pervan, Beatty, and Shiu (2009). *Journal of Business Research*, 63(3), 324-327.
- Fine, G. A., & Fields, C. D. (2008). Culture and Microsociology: The Anthill and the Veldt. *The ANNALS of the American Academy of Political and Social Science*, 619(1), 130-148. doi:10.1177/0002716208320138
- Fish, A., Bhanugopan, R., & Cogan, J. (2008). Value orientations as predictors of cultural and business impact: Individual suitability for cross-border assignments. *Cross Cultural Management: An International Journal*, 15(1), 30-48.
- Fiske, S. T., Rosenblum, K., & Travis, T. (2004). Social beings: A core motives approach to social psychology. *New York*.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. *American psychologist*, 34(10), 906.



- Fornell, C., & Bookstein, F. L. (1982). Two structural equation models: LISREL and PLS applied to consumer exit-voice theory. *Journal of Marketing research*, 440-452.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50.
- Froese, F. J., Peltokorpi, V., & Ko, K. A. (2012). The influence of intercultural communication on cross-cultural adjustment and work attitudes: Foreign workers in South Korea. *International Journal of Intercultural Relations*, 36(3), 331-342.
- Ganster, D. C., Hennessey, H. W., & Luthans, F. (1983). Social desirability response effects: Three alternative models. *Academy of Management Journal*, 26(2), 321-331.
- Garg, A. K., & Ramjee, D. (2013). The relationship between leadership styles and employee commitment at a parastatal company in South Africa. *The International Business & Economics Research Journal (Online)*, 12(11), 1411.
- Gatling, A., Kang, H. J. A., & Kim, J. S. (2016). The effects of authentic leadership and organizational commitment on turnover intention. *Leadership & Organization Development Journal*, 37(2), 181-199.
- Gill, R. (2011). *Theory and practice of leadership*: Sage.
- Gok, S., Karatuna, I., & Karaca, P. O. (2015). The role of perceived supervisor support and organizational identification in job satisfaction. *Procedia-Social and Behavioral Sciences*, 177, 38-42.
- Gonçalves, G., Reis, M., Sousa, C., Santos, J., Orgambêz-Ramos, A., & Scott, P. (2016). Cultural intelligence and conflict management styles. *International Journal of Organizational Analysis*, 24(4), 725-742.
- Gordon, M. E., Philpot, J. W., Burt, R. E., Thompson, C. A., & Spiller, W. E. (1980). Commitment to the union: Development of a measure and an examination of its correlates. *Journal of Applied Psychology*, 65(4), 479.
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The leadership quarterly*, 6(2), 219-247.
- Gregersen, H. B. (1993). Multiple commitments at work and extrarole behavior during three stages of organizational tenure. *Journal of business Research*.
- Grimm, P. (2010). Social desirability bias. *Wiley international encyclopedia of marketing*.
- Groves, K. S., Feyerherm, A., & Gu, M. (2015). Examining cultural intelligence and cross-cultural negotiation effectiveness. *Journal of Management Education*, 39(2), 209-243.
- Groves, K. S., & Feyerherm, A. E. (2011). Leader cultural intelligence in context: Testing the moderating effects of team cultural diversity on leader and team performance. *Group & Organization Management*, 36(5), 535-566.
- Guðmundsdóttir, S. (2015). Nordic expatriates in the US: The relationship between cultural intelligence and adjustment. *International Journal of Intercultural Relations*, 47, 175-186.
- Gullekson, N., & Dumaisnil, A. (2016). Expanding horizons on expatriate adjustment: A look at the role of emotional display and status. *Human Resource Management Review*, 26(3), 260-269.

- Gupta, A. (2013). Re-entry of expatriate and multinational development. *Intellectual Property Rights: Open Access*.
- Hair, J., Black, W., Babin, B., & Anderson, R. (2009). Multivariate data analysis. 17<sup>a</sup> Edição. In: Prentice Hall.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152.
- Hair, J. F., Sarstedt, M., Pieper, T. M., & Ringle, C. M. (2012). The use of partial least squares structural equation modeling in strategic management research: a review of past practices and recommendations for future applications. *Long range planning*, 45(5-6), 320-340.
- Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the academy of marketing science*, 40(3), 414-433.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*: Sage publications.
- Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107-123.
- Hall, D. T. (1996). Protean careers of the 21st century. *Academy of Management Perspectives*, 10(4), 8-16.
- Hall, E. T. (1989). *Beyond culture*: Anchor.
- Hanbury, G. L. (2001). *The function of leadership styles and personality types among city managers: An analysis of "fit" and tenure*. Florida Atlantic University Boca Raton, FL.
- Hanges, P. J., Aiken, J. R., Park, J., & Su, J. (2016). Cross-cultural leadership: Leading around the world. *Current opinion in psychology*, 8, 64-69.
- Harris, R. B., Harris, K. J., & Harvey, P. (2008). An examination of the impact of supervisor on the relationship between job strains and turnover intention for computer workers. *Journal of Applied Social Psychology*, 38(8), 2108-2131.
- Harrison, D. A., & Shaffer, M. A. (2005). Mapping the criterion space for expatriate success: Task-and relationship-based performance, effort and adaptation. *The international journal of human resource management*, 16(8), 1454-1474.
- Harteis, C. (2012). When workplace learning fails: Individual and organisational limitations—Exemplarily demonstrated by the issue of responsibility in work life. *International Journal of Human Resources Development and Management*, 12(1-2), 92-107.
- Harzing, A.-W. (2001). An analysis of the functions of international transfer of managers in MNCs. *Employee Relations*, 23(6), 581-598.
- Harzing, A.-W., & Christensen, C. (2004). Expatriate failure: time to abandon the concept? *Career Development International*, 9(7), 616-626.
- Harzing, A.-W., & Pudelko, M. (2013). Language competencies, policies and practices in multinational corporations: A comprehensive review and comparison of Anglophone, Asian, Continental European and Nordic MNCs. *Journal of World Business*, 48(1), 87-97.
- Harzing, A. W., Pudelko, M., & Sebastian Reiche, B. (2016). The bridging role of expatriates and inpatriates in knowledge transfer in multinational corporations. *Human Resource Management*, 55(4), 679-695.



- Hassan, S., Mahsud, R., Yukl, G., & Prussia, G. E. (2013). Ethical and empowering leadership and leader effectiveness. *Journal of Managerial Psychology*, 28(2), 133-146.
- Hassan, Z., & Diallo, M. M. (2013). Cross-cultural adjustments and expatriate's job performance: a study on Malaysia. *International Journal of Accounting and Business Management, (IJABM)*, 1(1), 8-23.
- Hechanova, R., Beehr, T. A., & Christiansen, N. D. (2003). Antecedents and consequences of employees' adjustment to overseas assignment: a meta-analytic review. *Applied Psychology*, 52(2), 213-236.
- Helgesen, S. (1995). *The female advantage: Women's ways of leadership*: Crown Business.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing* (pp. 277-319): Emerald Group Publishing Limited.
- Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. *Computational Statistics*, 28(2), 565-580.
- Herman, H., Huang, X., & Lam, W. (2013). Why does transformational leadership matter for employee turnover? A multi-foci social exchange perspective. *The Leadership Quarterly*, 24(5), 763-776.
- Hobman, E. V., Bordia, P., & Gallois, C. (2003). Consequences of feeling dissimilar from others in a work team. *Journal of Business and Psychology*, 17(3), 301-325.
- Hocking, J. B., Brown, M., & Harzing, A. W. (2007). Balancing global and local strategic contexts: Expatriate knowledge transfer, applications, and learning within a transnational organization. *Human Resource Management*, 46(4), 513-533.
- Hofstede, G. (1983). National cultures in four dimensions: A research-based theory of cultural differences among nations. *International Studies of Management & Organization*, 13(1-2), 46-74.
- Hofstede, G. (2003). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations*: Sage publications.
- Hogg, M. A., Martin, R., Epitropaki, O., Mankad, A., Svensson, A., & Weeden, K. (2005). Effective leadership in salient groups: Revisiting leader-member exchange theory from the perspective of the social identity theory of leadership. *Personality and Social Psychology Bulletin*, 31(7), 991-1004.
- Hogg, M. A., Terry, D. J., & White, K. M. (1995). A tale of two theories: A critical comparison of identity theory with social identity theory. *Social psychology quarterly*, 255-269.
- Horak, S., & Yang, I. (2016). Affective networks, informal ties, and the limits of expatriate effectiveness. *International Business Review*, 25(5), 1030-1042.
- House, R. J., Hanges, P. J., Javidan, M., Dorfman, P. W., & Gupta, V. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies*: Sage publications.
- Huff, K. C. (2013). Language, cultural intelligence and expatriate success. *Management Research Review*, 36(6), 596-612.
- Huff, K. C., Song, P., & Gresch, E. B. (2014). Cultural intelligence, personality, and cross-cultural adjustment: A study of expatriates in Japan. *International Journal of Intercultural Relations*, 38, 151-157.

- Hult, G. T. M., Ketchen, D. J., Griffith, D. A., Finnegan, C. A., Gonzalez-Padron, T., Harmancioglu, N., . . . Cavusgil, S. T. (2008). Data equivalence in cross-cultural international business research: assessment and guidelines. *Journal of International Business Studies*, 39(6), 1027-1044.
- Hutzschenreuter, T., & Horstkotte, J. (2013). Performance effects of international expansion processes: The moderating role of top management team experiences. *International Business Review*, 22(1), 259-277.
- Hyman, L., Lamb, J., & Bulmer, M. (2006). *The use of pre-existing survey questions: implications for data quality*. Paper presented at the Proceedings of the European Conference on Quality in Survey Statistics.
- Imai, L., & Gelfand, M. J. (2010). The culturally intelligent negotiator: The impact of cultural intelligence (CQ) on negotiation sequences and outcomes. *Organizational Behavior and Human Decision Processes*, 112(2), 83-98.
- Jackson, T. A., Meyer, J. P., & Wang, X.-H. (2013). Leadership, commitment, and culture: A meta-analysis. *Journal of Leadership & Organizational Studies*, 20(1), 84-106.
- Jacobs, J. E., & Paris, S. G. (1987). Children's metacognition about reading: Issues in definition, measurement, and instruction. *Educational psychologist*, 22(3-4), 255-278.
- Janssen, O. (2000). Job demands, perceptions of effort-reward fairness and innovative work behaviour. *Journal of Occupational and organizational psychology*, 73(3), 287-302.
- Jenkins, R. (2014). *Social identity*: Routledge.
- Jonsson, A., & Foss, N. J. (2011). International expansion through flexible replication: Learning from the internationalization experience of IKEA. *Journal of International Business Studies*, 42(9), 1079-1102.
- Jose, G., & Mampilly, S. R. (2015). Relationships among perceived supervisor support, psychological empowerment and employee engagement in Indian workplaces. *Journal of Workplace Behavioral Health*, 30(3), 231-250.
- Jyoti, J., & Kour, S. (2015). Assessing the cultural intelligence and task performance equation: Mediating role of cultural adjustment. *Cross Cultural Management*, 22(2), 236-258.
- Jyoti, J., & Kour, S. (2017). Factors affecting cultural intelligence and its impact on job performance: Role of cross-cultural adjustment, experience and perceived social support. *Personnel Review*, 46(4), 767-791.
- Kalidass, A., & Bahron, A. (2015). The relationship between perceived supervisor support, perceived organizational support, organizational commitment and employee turnover intention. *International Journal of Business Administration*, 6(5), 82.
- Keorite, M., & Pan, H. (2016). The impacts of Chinese direct investment in Thailand on the Sino-Thai bilateral trade. *Journal of Chinese Economic and Foreign Trade Studies*, 9(1), 24-39.
- Ketkar, S., Kock, N., Parente, R., & Verville, J. (2012). The impact of individualism on buyer-supplier relationship norms, trust and market performance: An analysis of data from Brazil and the USA. *International Business Review*, 21(5), 782-793.
- Keung, E. K. (2011). What factors of cultural intelligence predict transformational leadership: A study of international school leaders.

- Khan, S. I., Mahmood, A., Kanwal, S., & Latif, Y. (2015). How Perceived Supervisor Support Effects Workplace Deviance? Mediating Role of Perceived Organizational Support. *Pakistan Journal of Commerce & Social Sciences*, 9(3).
- Khorana, A., & Servaes, H. (2011). What drives market share in the mutual fund industry? *Review of Finance*, 16(1), 81-113.
- Kim, Y. J., & Van Dyne, L. (2012). Cultural intelligence and international leadership potential: The importance of contact for members of the majority. *Applied psychology*, 61(2), 272-294.
- Kline, R. B. (2004). Beyond significance testing: Reforming data analysis methods in behavioral research.
- Knapp, M. L., Hall, J. A., & Horgan, T. G. (2013). *Nonverbal communication in human interaction*: Cengage Learning.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (IJeC)*, 11(4), 1-10.
- Kock, N. (2017). WarpPLS user manual: Version 6.0. *ScriptWarp Systems: Laredo, TX, USA*.
- Kock, N., & Lynn, G. S. (2012). Lateral Collinearity and Misleading Results in Variance-Based SEM: An Illustration and Recommendations. *Journal of the Association for Information Systems*, 13(7), 546-580.
- Kock, N., & Mayfield, M. (2015). PLS-based SEM algorithms: The good neighbor assumption, collinearity, and nonlinearity. *Information Management and Business Review*, 7(2), 113-130.
- Koh, C., Ang, S., & Van Dyne, L. (2015). Development and Validation of the CQS: The Cultural Intelligence Scale. In *Handbook of Cultural Intelligence* (pp. 34-56): Routledge.
- Koirala, M., & Charoensukmongkol, P. (2018). Perceptions of bank employees towards corporate social responsibility and work attitudes: a comparison between Nepal and Thailand. *International Journal of Management Decisions*, 4(1), 1.
- Komin, S. (1990). Culture and work-related values in Thai organizations. *International journal of psychology*, 25(3-6), 681-704.
- Konanahalli, A., O. Oyedele, L., Spillane, J., Coates, R., von Meding, J., & Ebohon, J. (2014). Cross-cultural intelligence (CQ) It's impact on British expatriate adjustment on international construction projects. *International Journal of Managing Projects in Business*, 7(3), 423-448.
- Koo Moon, H., Kwon Choi, B., & Shik Jung, J. (2012). Previous international experience, cross-cultural training, and expatriates' cross-cultural adjustment: Effects of cultural intelligence and goal orientation. *Human Resource Development Quarterly*, 23(3), 285-330.
- Koo Moon, H., Kwon Choi, B., & Shik Jung, J. (2013). Comprehensive examination on antecedents of cultural intelligence: Case of South Korea. *Personnel Review*, 42(4), 440-465.
- Korte, R. F. (2007). A review of social identity theory with implications for training and development. *Journal of European Industrial Training*, 31(3), 166-180.
- Korzilius, H., B ücker, J. J., & Beerlage, S. (2017). Multiculturalism and innovative work behavior: The mediating role of cultural intelligence. *International Journal of Intercultural Relations*, 56, 13-24.



- Krishnan, S., & Kirubamoorthy, G. (2017). Cultural Intelligence and Cross-Cultural Adjustments: Impact on Global Mobility Intentions. *American Journal of Economics*, 7(1), 25-28.
- Kühlmann, T., & Hutchings, K. (2010). Expatriate assignments vs localization of management in China: Staffing choices of Australian and German companies. *Career Development International*, 15(1), 20-38.
- Kundu, S. C. (2003). Workforce diversity status: A study of employees' reactions. *Industrial Management & Data Systems*, 103(4), 215-226.
- Lancaster, B. P. (1999). Defining and Interpreting Suppressor Effects: Advantages and Limitations.
- Landry, G., & Vandenberghe, C. (2009). Role of commitment to the supervisor, leader-member exchange, and supervisor-based self-esteem in employee-supervisor conflicts. *The Journal of social psychology*, 149(1), 5-28.
- Latham, G. P., & Pinder, C. C. (2005). Work motivation theory and research at the dawn of the twenty-first century. *Annu. Rev. Psychol.*, 56, 485-516.
- Laurent, A. (1986). The cross-cultural puzzle of international human resource management. *Human resource management*, 25(1), 91-102.
- Lauring, J., & Selmer, J. (2012). Positive dissimilarity attitudes in multicultural organizations: The role of language diversity and communication frequency. *Corporate Communications: An International Journal*, 17(2), 156-172.
- Lee, K.-h., Yang, G., & Graham, J. L. (2006). Tension and trust in international business negotiations: American executives negotiating with Chinese executives. *Journal of International Business Studies*, 37(5), 623-641.
- Lee, L., Petter, S., Fayard, D., & Robinson, S. (2011). On the use of partial least squares path modeling in accounting research. *International Journal of Accounting Information Systems*, 12(4), 305-328.
- Lee, L.-Y., & Sukoco, B. M. (2010). The effects of cultural intelligence on expatriate performance: The moderating effects of international experience. *The International Journal of Human Resource Management*, 21(7), 963-981.
- Lee, P.-Y., Li, C.-S. J., & Wu, M.-L. (2018). The roles of cross-cultural adjustment and social capital formation in the dynamic capabilities development of multiunit organizations. *Asia Pacific Management Review*, 23(1), 20-29.
- Leung, K. (2014). Globalization of Chinese firms: What happens to culture? *Management and Organization Review*, 10(3), 391-397.
- Leveson, L., Joiner, T. A., & Bakalis, S. (2009). Managing cultural diversity and perceived organizational support: Evidence from Australia. *International Journal of Manpower*, 30(4), 377-392.
- Levinson, H. (1965). Reciprocity: The relationship between man and organization. . *Administrative science quarterly*, 370—390.
- Li, M., Ruangkanjanases, A., & Chen, C. (2014). China's Foreign Direct Investment in Thailand-Current Status and Future Prospects. *International Journal of Trade, Economics and Finance*, 5(4), 296.
- Li, P.-Y. (2018). Top management team characteristics and firm internationalization: The moderating role of the size of middle managers. *International Business Review*, 27(1), 125-138.

- Liang, L., Nontasak, N., & Pongsabutr, Y. (2015). Cross-cultural Competences Required for Department Managers of Selected Chinese Transnational Companies in the Amata City Industrial Estate of Thailand. *HRD JOURNAL*, 6(1), 106-119.
- Liao, H., Joshi, A., & Chuang, A. (2004). Sticking out like a sore thumb: Employee dissimilarity and deviance at work. *Personnel Psychology*, 57(4), 969-1000.
- Lin, Y.-c., Chen, A. S.-y., & Song, Y.-c. (2012). Does your intelligence help to survive in a foreign jungle? The effects of cultural intelligence and emotional intelligence on cross-cultural adjustment. *International Journal of intercultural relations*, 36(4), 541-552.
- Lin, Z., & Zhao, Z. (2016). Culture, expatriation and performance: case of Chinese multinational enterprises. *Chinese Management Studies*, 10(2), 346-364.
- Linder, C. (2015). Expatriates' willingness to adjust their symbolic leadership abroad. An analysis of how culture affects expatriates' use of symbolic interaction. *Journal of Global Mobility*, 3(3), 244-272.
- Ling Suan, C., & Mohd Nasurdin, A. (2014). An empirical investigation into the influence of human resource management practices on work engagement: the case of customer-contact employees in Malaysia. *International Journal of Culture, Tourism and Hospitality Research*, 8(3), 345-360.
- Little, R. J., & Rubin, D. B. (2019). *Statistical analysis with missing data* (Vol. 793): Wiley.
- Liu, C.-H., & Lee, H.-W. (2008). A proposed model of expatriates in multinational corporations. *Cross Cultural Management: An International Journal*, 15(2), 176-193.
- Liu, C.-T., Guo, Y. M., & Lee, C.-H. (2011). The effects of relationship quality and switching barriers on customer loyalty. *International Journal of Information Management*, 31(1), 71-79.
- Liu, X., & Shaffer, M. A. (2005). An investigation of expatriate adjustment and performance: A social capital perspective. *International Journal of Cross Cultural Management*, 5(3), 235-254.
- Livermore, D. (2011). *The cultural intelligence difference: Master the one skill you can't do without in today's global economy*: AMACOM Div American Mgmt Assn.
- Lorenz, M. P., Ramsey, J. R., & Richey, R. G. (2017). Expatriates' international opportunity recognition and innovativeness: The role of metacognitive and cognitive cultural intelligence. *Journal of World Business*.
- Lu, J. W., & Beamish, P. W. (2001). The internationalization and performance of SMEs. *Strategic management journal*, 22(6-7), 565-586.
- Mach, M., & Baruch, Y. (2015). Team performance in cross cultural project teams: The moderated mediation role of consensus, heterogeneity, faultlines and trust. *Cross Cultural Management*, 22(3), 464-486.
- MacNab, B. R. (2012). An experiential approach to cultural intelligence education. *Journal of Management Education*, 36(1), 66-94.
- Maertz Jr, C. P., Griffeth, R. W., Campbell, N. S., & Allen, D. G. (2007). The effects of perceived organizational support and perceived supervisor support on employee turnover. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 28(8), 1059-1075.



- Magnusson, P., Westjohn, S. A., Semenov, A. V., Randrianasolo, A. A., & Zdravkovic, S. (2013). The role of cultural intelligence in marketing adaptation and export performance. *Journal of Marketing Research*, 21(4), 44-61.
- Mahajan, A., & Toh, S. M. (2014). Facilitating expatriate adjustment: The role of advice-seeking from host country nationals. *Journal of World Business*, 49(4), 476-487.
- Malek, M. A., & Budhwar, P. (2013). Cultural intelligence as a predictor of expatriate adjustment and performance in Malaysia. *Journal of world business*, 48(2), 222-231.
- Manamela, M. M., Cassim, N., & Karodia, A. M. (2016). The impact of change management on the implementation of organisational strategy: A case study of National Home Builders Registration Council. *Singaporean Journal of Business Economics and Management Studies*, 5(2), 1-39.
- Marlin, A. M., & Budhwar, P. (2013). Cultural intelligence as a predictor of expatriate adjustment and performance in Malaysia. *Journal of World Business*, 48, 222-231.
- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological bulletin*, 108(2), 171.
- Maxwell, S. E., Cole, D. A., & Mitchell, M. A. (2011). Bias in cross-sectional analyses of longitudinal mediation: Partial and complete mediation under an autoregressive model. *Multivariate Behavioral Research*, 46(5), 816-841.
- Mendenhall, M., & Oddou, G. (1985). The dimensions of expatriate acculturation: A review. *Academy of management review*, 10(1), 39-47.
- Mendenhall, M. E., & Oddou, G. R. (1991). Succession planning for the 21st century: how well are we grooming our future business leaders? *Business Horizons*, 34(1), 26-35.
- Menguc, B., Auh, S., Fisher, M., & Haddad, A. (2013). To be engaged or not to be engaged: The antecedents and consequences of service employee engagement. *Journal of business research*, 66(11), 2163-2170.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, 1(1), 61-89.
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of applied psychology*, 78(4), 538.
- MOFCOM. (2018). Statistical bulletin of China's outward foreign direct investment.
- Montagiani, A., & Giacalone, R. A. (1998). Impression management and cross-cultural adaption. *The Journal of Social Psychology*, 138(5), 598-608.
- Moon, T. (2013). The effects of cultural intelligence on performance in multicultural teams. *Journal of Applied Social Psychology*, 43(12), 2414-2425.
- Mor, S., Morris, M. W., & Joh, J. (2013). Identifying and training adaptive cross-cultural management skills: The crucial role of cultural metacognition. *Academy of Management Learning & Education*, 12(3), 453-475.
- Morck, R., Yeung, B., & Zhao, M. (2008). Perspectives on China's outward foreign direct investment. *Journal of International Business Studies*, 39(3), 337-350.
- Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of vocational behavior*, 14(2), 224-247.

- Muchiri, M. K., Cooksey, R. W., Di Milia, L. V., & Walumbwa, F. O. (2011). Gender and managerial level differences in perceptions of effective leadership. *Leadership & Organization Development Journal*, 32(5), 462-492.
- Musamali, K., & Martin, B. N. (2016). Comparing higher education practices and cultural competences in Kenya and the United States. *Higher Education Studies*, 6(3), 127.
- Nadler, L. B., Nadler, M. K., & Todd-Mancillas, W. R. (1987). *Advances in gender and communication research*: University Press of America.
- Napier, N. K., & Taylor, S. (2002). Experiences of women professionals abroad: Comparisons across Japan, China and Turkey. *International Journal of Human Resource Management*, 13(5), 837-851.
- Nelson, T. O. (1996). Consciousness and metacognition. *American psychologist*, 51(2), 102.
- Newman, W. H. (1992). *Birth of a successful joint venture*: University Press of Amer.
- Ng, K.-Y., & Earley, P. C. (2006). Culture+ intelligence: Old constructs, new frontiers. *Group & Organization Management*, 31(1), 4-19.
- Nunes, I. M., Felix, B., & Prates, L. A. (2017). Cultural intelligence, cross-cultural adaptation and expatriate performance: a study with expatriates living in Brazil. *Revista de Administração*, 52(3), 219-232.
- O'Reilly, C. A., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of applied psychology*, 71(3), 492.
- Oberg, K. (1960). Culture shock: Adjustment to new cultural environments. *Pract. Anthropol.*, 7: 177-182. Parker B, McEvoy GM (1993). Initial examination of a model of intercultural adjustment. *International J. Int. Relation*, 17, 355-379.
- Okoro, E. (2012). Cross-cultural etiquette and communication in global business: Toward a strategic framework for managing corporate expansion. *International journal of business and management*, 7(16), 130.
- Olie, R. (1990). Culture and integration problems in international mergers and acquisitions. *European Management Journal*, 8(2), 206-215.
- Olson, D. A., & Shultz, K. S. (1994). Gender Differences in the Dimensionality of Social Support 1. *Journal of Applied Social Psychology*, 24(14), 1221-1232.
- Osland, J., & Osland, A. (2005). Expatriate paradoxes and cultural involvement. *International Studies of Management & Organization*, 35(4), 91-114.
- Ott, D. L., & Michailova, S. (2018). Cultural Intelligence: A Review and New Research Avenues. *International Journal of Management Reviews*, 20(1), 99-119. doi:10.1111/ijmr.12118
- Palthe, J. (2008). The role of interaction and general adjustment in expatriate attitudes: Evidence from a field study of global executives on assignment in South Korea, Japan and The Netherlands. *Journal of Asia Business Studies*, 3(1), 42-53.
- Pandey, A., & Charoensukmongkol, P. (2019). Contribution of cultural intelligence to adaptive selling and customer-oriented selling of salespeople at international trade shows: does cultural similarity matter? *Journal of Asia Business Studies*, 13(1), 79-96.
- Patatoukas, P. N. (2011). Customer-base concentration: Implications for firm performance and capital markets: 2011 american accounting association competitive manuscript award winner. *The Accounting Review*, 87(2), 363-392.

- Peltokorpi, V. (2008). Cross-cultural adjustment of expatriates in Japan. *The International Journal of Human Resource Management*, 19(9), 1588-1606.
- Peng, D. X., & Lai, F. (2012). Using partial least squares in operations management research: A practical guideline and summary of past research. *Journal of Operations Management*, 30(6), 467-480.
- Peterson, B. (2011). *Cultural intelligence: A guide to working with people from other cultures*: Nicholas Brealey Publishing.
- Phungsoonthorn, T., & Charoensukmongkol, P. (2018). The Preventive Role of Transformational Leadership and Trust in the Leader on Employee Turnover Risk of Myanmar Migrant Workers in Thailand: The Moderating Role of Salary and Job Tenure. *Journal of Risk Management and Insurance*, 22(2), 66-82.
- Pimpa, N. (2012). Amazing Thailand: Organizational culture in the Thai public sector. *International Business Research*, 5(11), 35.
- Podsakoff, N. P., Podsakoff, P. M., & Kuskova, V. V. (2010). Dispelling misconceptions and providing guidelines for leader reward and punishment behavior. *Business Horizons*, 53(3), 291-303.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.
- Porter, G., & Tansky, J. W. (1999). Expatriate success may depend on a "learning orientation": Considerations for selection and training. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, 38(1), 47-60.
- Presbitero, A. (2016). Cultural intelligence (CQ) in virtual, cross-cultural interactions: Generalizability of measure and links to personality dimensions and task performance. *International Journal of Intercultural Relations*, 50, 29-38.
- Presbitero, A. (2017a). It's not all about language ability: motivational cultural intelligence matters in call center performance. *The International Journal of Human Resource Management*, 28(11), 1547-1562.
- Presbitero, A. (2017b). Religious expatriates' cultural intelligence and adaptation: The role of intrinsic motivation for successful expatriation. *Journal of Global Mobility: The Home of Expatriate Management Research*, 5(2), 146-157.
- Presbitero, A., & Toledano, L. S. (2017). Global team members' performance and the roles of cross-cultural training, cultural intelligence, and contact intensity: the case of global teams in IT offshoring sector. *The International Journal of Human Resource Management*, 1-21.
- Puck, J. F., Holtbrügge, D., & Döding, S. A. (2003). Determinants and consequences of expatriate adjustment: A review of existing studies. *WorNing Paper*, 3, 2003.
- Puyod, J. V., & Charoensukmongkol, P. (2019). The contribution of cultural intelligence to the interaction involvement and performance of call center agents in cross-cultural communication. *Management Research Review*. doi:<https://doi.org/10.1108/MRR-10-2018-0386>
- Quer, D., Claver, E., & Rienda, L. (2010). Doing business in China and performance: a review of evidence. *Chinese Management Studies*, 4(1), 37-56.



- Ramalu, S. S., Rose, R. C., Kumar, N., & Uli, J. (2010). Doing business in global arena: An examination of the relationship between cultural intelligence and cross-cultural adjustment. *Asian Academy of Management Journal*, 15(1), 79-97.
- Ramalu, S. S., Rose, R. C., Uli, J., & Kumar, N. (2012). Cultural intelligence and expatriate performance in global assignment: The mediating role of adjustment. *International Journal of Business and Society*, 13(1), 19.
- Ravasi, C., Salamin, X., & Davoine, E. (2015). Cross-cultural adjustment of skilled migrants in a multicultural and multilingual environment: An explorative study of foreign employees and their spouses in the Swiss context. *The International Journal of Human Resource Management*, 26(10), 1335-1359.
- Rehg, M. T., Gundlach, M. J., & Grigorian, R. A. (2012). Examining the influence of cross-cultural training on cultural intelligence and specific self-efficacy. *Cross Cultural Management: An International Journal*, 19(2), 215-232.
- Reichers, A. E. (1985). A review and reconceptualization of organizational commitment. *Academy of management review*, 10(3), 465-476.
- Richardson, J., & Mallon, M. (2005). Career interrupted? The case of the self-directed expatriate. *Journal of World Business*, 40(4), 409-420.
- Richter, N. F., Cepeda, G., Roldán, J. L., & Ringle, C. M. (2016). European management research using partial least squares structural equation modeling (PLS-SEM). *European Management Journal*, 34(6), 589-597.
- Ringle, C. M., Sarstedt, M., & Straub, D. (2012). A critical look at the use of PLS-SEM in MIS Quarterly.
- Robie, C., & Ryan, A. M. (1996). Structural equivalence of a measure of cross-cultural adjustment. *Educational and psychological measurement*, 56(3), 514-521.
- Robins, J. A., Tallman, S., & Fladmoe-Lindquist, K. (2002). Autonomy and dependence of international cooperative ventures: An exploration of the strategic performance of US ventures in Mexico. *Strategic Management Journal*, 23(10), 881-901.
- Rockstuhl, T., Seiler, S., Ang, S., Van Dyne, L., & Annen, H. (2011). Beyond general intelligence (IQ) and emotional intelligence (EQ): The role of cultural intelligence (CQ) on cross-border leadership effectiveness in a globalized world. *Journal of Social Issues*, 67(4), 825-840.
- Rosen, B., & Jerdee, T. H. (1973). The influence of sex-role stereotypes on evaluations of male and female supervisory behavior. *Journal of Applied Psychology*, 57(1), 44.
- Rosenzweig, P. M. (1994). The new "American challenge": Foreign multinationals in the United States. *California Management Review*, 36(3), 107-123.
- Ru Hsu, Y. (2011). Work-family conflict and job satisfaction in stressful working environments: The moderating roles of perceived supervisor support and internal locus of control. *International journal of manpower*, 32(2), 233-248.
- Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), 54-67.
- Sadeghi, A., & Pihie, Z. A. L. (2012). Transformational leadership and its predictive effects on leadership effectiveness. *International Journal of Business and Social Science*, 3(7).
- Salamin, X., & Davoine, E. (2015). International adjustment of female vs male business expatriates. A replication study in Switzerland. *Journal of Global Mobility*, 3(2), 183-212.

- Salancik, G. R. (1977). Commitment and the control of organizational behavior and belief. *New directions in organizational behavior*, 1, 54.
- Salgado, J. F., & Bastida, M. (2017). Predicting expatriate effectiveness: The role of personality, cross-cultural adjustment, and organizational support. *International Journal of Selection and Assessment*, 25(3), 267-275.
- Sambasivan, M., Sadoughi, M., & Esmaeilzadeh, P. (2017). Investigating the factors influencing cultural adjustment and expatriate performance: The case of Malaysia. *International Journal of Productivity and Performance Management*, 66(8), 1002-1019.
- Sarstedt, M., Ringle, C. M., Smith, D., Reams, R., & Hair Jr, J. F. (2014). Partial least squares structural equation modeling (PLS-SEM): A useful tool for family business researchers. *Journal of Family Business Strategy*, 5(1), 105-115.
- Sasatanun, P., & Charoensukmongkol, P. (2016). Antecedents and outcomes associated with social media use in customer relationship management of Thai microenterprises. *International Journal of Technoentrepreneurship*, 3(2), 127-149.
- Scholz, T. M. (2012). Talent management in the video game industry: The role of cultural diversity and cultural intelligence. *Thunderbird International Business Review*, 54(6), 845-858.
- Seak, N., & Enderwick, P. (2008). The management of New Zealand expatriates in China. *The International Journal of Human Resource Management*, 19(7), 1298-1313.
- Selmer, J. (2001). Antecedents of expatriate/local relationships: pre-knowledge vs socialization tactics. *International Journal of Human Resource Management*, 12(6), 916-925.
- Selmer, J. (2006). Adjustment of business expatriates in Greater China: A strategic perspective. *The International Journal of Human Resource Management*, 17(12), 1994-2008.
- Selmer, J., & Luring, J. (2015). Host country language ability and expatriate adjustment: The moderating effect of language difficulty. *The International Journal of Human Resource Management*, 26(3), 401-420.
- Selmer, J., & Luring, J. (2016). Work engagement and intercultural adjustment. *International Journal of Cross Cultural Management*, 16(1), 33-51.
- Shaban, A. (2016). Managing and Leading a Diverse Workforce: One of the Main Challenges in Management. *Procedia-Social and Behavioral Sciences*, 230, 76-84.
- Shaffer, M. A., & Harrison, D. A. (1998). EXPATRIATES'PSYCHOLOGICAL WITHDRAWAL FROM INTERNATIONAL ASSIGNMENTS: WORK, NONWORK, AND FAMILY INFLUENCES. *Personnel psychology*, 51(1), 87-118.
- Shanock, L. R., & Eisenberger, R. (2006). When supervisors feel supported: Relationships with subordinates' perceived supervisor support, perceived organizational support, and performance. *Journal of Applied psychology*, 91(3), 689.
- Sharma, N., & Hussain, D. (2017). Current Status and Future Directions for Cultural Intelligence. *Journal of Intercultural Communication Research*, 46(1), 96-110.



- Shay, J. P., & Baack, S. (2006). An empirical investigation of the relationships between modes and degree of expatriate adjustment and multiple measures of performance. *International Journal of Cross Cultural Management*, 6(3), 275-294.
- Shay, J. P., & Tracey, J. B. (2009). Expatriate adjustment and effectiveness: The mediating role of managerial practices. *Journal of International Management*, 15(4), 401-412.
- Shi, L., & Wang, L. (2014). The culture shock and cross-cultural adaptation of Chinese expatriates in international business contexts. *International Business Research*, 7(1), 23.
- Shin, S. J., Morgeson, F. P., & Campion, M. A. (2007). What you do depends on where you are: Understanding how domestic and expatriate work requirements depend upon the cultural context. *Journal of International Business Studies*, 38(1), 64-83.
- Shupe, E. I. (2007). Clashing cultures: A model of international student conflict. *Journal of Cross-Cultural Psychology*, 38(6), 750-771.
- Siders, M. A., George, G., & Dharwadkar, R. (2001). The relationship of internal and external commitment foci to objective job performance measures. *Academy of Management Journal*, 44(3), 570-579.
- Smith, P. B., Peterson, M. F., & Schwartz, S. H. (2002). Cultural values, sources of guidance, and their relevance to managerial behavior: A 47-nation study. *Journal of cross-cultural Psychology*, 33(2), 188-208.
- Snape, E., Chan, A. W., & Redman, T. (2006). Multiple commitments in the Chinese context: Testing compatibility, cultural, and moderating hypotheses. *Journal of Vocational Behavior*, 69(2), 302-314.
- Solomon, A., & Steyn, R. (2017). Leadership style and leadership effectiveness: Does cultural intelligence moderate the relationship? *Acta Commercii*, 17(1), 1-13.
- Sonesh, S. C., & DeNisi, A. S. (2016). The categorization of expatriates and the support offered by host country nationals. *Journal of Global Mobility*, 4(1), 18-43.
- Sorndee, K., Siengthai, S., & Swierczek, F. W. (2017). Closing cultural distance: the cultural adaptability in Chinese-related firms in Thailand. *Journal of Asia Business Studies*, 11(2), 229-250.
- Spector, P. E., Cooper, C. L., Sanchez, J. I., O'Driscoll, M., Sparks, K., Bernin, P., . . . Lu, L. (2001). Do national levels of individualism and internal locus of control relate to well-being: an ecological level international study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 22(8), 815-832.
- Spencer-Oatey, H. (2008). Face,(im) politeness and rapport. *Culturally speaking: Culture, communication and politeness theory*, 2.
- Sriussadaporn, R. (2006). Managing international business communication problems at work: a pilot study in foreign companies in Thailand. *Cross Cultural Management: An International Journal*, 13(4), 330-344.
- Stahl, G. K., Miska, C., Lee, H.-J., & De Luque, M. S. (2017). The upside of cultural differences: Towards a more balanced treatment of culture in cross-cultural management research. *Cross Cultural & Strategic Management*, 24(1), 2-12.
- Sternberg, R. J., & Detterman, D. K. (1986). *What is intelligence? Contemporary viewpoints on its nature and definition*. Norwood: NJ: Ablex.
- Sternberg, R. J., & Grigorenko, E. L. (2006). Cultural intelligence and successful intelligence. *Group & Organization Management*, 31(1), 27-39.

- Stevens, R. H., & Ogunji, E. (2011). Preparing business students for the multi-cultural work environment of the future: A teaching agenda. *International Journal of Management*, 28(2), 528.
- Stinglhamber, F., & Vandenberghe, C. (2003). Organizations and supervisors as sources of support and targets of commitment: A longitudinal study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 24(3), 251-270.
- Stroh, L. K., & Caligiuri, P. M. (1998). Increasing global competitiveness through effective people management. *Journal of World Business*, 33(1), 1-16.
- Subramaniam, A., Ramalu, I., Wei, C. C., & Rose, R. C. (2011). The effects of cultural intelligence on cross-cultural adjustment and job performance amongst expatriates in Malaysia. *International Journal of Business and Social Science*, 2(9).
- Suthatorn, P., & Charoensukmongkol, P. (2018). Cultural intelligence and airline cabin crews members' anxiety: The mediating roles of intercultural communication competence and service attentiveness. *Journal of Human Resources in Hospitality & Tourism*, 17(4), 423-444. doi:10.1080/15332845.2018.1449559
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. *The social psychology of intergroup relations*, 33(47), 74.
- Takeuchi, R., Yun, S., & Tesluk, P. E. (2002). An examination of crossover and spillover effects of spousal and expatriate cross-cultural adjustment on expatriate outcomes. *Journal of applied psychology*, 87(4), 655.
- Tanaka, N. (1991). An investigation of apology: Japanese in comparison with Australian. *Meikai Journal*, 4, 35-53.
- Tanchaitranon, N., & Charoensukmongkol, P. (2016). Effects of global networks and the foreign migrant workforce on Thai SMEs' satisfaction with their export performance: the mediating role of international knowledge. *International Journal of Globalisation and Small Business*, 8(3), 251-268.
- Taylor, S., Beechler, S., & Napier, N. (1996). Toward an integrative model of strategic international human resource management. *Academy of Management review*, 21(4), 959-985.
- Taylor, S. N., & Hood, J. N. (2011). It may not be what you think: Gender differences in predicting emotional and social competence. *Human Relations*, 64(5), 627-652.
- Templer, K. J., Tay, C., & Chandrasekar, N. A. (2006). Motivational cultural intelligence, realistic job preview, realistic living conditions preview, and cross-cultural adjustment. *Group & Organization Management*, 31(1), 154-173.
- Thomas, D. C. (2006). Domain and development of cultural intelligence: The importance of mindfulness. *Group & Organization Management*, 31(1), 78-99.
- Thomas, D. C., Elron, E., Stahl, G., Ekelund, B. Z., Ravlin, E. C., Cerdin, J.-L., . . . Lazarova, M. B. (2008). Cultural Intelligence. *International Journal of Cross Cultural Management*, 8(2), 123-143. doi:10.1177/1470595808091787
- Tremblay, M., & Gibson, M. (2016). The role of humor in the relationship between transactional leadership behavior, perceived supervisor support, and citizenship behavior. *Journal of Leadership & Organizational Studies*, 23(1), 39-54.
- Tremblay, M., Vandenberghe, C., & Doucet, O. (2013). Relationships between leader-contingent and non-contingent reward and punishment behaviors and subordinates' perceptions of justice and satisfaction, and evaluation of the

- moderating influence of trust propensity, pay level, and role ambiguity. *Journal of Business and Psychology*, 28(2), 233-249.
- Triandis, H. C. (1994). *Culture and Social Behavior*. New York: McGraw-Hill.
- Triandis, H. C. (2003). The future of workforce diversity in international organisations: A commentary. *Applied Psychology*, 52(3), 486-495.
- Triandis, H. C. (2006). Cultural intelligence in organizations. *Group & Organization Management*, 31(1), 20-26.
- Tsai, C.-J., Carr, C., Qiao, K., & Supprakit, S. (2019). Modes of cross-cultural leadership adjustment: adapting leadership to meet local conditions and/or changing followers to match personal requirements? *The International Journal of Human Resource Management*, 30(9), 1477-1504.
- Tsui, A. S., Egan, T. D., & O'Reilly III, C. A. (1992). Being different: Relational demography and organizational attachment. *Administrative science quarterly*, 549-579.
- Tsui, A. S., Egan, T. D., & Xin, K. R. (1995). *Diversity in organizations: Lessons from demography research*. Paper presented at the An earlier version of this chapter was presented as a paper at the American Psychological Society meeting, Chicago, IL, Jun 1993.
- Tu, Y.-K., Gunnell, D., & Gilthorpe, M. S. (2008). Simpson's Paradox, Lord's Paradox, and Suppression Effects are the same phenomenon—the reversal paradox. *Emerging themes in epidemiology*, 5(1), 2.
- Tuan, L. T. (2015). Entrepreneurial orientation and competitive intelligence: cultural intelligence as a moderator. *Journal of Research in Marketing and Entrepreneurship*, 17(2), 212-228.
- Tung, R. L. (1987). Expatriate assignments: Enhancing success and minimizing failure. *The Academy of Management Executive (1987-1989)*, 117-125.
- Tungli, Z., & Peiperl, M. (2009). Expatriate practices in German, Japanese, UK, and US multinational companies: A comparative survey of changes. *Human Resource Management*, 48(1), 153-171.
- Turner, J. C. (1981). The experimental social psychology of intergroup behavior. *Intergroup behaviour*, 66.
- Usunier, J.-C. (2011). Language as a resource to assess cross-cultural equivalence in quantitative management research. *Journal of World Business*, 46(3), 314-319.
- Van Knippenberg, D., & Hogg, M. A. (2003). A social identity model of leadership effectiveness in organizations. *Research in organizational behavior*, 25, 243-295.
- Van Lange, P. A., Rusbult, C. E., Drigotas, S. M., Arriaga, X. B., Witcher, B. S., & Cox, C. L. (1997). Willingness to sacrifice in close relationships. *Journal of personality and social psychology*, 72(6), 1373.
- Van Rinsum, M., & Verbeeten, F. H. (2012). The impact of subjectivity in performance evaluation practices on public sector managers' motivation. *Accounting and Business Research*, 42(4), 377-396.
- Van Vianen, A. E., Shen, C. T., & Chuang, A. (2011). Person–organization and person–supervisor fits: Employee commitments in a Chinese context. *Journal of Organizational Behavior*, 32(6), 906-926.
- Vandenberghe, C., & Bentein, K. (2009). A closer look at the relationship between affective commitment to supervisors and organizations and turnover. *Journal of Occupational and organizational psychology*, 82(2), 331-348.



- Vardiman, P. D., Houghton, J. D., & Jinkerson, D. L. (2006). Environmental leadership development: Toward a contextual model of leader selection and effectiveness. *Leadership & Organization Development Journal*, 27(2), 93-105.
- Vijayakumar, P. B., & Cunningham, C. J. (2016). Cross-cultural adjustment and expatriation motives among Indian expatriates. *Journal of Global Mobility: The Home of Expatriate Management Research*, 4(3), 326-344.
- Vlajčić, D., Caputo, A., Marzi, G., & Dabić, M. (2018). Expatriates managers' cultural intelligence as promoter of knowledge transfer in multinational companies. *Journal of Business Research*.
- Vlajčić, D., Caputo, A., Marzi, G., & Dabić, M. (2019). Expatriates managers' cultural intelligence as promoter of knowledge transfer in multinational companies. *Journal of Business Research*, 94, 367-377.
- Vroom, V. H., & Jago, A. G. (2007). The role of the situation in leadership. *American psychologist*, 62(1), 17.
- Wang, D., Fan, D., Freeman, S., & Zhu, C. J. (2017). Exploring cross-cultural skills for expatriate managers from Chinese multinationals: Congruence and contextualization. *Asia Pacific Journal of Management*, 34(1), 123-146.
- Wang, D., Feng, T., Freeman, S., Fan, D., & Zhu, C. J. (2014). Unpacking the "skill-cross-cultural competence" mechanisms: Empirical evidence from Chinese expatriate managers. *International Business Review*, 23(3), 530-541.
- Ward, C., Okura, Y., Kennedy, A., & Kojima, T. (1998). The U-curve on trial: A longitudinal study of psychological and sociocultural adjustment during cross-cultural transition. *International Journal of Intercultural Relations*, 22(3), 277-291.
- Wasti, S. A., & Can, Ö. (2008). Affective and normative commitment to organization, supervisor, and coworkers: Do collectivist values matter? *Journal of Vocational Behavior*, 73(3), 404-413.
- Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader-member exchange: A social exchange perspective. *Academy of Management journal*, 40(1), 82-111.
- Webb, A. (1996). The expatriate experience: implications for career success. *Career Development International*, 1(5), 38-44.
- Wieselquist, J., Rusbult, C. E., Foster, C. A., & Agnew, C. R. (1999). Commitment, pro-relationship behavior, and trust in close relationships. *Journal of personality and social psychology*, 77(5), 942.
- Witt, L., Kacmar, K. M., & Andrews, M. C. (2001). The interactive effects of procedural justice and exchange ideology on supervisor-rated commitment. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, 22(5), 505-515.
- Wong, Y.-T., & Lui, H.-K. (2007). How to improve employees' commitment to their line manager-a practical study in a Chinese joint venture. *Journal of General Management*, 32(3), 61-77.
- Worchel, S. (2005). Culture's role in conflict and conflict management: Some suggestions, many questions. *International Journal of Intercultural Relations*, 29(6), 739-757.
- Wu, P.-C., & Ang, S. H. (2011). The impact of expatriate supporting practices and cultural intelligence on cross-cultural adjustment and performance of expatriates in

- Singapore. *The International Journal of Human Resource Management*, 22(13), 2683-2702.
- Yamazaki, Y. (2010). Expatriate adaptation. *Management International Review*, 50(1), 81-108.
- Yamazaki, Y., & Kayes, D. C. (2004). An experiential approach to cross-cultural learning: A review and integration of competencies for successful expatriate adaptation. *Academy of Management Learning & Education*, 3(4), 362-379.
- Yitmen, I. (2013). Organizational cultural intelligence: A competitive capability for strategic alliances in the international construction industry. *Project Management Journal*, 44(4), 5-25.
- Yläne, V. (2008). Communication accommodation theory. *Culturally Speaking: Culture, Communication, and Politeness Theory (2nd edn pp. 164–186)*. London: Continuum.
- Yoder, S., Visich, J. K., & Rustambekov, E. (2016). Lessons learned from international expansion failures and successes. *Business Horizons*, 59(2), 233-243.
- Yoo, W., Mayberry, R., Bae, S., Singh, K., He, Q. P., & Lillard Jr, J. W. (2014). A study of effects of multicollinearity in the multivariable analysis. *International journal of applied science and technology*, 4(5), 9.
- Young, C. A., Haffeejee, B., & Corsun, D. L. (2017). The relationship between ethnocentrism and cultural intelligence. *International Journal of Intercultural Relations*, 58, 31-41.
- Yukl, G., Gordon, A., & Taber, T. (2002). A hierarchical taxonomy of leadership behavior: Integrating a half century of behavior research. *Journal of Leadership & Organizational Studies*, 9(1), 15-32.
- Yukl, G. A. (1994). *Leadership in organizations*: Pearson Education India.
- Yukl, G. A. (2013). *Leadership in organizations*: Pearson Education India.
- Yukongdi, V. (2010). A study of Thai employees' preferred leadership style. *Asia pacific business review*, 16(1-2), 161-181.
- Zacher, H., Rosing, K., Henning, T., & Frese, M. (2011). Establishing the next generation at work: Leader generativity as a moderator of the relationships between leader age, leader-member exchange, and leadership success. *Psychology and aging*, 26(1), 241.
- Zander, L., Mockaitis, A. I., & Butler, C. L. (2012). Leading global teams. *Journal of World Business*, 47(4), 592-603.
- Zhang, X., & Daly, K. (2011). The determinants of China's outward foreign direct investment. *Emerging markets review*, 12(4), 389-398.
- Zhang, Y. (2013). Expatriate development for cross-cultural adjustment: Effects of cultural distance and cultural intelligence. *Human Resource Development Review*, 12(2), 177-199.
- Zhao, S., Liu, Y., & Zhou, L. (2016). How does a boundaryless mindset enhance expatriate job performance? The mediating role of proactive resource acquisition tactics and the moderating role of behavioural cultural intelligence. *The International Journal of Human Resource Management*, 1-25.



## APPENDIX 1



ที่ ศธ ๐๕๒๖.๑๔/๐๐๐๐ ๙

วิทยาลัยนานาชาติ  
สถาบันบัณฑิตพัฒนบริหารศาสตร์  
คลองจั่น บางกะปิ กทม. ๑๐๒๔๐

๙ มกราคม ๒๕๖๒

เรื่อง ขอความร่วมมือในการเก็บข้อมูลวิจัย

เรียน

หนังสือฉบับนี้เพื่อยืนยันว่า Miss Guang XiaoYun เป็นนักศึกษาปริญญาเอกของวิทยาลัยนานาชาติ สถาบันบัณฑิตพัฒนบริหารศาสตร์ (นิด้า) อยู่ระหว่างการดำเนินงานวิจัยเกี่ยวกับการบริหารจัดการของบริษัทข้ามชาติในประเทศไทย ซึ่งเป็นส่วนหนึ่งของคณาจารย์นิพนธ์ระดับปริญญาเอก โดยมีผู้ช่วยศาสตราจารย์ ดร.พีรยุทธ เจริญสุขมงคล เป็นที่ปรึกษาวิจัย ในการนี้ผู้วิจัยมีความจำเป็นต้องขอเก็บข้อมูลวิจัยด้วยแบบสอบถามจากท่าน

จึงเรียนมาเพื่อขอความอนุเคราะห์จากท่านโปรดอนุญาตให้ผู้วิจัยได้ทำการเก็บข้อมูลวิจัยดังกล่าวเพื่อประโยชน์ทางวิชาการต่อไป หากท่านมีข้อสงสัยประการใดสามารถติดต่อที่ปรึกษาวิจัย ผู้ช่วยศาสตราจารย์ ดร.พีรยุทธ เจริญสุขมงคล ได้ที่เบอร์โทรศัพท์ ๐๒-๗๒๗-๓๕๒๖ ในเวลาราชการ หรือติดต่อทางอีเมลได้ที่ peerayuth.c@nida.ac.th

ขอขอบคุณมาในโอกาสนี้

ขอแสดงความนับถือ

(รองศาสตราจารย์ดร.ไพบุลย์ ภูริเวทย์)  
รักษาราชการแทนคณบดีวิทยาลัยนานาชาติ

สำนักงานเลขานุการวิทยาลัย  
โทร. ๐ ๒๗๒๗ ๓๕๒๖

## APPENDIX 2



编号教育部 0526.14/ 00011

国际学院  
泰国国家发展管理研究院  
KlongchanBangkapi Bangkok 10240

佛历 2562 年 1 月

主旨 敬请协助论文究资的资料收集

尊敬的先生/女士

此函证明光晓赞女士为泰国国家发展管理研究院国际学院 (ICONIDA) 博士生。由于现正她正在进行研究有关跨国公司在泰国的经营管理，作为其博士论文的研究分析，并有学院的指导教授 Asst. Prof. Dr. Peerayuth Charoensukmongkol 为该博士论文的导师。

因此，ICONIDA 敬希望贵方将给予协助及支持，并承诺该研究所收集的信息和数据将绝对保密，且只作为学术研究的用途。若贵方有任何的疑问，将可在工作时间内向她的导师 Asst. Prof. Dr. Peerayuth Charoensukmongkol 发出问题，电话号码 0-2727-3526 或直接发邮件到她导师的油箱地址 [peerayuth.c@nida.ac.th](mailto:peerayuth.c@nida.ac.th)。

非常感谢您的合作。

此致敬礼

Assoc. Prof. Dr. Piboon Puriveth  
国际学院院长（代）

国际学院秘书办公室  
电话号码 0-2727-3526

## APPENDIX 3

### Questionnaire -- English

Dear Respondents,

I am Guang Xiaoyun, currently taking my Doctor of Philosophy in Management at International College of NIDA (ICO NIDA) Thailand. I am conducting a study on Chinese Expatriates in Thailand. I would like to request your participation in my study by completing the survey questions below.

This questionnaire is completely anonymous, and whatever information you furnish will be dealt with utmost confidentiality. Please answer the questions as honestly as possible. There are no *right* or *wrong* answers. Thank you very much!

#### Part 1

##### Personal Information

For each of the following items, please place a check mark ☒ onto the appropriate box.

1. Gender

☐ Male

☐ Female

2. Age \_\_\_\_\_ years old

3. Job Tenure in current position

☐ less than 1 year

☐ 1—2 years

☐ 3-4 years

☐ 5—6 years

☐ 7—8 years

☐ 9—10 years

☐ more than 10 years

4. Job function

☐ Production

☐ Marketing/Sales

☐ Finance/Accounting

☐ Human Resources

☐ IT

☐ Others, please specify \_\_\_\_\_

## 5. Industry

- ☐ Manufacturing    ☐ Food    ☐ Service    ☐ Airline  
☐ Others, please specify \_\_\_\_\_

**Part 2**

Please evaluate your Thai language ability in the following aspects	No ability	Limited ability	Average ability	Above average ability	Excellent ability
Using Thai language in general					
Writing in Thai language					
Speaking Thai language					
Reading and understanding Thai language					
Listening to Thai language					
To what extent you agree with the following statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I know the legal and economic systems of other cultures.					
I know the rules (e.g., vocabulary, grammar) of other languages.					
I know the cultural values and religious beliefs of other cultures.					
I know the marriage systems of other cultures.					
I know the arts and crafts of other cultures.					
I know the rules for expressing non-verbal behaviors in other culture.					
I am conscious of the cultural knowledge I use when interacting					

To what extent you agree with the following statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
<b>with people with different cultural backgrounds.</b>					
<b>I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.</b>					
<b>I am conscious of the cultural knowledge I apply to cross-cultural interaction.</b>					
<b>I check the accuracy of my cultural knowledge as I interact with people from different cultures.</b>					
<b>I enjoy interacting with people from different cultures.</b>					
<b>I am confident that I can socialize with locals in a culture that is unfamiliar to me.</b>					
<b>I am sure I can deal with the stress of adjusting to culture that is new to me.</b>					
<b>I enjoy living in cultures that are unfamiliar to me.</b>					
<b>I am confident that I can get accustomed to the shopping conditions in a different culture.</b>					
<b>I change my verbal behavior (e.g., accent, tone) when a cross-interaction requires it.</b>					



To what extent you agree with the following statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I use pause and silence differently to suit different cross-cultural situations.					
I vary the rate of my speaking when a cross-cultural situation requires it.					
I change my non-verbal behavior when a cross-cultural situation requires it.					
I alter my facial expressions when a cross-cultural interaction requires it.					
To what extent you can adjust to each of these aspects when working in Thailand	Completely Unadjusted	Not Adjusted	Neutral	Adjusted	Completely Adjusted
Living condition in general					
Housing conditions					
Food					
Shopping					
Cost of living					
Entertainment/recreation					
facilities and opportunities					
Health care facilities					
Specific job responsibilities					
Performance standards and					
expectations					
Supervisory responsibilities					

To what extent you can adjust to each of these aspects when working in Thailand		Completely Unadjusted	Not Adjusted	Neutral	Adjusted	Completely Adjusted
Socializing with host nationals						
Interacting with host nationals on a day-to-day basis						
Interacting with host national outside of work						
Speaking with host nationals						

## APPENDIX 4

## Questionnaire – Chinese

个人信息，请选择符合您情况的选项。

1. 性别 ☐ 男 ☐ 女
2. 年龄 \_\_\_\_\_ 岁
3. 在目前工作职位的任期 ☐ 少于一年 ☐ 1-2年 ☐ 3-4年 ☐ 5-6年 ☐ 7-8年 ☐ 9-10年 ☐ 10年以上
4. 工作职能 ☐ 生产 ☐ 市场/销售 ☐ 金融/会计 ☐ 人力资源 ☐ 信息技术  
其它，请写明\_\_\_\_\_
5. 所在行业 ☐ 制造业 ☐ 食品业 ☐ 服务业 ☐ 航空业 其它,请写明\_\_\_\_\_

请从以下几个方面评估你的泰语能力	完全不会	不会	中等水平	良好	非常好
一般使用泰语能力					
泰语写作					
泰语会话					
泰语阅读和理解					
泰语听力					
你在多大程度上同意下面的说法	完全不同意	不同意	中立	同意	完全同意

我了解其它文化中的法律和经济体系

我了解其它语言的规则（比如词汇、语法）

我了解其它文化中的文化价值观和宗教信仰

请从以下几个方面评估你的泰语能力	完全	不	中等	良	非常
	不会	会	水平	好	好

我了解其它文化中的婚姻体系

我了解其它文化的艺术和手工艺品

我了解其它文化中表达非语言行为的规则

当我与来自不同文化背景的人交往时，我知道要使用不同的文化知识

当与陌生文化中的人们交往时，我会调整自己的文化行为习惯

当我要与我文化背景不同的人交往时，我会意识到他们的文化习惯

当我和不同文化背景的人交往时，我会检查我的行为是否符合他们的文化习惯

我喜欢与来自不同文化背景的人交往

我相信在自己不熟悉的文化中也能和当地人进行交往

我确信自己能够承受因适应新文化而带来的压力

我享受居住在不熟悉的文化环境中的乐趣

我相信我能适应不同文化下的购物条件/环境

当跨文化交往需要时，我能改变我的言语行为（比如语调，口音等）以便适应对方

为适应不同的文化，我在交流过程中运用的停顿和沉默也会有所不同

为适应不同的文化，我调整我说话的速度

请从以下几个方面评估你的泰语能力	完全不会	不会	中等水平	良好	非常好
为适应不同的文化，我改变我的的非言语行为					
为适应不同的文化，我使用不同的面部表情					
在泰国工作时，你能在多大程度上适应这些方面	完全不应	不适	中立的	适	完全适应
总体生活环境					
住房条件					
食物					
购物					
生活成本					
娱乐设施和机会					
健康医疗设施					
具体工作职责					
绩效标准和预期					
监管职责					
与当地人的社交活动					
与当地人的日常活动					
非工作场合与当地人的活动					
与当地人的交谈					



## APPENDIX 5

### Questionnaire -- Thai

เรียน ท่านที่เคารพ

แบบสอบถามนี้เป็นส่วนหนึ่งของงานวิจัยระดับปริญญาเอก เพื่อศึกษาเกี่ยวกับทัศนคติของบุคลากรที่ทำงานในบริษัทข้ามชาติในประเทศไทย ซึ่งผลที่ได้จากงานวิจัยนี้จะมีประโยชน์อย่างยิ่งต่อการบริหารจัดการองค์กรให้มีประสิทธิภาพ ดังนั้นทางผู้วิจัยขอความกรุณาท่านช่วยตอบคำถามทั้งหมดตามความเป็นจริงมากที่สุด เพื่อประโยชน์ในทางวิชาการ ท่านสามารถมั่นใจได้ว่าข้อมูลทุกอย่างในแบบสอบถามนี้จะถูกเก็บเป็นความลับเพื่อใช้ในการวิจัยเท่านั้น ซึ่งจะมีเพียงผู้วิจัยเท่านั้นที่สามารถเข้าถึงข้อมูลนี้ได้ ขอขอบพระคุณเป็นอย่างสูงสำหรับความร่วมมือในครั้งนี้

#### ส่วนที่ 1

1. เพศ

☐ ชาย

☐ หญิง

2. อายุ \_\_\_\_\_ ปี

3. อายุงานที่บริษัท

☐ น้อยกว่า 1 ปี

☐ 1—2 ปี

☐ 3—4 ปี

☐ 5—6 ปี

☐ 7—8 ปี

☐ 9—10 ปี

☐ มากกว่า 10 ปี

4. ท่านทำงานให้กับเจ้านายคนจिनคนปัจจุบันของท่านมานานกี่ปี

☐ น้อยกว่า 1 ปี

☐ 1—2 ปี

☐ 3—4 ปี

☐ 5—6 ปี

☐ 7—8 ปี

☐ 9—10 ปี

☐ มากกว่า 10 ปี

## ส่วนที่ 2

ท่านรู้สึกว่าเป็นนายคนจีนของท่านมีลักษณะ	ไม่เห็น	ไม่เห็น	ปาน	เห็น	เห็น
ตามแต่ละข้อนี้อยู่ในระดับใด	ด้วย	ด้วย	กลาง	ด้วย	ด้วย
	อย่างยิ่ง			อย่าง	
				ยิ่ง	
ท่านรู้สึกได้ว่าเจ้านายคนจีนของท่านมีภาวะ					
ผู้นำที่ดี					
เจ้านายคนจีนของท่านแสดงออกถึงการเป็น					
ผู้นำที่ดี					
เจ้านายคนจีนของท่านสามารถทำให้ท่าน					
ทุ่มเทกับการทำงานได้ดี					
โดยรวมแล้วท่านรู้สึกว่าคุณสามารถเชื่อฟัง					
เจ้านายคนจีนของท่านได้อย่างสนิทใจ					

กรุณาประเมินเจ้านายคนจีนของท่านในข้อ	ไม่เห็น	ไม่เห็น	ปาน	เห็น	เห็น
ต่อไปนี้	ด้วย	ด้วย	กลาง	ด้วย	ด้วย
	อย่างยิ่ง			อย่างยิ่ง	

เจ้านายคนจีนของท่านใส่ใจความรู้สึกที่ดี

ของท่าน

เจ้านายคนจีนของท่านแสดงความใส่ใจต่อ

ความเป็นอยู่ที่ดีของท่าน

เจ้านายคนจีนของท่านช่วยเหลือให้พนักงาน

ทุกคนได้มีการพัฒนาศักยภาพ

กรุณาประเมินว่าท่านรู้สึกกับเจ้านายคนจีน	ไม่เห็น	ไม่เห็น	ปาน	เห็น	เห็นด้วย
	ด้วย	ด้วย	กลาง	ด้วย	อย่างยิ่ง

อย่างยิ่ง

ตั้งแต่เริ่มทำงานด้วยกันท่านสามารถรู้สึกได้

ว่าเจ้านายคนจีนของท่านมีค่านิยมในการใช้

ชีวิตและการทำงานที่คล้ายกับท่าน

ท่านพบว่าค่านิยมในการใช้ชีวิตและการ

ทำงานของท่านกับเจ้านายคนจีนของท่านมี

ความคล้ายกัน

ท่านรู้สึกชื่นชมและศรัทธาในแนวคิดและ

หลักปรัชญาการทำงานของเจ้านายคนจีน

ของท่าน

ท่านจะรู้สึกแย่ไปด้วยหากมีคนมาต่อว่า

เจ้านายคนจีนของท่านแบบเสียๆหายๆ

ท่านรู้สึกยินดีที่จะพูดชื่นชมความดีของ

เจ้านายคนจีนของท่านให้เพื่อนๆ ฟัง

ท่านรู้สึกชื่นชมการทำงานและการวางตัว

ของเจ้านายคนจีนของท่านในที่ทำงาน

## BIOGRAPHY

**NAME**

Xiaoyun Guang

**ACADEMIC**

Bachelor's degree major in English from Tianjin Normal University, China

**BACKGROUND**

Master's degree major in Master of Business Administration from SEGi University, Malaysia

Doctoral Degree major in Management from National Institute of Development Administration, Thailand

**EXPERIENCES**

-

