

**CONTRIBUTION OF CULTURAL INTELLIGENCE TO
INTERCULTURAL COMMUNICATION COMPETENCY,
SERVICE ATTENTIVENESS, AND ANXIETY OF
THAI CABIN CREWS**

Pornprom Suthatorn

**A Dissertation Submitted in Partial
Fulfillment of the Requirements for the Degree of
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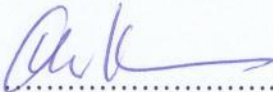
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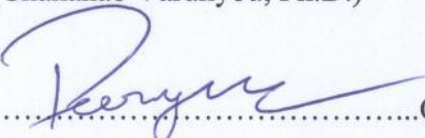
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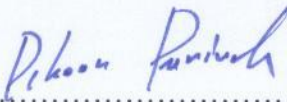
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ABSTRACT

Title of Dissertation	Contribution of Cultural Intelligence to Intercultural Communication Competency, Service Attentiveness, And Anxiety of Thai Cabin Crews
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The concept of cultural intelligence (CQ) has been proposed as a set of skills that allows individuals to deal effectively with culturally diverse situations. Even though the role of CQ have been found in many contexts but only a few focuses on the benefits of CQ for service providers who have to deal regularly with foreign customers. This research will fill this research gap by studying the role of CQ in airline cabin crew members, which is the context that has never been investigated before. The objective of this study is to investigate the relationship between the level of cultural intelligence exhibited by the airline cabin crew members and the degree of anxiety they experienced when serving foreign passengers. Intercultural communication competence and service attentiveness were proposed that the contribution of CQ can be indirectly explained through these two competencies to lower job anxiety. Survey data were collected from 372 Thai airline cabin crew members who worked at a leading international airline in Thailand. The results from a partial least squares regression analysis supported that having CQ allowed the cabin crew members to develop intercultural communication competence and service attentiveness; these two competencies served as the mechanisms that explain why the cabin crew members with high CQ tended to experience lower anxiety when working on stressful international flights.

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CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Cabin crews are frontline staff in airline business who have direct contacts with customers (Albrecht, 1992; Wirtz & Johnston, 2003). Their duties involve safety and service while they are on an aircraft. Cabin crews have to face many challenges. In the part of safety, cabin crews will have to make sure that all passengers are safe and well during each flight. However, they tend to be highly susceptible to health problems and emotional exhaustion from a long haul flight (Kim & Park, 2014). Importantly, one particular problem that creates a lot of anxiety and stress for cabin crew is when they have to serve passengers from various cultures (Ulrey & Amason, 2001). In research, there are evidences indicating that cross-cultural interaction can easily cause uncertainty and anxiety (Gudykunst, 1993; Ulrey & Amason, 2001). Generally, miscommunication and inappropriate interactions that the cabin crew unintentionally demonstrate can create dissatisfaction to foreign passengers which subsequently cause anxiety to cabin crews (Gudykunst, 1993; Ulrey & Amason, 2001).

According to Johnson et al. (2006), one particular competency that can help individuals to alleviate problems in intercultural situation is a cultural competency. The cultural competency is the ability to function effectively in another culture which consists of cultural knowledge, personal skill and attributes (Gertsen, 1990; Johnson et al., 2006). In regard to characteristics of cabin crew's job that have to deal with foreign passengers, cabin crews are required to have broader cultural knowledge to help them interact with passengers from different ethnic groups effectively (Heracleous & Wirtz, 2010). In particular, this research focuses on the aspect of cultural competency in the area of Cultural Intelligence (CQ). CQ is selected for this research because it has been recently proposed as new set of skills that allow

individual to function and manage effectively in culturally diverse setting (Bücker et al., 2014b; Moon, 2013; Van Dyne et al., 2012). CQ is a multidimensional construct targeting situations involving cross-cultural interactions arising from differences in race, ethnicity and nationality (Ang et al., 2007). A person with CQ capability can understand actions of others from different cultures and adapt themselves well into a new cultural setting.

Prior research has found that CQ is a crucial characteristic that enhances cross cultural performance of individual in many areas such as cross-cultural interaction and communication (Thomas et al., 2008; Thomas & Inkson, 2003), leadership performance (Earley et al., 2006; Groves & Feyerherm, 2011; Rockstuhl et al., 2011; Thomas & Inkson, 2003), multinational team performance (Earley et al., 2006; Earley & Peterson, 2004; Thomas & Inkson, 2003), and international performance of export firms (Charoensukmongkol, 2016). CQ is also found to explain performance on service providers in the area that requires cross-cultural interactions in hotel industry (Fakhreidin, 2011). However, the roles of CQ in context of cabin crew has never been investigated. Given the nature of cabin crew's job which has to deal regularly with foreign passengers, CQ might be a skill that is important for them to be more effective in their job, and to help them lower anxiety that could happen from cross-cultural interaction.

1.2 Purpose of the Study

The objective of this study is to investigate the relationship between the level of CQ exhibited by the cabin crew and the degree of job anxiety that they experience when serving foreign passengers. In addition to the direct linkage between CQ and job anxiety, this research proposes that the contribution of CQ can be indirectly explained by two competencies, which are: 1) Intercultural communication competence and 2) Service attentiveness. First, intercultural communication competence is an ability to communicate effectively with people from other cultures (Bennett, 1998). Because some of verbal and non-verbal actions in some cultures may be perceived totally different in another culture (Lee, 2015). Prior research suggested that intercultural communication competence supports persons to communicate in diverse culturally

situations effectively by playing as a significant resource to deal with customer from various cultures (Ulrey & Amason, 2001). Second, service attentiveness is an ability to serve customer to meet their expectation and give them an impression by showing an interest in them and willingness to serve them (Johnston, 1995). However, the diversity of customer's culture makes a situation more complicated because an expectation in service tends to vary by nationality (Lee, 2015). CQ, which is the ability to function well in diverse cultural situations (Bücker et al., 2014b), is proposed in this research as the characteristic of cabin crews that can enhance these two competencies, which subsequently allow cabin crew to experience less anxiety when dealing with foreign passengers.

This research uses two theories for hypothesis development which are the appraisal theory and the job demand-resource (JD-R) model. First, the appraisal theory explains how individual assesses situations concerning their well-being. Persons assess problems that might occur comparing to capabilities that they have. If they have sufficient skills to cope with those problems, stress is less likely to happen (Folkman & Lazarus, 1986). Second, the JD-R model assumes that there are two psychological processes that lead to job stress which are job demand and job resource (Jackson et al., 2006). The excessive job demands and the lack of job resources will lead individuals to job stress and disengagement (Demerouti et al., 2001). If persons have adequate job resource, they will be able to deal with job demands which consequently help them to cope effectively with job stress. On the basis of the appraisal theory, CQ can be the capability that facilitates cabin crews to lower their tendency to perceive cross-cultural service encounter less threatening, as well as to make them to be more confident in cross-cultural interaction. On the basis of the JD-R model, CQ can also be served as an aspect of job resources that allows them to deal effectively with their job demands when serving foreign passengers.

1.3 Research Questions

This study will investigate whether the level of CQ of cabin crews directly relates with lowering job anxiety when serving foreign passengers? In addition to the direct effect of CQ on anxiety, this research will investigate whether the relationship

between the level of CQ that cabin crews exhibit and their level of anxiety can be indirectly explained by the level of intercultural communication competence and the level of service attentiveness associated with CQ?

1.4 Significance of the Study

This research gives academic contributions to existing CQ research. Even though the role of CQ have been found in many contexts but only a few focuses on the benefits of CQ for service providers who have to deal regularly with foreign customers. This research will fill this research gap by studying the role of CQ in cabin crew, which is the context that has never been investigated before. Results from this research will provide extra evidence to prior research regarding the benefits of CQ to employees who work in the service industry, particularly in the airline business. Moreover, this research will provide practical contributions to airlines company/industry. Generally, job stress of cabin crews can negatively affect airline companies because it can lower productivity and service performance of cabin crews. In addition, this issue can lead to turnover problem which can affect the operations of the airline companies. Results from this research will suggest some intervention to help cabin crews develop cultural competency so that they can be more effective in their job and to help them alleviate the level of anxiety that they experience.

CHAPTER 2

LITERATURE REVIEW

2.1 Job Stress in Cross-Cultural Service Providers

According to Lazarus (1966) “Stress arises when individuals perceive that they cannot adequately cope with the demands being made on them or with threats to their well-being”. In particular, service providers in hospitality industry tend to have higher stress more than other workplaces because the irregular work hours, work roles, work interactions and environments, long working hours (‘Sunny’Hu & Cheng, 2010; Karatepe & Ehsani, 2012; Tsaur & Tang, 2012; Wan, 2013). In addition, because service providers in hospitality sector have to have face-to-face contact with end customers, it is inevitably for them to face with demanding customers or to experience customers’ verbal aggressiveness; all of which can make them highly susceptible to psychological distress (Cordes & Dougherty, 1993; Karatepe & Ehsani, 2012; Karatepe & Karatepe, 2009; Tiyce et al., 2013).

The stress that service providers have to encounter tend to be more intense when they have to deal with cultural diverse situation, especially for those who work with people from different cultures because of the norms, value and relationships are different (Gudykunst, 2004). For example, Wang and Mattila (2010) found that culture differences of customers may be a potential stressor to service providers that might lead to actual stress. Additionally, scholars found that the expectation of customers may vary by their nationality (Donthu & Yoo, 1998; Lee, 2015; Wang & Mattila, 2010). For example, Herbig and Genestre (1996) found that in Mexico’s retail industry, US customers tend to have higher expectation regarding service quality comparing to Mexican customers. Wang and Mattila (2010) found that American customers love to chat or even laugh with service providers but Japanese people feel that an interaction between service providers and customers is not polite in their perspective. This situation indicates the difficulty of service providers when

dealing with people from different nationalities due to difference expectations and preferences. If service providers could not adjust their service to particular culture, customer dissatisfaction can easily occur, and that might cause service providers to experience stress.

2.2 Job Stress in Cabin Crews

In particular, cabin crews are among the career group in hospitality industry that have to face with occupational stress (Chen & Chen, 2012; MacDonald et al., 2003). Generally, this career has stresses from a long haul flight and the rapid change of time zone can cause fatigue and biological problems (Lahti et al., 2007). A short haul flight can also cause stress and fatigue due to the airline company need to maximize usage of cabin crews by scheduling many flights per days (Bennett, 2003). For example, Chen and Chen (2012) reported that cabin crews tended to suffer from both physical and emotional reasons due to demanding job characteristics which inevitably require them to work on irregular hours. These reasons made cabin crew more susceptible to job stress which might consequently lead to negative outcome such as turnover intention, health problems, job dissatisfaction (MacDonald et al., 2003). In term of services, they also have to face with high expectation from passengers with diverse cultural backgrounds, especially during international flights. (Chen & Chang, 2005). Inability to understand expectation of people from other cultures may cause occupational stress to cabin crews as well. For example, Sultan and Simpson Jr (2000) found that European passengers perceived that US airlines has lower service quality than their own national airlines and also has higher expectation of service quality. If US airlines fail to adapt themselves to those specific needs, passengers might feel dissatisfaction. Consequently, cabin crews may encounter undesirable situation such as passengers' complaints which might cause a job anxiety.

2.3 Theories of Work-Related Stress

This research will use two theories to explain work-related stress in cabin crews which are 1) appraisal theory and 2) job demand-resource model. Appraisal theory and JD-R model will be discussed as follows.

2.3.1 Appraisal Theory

According to Moors et al. (2013), “appraisal is a process that detects and assesses the significance of the environment for well-being”. The well-being includes individual’s needs, values, goals, belief and other things that individual cares about. The main thrust of the appraisal theory is how persons assess situations and compare to their abilities to cope with those problems to avoid stress (Smith & Lazarus, 1993). This theory has two phases of appraisal which are the primary and secondary appraisal. The primary appraisal is an evaluation of how persons relate to the situation by assessing benefits or problems that might occurred to themselves. The anxiety first begins if a person interprets the situation as a threat to their well-being (Martin & Daniels, 2014). The secondary appraisal is an assessment in their own abilities and knowledge to cope with stressful situations. If they found that they have sufficient skills to deal with those problems, the level of stress that they previously experience in the first process is lessen. In contrast, if they found that they are lack of capabilities to deal with problems, the level of anxiety will intensify (Folkman & Lazarus, 1986).

When applying this theory to explain stress in cabin crew job, the primary appraisal involves the degree to which the cabin crews perceive cross-cultural interaction with foreign passengers as a threatening situation to their wellbeing. Generally, cabin crews can perceive it as a threat due to the difficulty to understand and to satisfy people from other cultures. However, in the secondary appraisal, if they perceive that they have enough capability to deal with foreign passengers, the level of anxiety that they experience at the beginning will be lessened. Otherwise, if they found that they don’t have enough capability, they tend to experience more anxiety in their job.

2.3.2 Job Demand-Resource Model

According to Demerouti et al. (2001), Job Demand-Resource (JD-R) model is a theoretical model which explain how stress is developed in occupations. This model focuses on both positive and negative indicators that may increase or reduce job stress. Job demand-resource model proposes that working conditions can be categorized into two categories; job demand and job resource (Demerouti et al.,

2001). Bakker and Demerouti (2007) defined Job demand as “physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs.” For example, a job may require a person to work in high pressure condition from their supervisor, time pressure or work role (Constable & Russell, 1986; Ohly & Fritz, 2010). Furthermore, job demands tend to be high when individual face with demanding customers who have high expectation. Stressors that employees experience from job demands required greater effort from employees to sustain work quality and performance. Thus, employees who expose to high job demands for a long period of time can experience negative consequences such as fatigue, energy draining or emotional exhaustion (Hockey, 1993).

Job resource is defined as “physical, psychological, social, or organizational aspects of the job that may do any of the followings: 1) functional in achieving work goals, 2) reduce job demands and the associated physiological and psychological costs, 3) stimulate personal growth, learning, and development” (Demerouti et al., 2006, p. 501). Thus, job resource are assets used for achieving work goals, maintaining personal well-being and reducing stress (Jackson et al., 2006). Job resource can be divided into two categories, the first is external resource and the second is internal resource. Some examples of the external resource include job autonomy (i.e. job decision making, job control, task variety), workplace design, organizational management approach and top management’s commitment (Gurt & Elke, 2009). It also includes social resource such as support from colleague, supervisor, organizational management, individual’s peer group or their families. The internal resource referred to personal characteristic, individual’s knowledge in their job or the work sequences in particular job.

The interaction between job demand and job resource is the core mechanism of this model that explain occupational stress (Demerouti et al., 2001). When people trying to cope with their job demands by using the individual’s resources, job resource will be reduced continuously as job demand still existed. If there are adequate resources, individual is able to serve their job without the stress. If there is lack of resource, the stress may occur because people might expect that they cannot achieve

their goal by the resource they possess. Consequently, individuals tend to withdraw or disengage their behavior (Demerouti et al., 2001). JD-R model is a theoretical framework that suggests interventions for organization to help employees overcome job stress by balancing the amount of job demands and job resources that employees expose to. For example, if job tasks are increasing and expecting to exceed employee's capability, the organization should plan to reduce workloads of that position and delegate to others. On the other hand, the organization has to monitor the adequacy of resources of employees which are used to their assigned tasks such as distributing power to make decisions, increasing reward and support from the management (Demerouti et al., 2001). Apart from organization's resource, individual's resource such as knowledge, skills and competencies are considered as important resources that facilitate persons to buffer job demands (Hetty van Emmerik et al., 2012). For example, Bakker et al. (2003) mentioned that if job demands required person to deal with overloaded tasks with time pressure, company should provide more trainings to increase an efficiency of employees and gives an advisory from management for particular complex tasks so that employees can deal with those job demands effectively. The organization that understands this mechanism of JD-R and applies it correctly may help their employees to reduce stress which might lead to wellbeing and improving employees' job performance (Demerouti, 2006; Jackson et al., 2006).

In context of cabin crew, job demands can have several aspects. Apart from the physical and emotional exhaustion caused by a long haul flight, cabin crews have to serve passengers from different cultures, to understand foreign passengers' service expectations, and to solve problems in culturally diverse settings. Cabin crews may require some resources to help them deal with these demands. Specifically, one particular resource required for cabin crews to deal with job demands that they inevitably face when serving foreign passengers is knowledge and skills that allow them to deal effectively with foreign passengers. Literature provides evidence that knowledge and skills may lower cabin crews' job anxiety. For example, Bose and Ye (2013) mentioned that broader range of knowledge helps cabin crews effectively handle a stressful situation. In the present research, the author proposes that one particular skills and competencies that might help cabin crews to deal effectively with

job demands from intercultural interaction with foreign passengers is cultural intelligence. Details about what is cultural intelligence and how it can help cabin crews lower job anxiety from intercultural interaction with foreign passengers will be discussed in the next section.

2.4 Cultural Intelligence

Cultural Intelligence (CQ) has been developed by Earley (2002) based on Sternberg and Sternberg and Detterman (1986) contemporary theory of intelligence. In particular, (Van Dyne et al., 2012) argued that the famous intelligences such as Intelligence Quotient (Schmidt & Hunter, 2000) or Emotional Intelligence (Mayer & Salovey, 1993) which were developed on Sternberg and Letterman's theory are both domain specific. That means those intelligences can be applied within one particular culture (Ng & Earley, 2006; Rockstuhl et al., 2011). In contrast, CQ is a culture-free concept which can be applied universally across culture (Ang et al., 2007; Ng & Earley, 2006). Green and White (1976) suggested that the cross-national research should apply one of two measurement methodologies, emic or etic. Emic is a measurement developed for comparing within one culture (Berry, 1969). Etic is a measurement developed for comparing across culture. According to Pike (1967), "An etic viewpoint studies behavior from outside that system, whereas an emic viewpoint studies behavior from inside the system." In this case, Intelligence Quotient and Emotional Intelligence is likely to be emic and CQ tend to be etic. Ng and Earley (2006) conclude that "CQ is the capability to be effective across, and not just within cultures".

According to Earley and Ang (2003) defined CQ as "a set of capabilities for individual to function effectively in culturally diverse setting". Earley and Ang (2003) conceptualized CQ as a multidimensional construct consist of 4 capabilities; Cognitive CQ, Metacognitive CQ, Motivational CQ and Behavioral CQ. The details of CQ's four element are below.

2.4.1 Cognitive CQ

Cognitive CQ refers to “an individual’s knowledge structures regarding cultural institution, norms, practices and convention in difference culture setting” (Van Dyne et al., 2012). The knowledge can be derived from learning or experiencing personally. The level of cognitive CQ is depending on the degree to which people understand the idea of culture and how it shapes the way you think and behave (Van Dyne et al., 2010). The knowledge of various aspects in each culture help them to understand overall specific culture and the way it differs from one context to another context (Ang et al., 2007). People who have high Cognitive CQ will understand differences of each culture in various aspects and what is an appropriate interaction in particular culture they encounter with (Earley & Mosakowski, 2004).

2.4.2 Metacognitive CQ

The Metacognitive CQ is defined as “a mental process that individual uses to acquire and understand cultural knowledge” (Ang et al., 2007). Earley (2002) mentioned that Metacognitive CQ is “Thinking about thinking”. It is a capability to understand what happens in our own thought and other people’s thought in cross cultural interactions. This aspect provides a control of people’s cognition by not judging others but trying to understand their actions as patterns. If the result of interaction does not match our expectation, our own cognition should be revised. The skill includes the strategy that when we can use our knowledge or planning the topic or specific interaction to suit particular situation. People who have high Metacognitive CQ can detect unusual situations when dealing with people from another culture. They can control their cognition and compare the result of interaction to the cognition they have. They tend to change their response if the situation goes wrong and if it is going well. They adapt it into a new cognition by abandoning preexisting conceptualization of how and why people function the way they do (Earley, 2002).

2.4.3 Motivational CQ

Motivation CQ is defined as “the capability to direct attention and energy toward learning about and functioning in situation characterized by culture difference” (Ang et al., 2007). Earley (2002) suggested that only having knowledge of

cultures is insufficient but the motivation of using knowledge and performing a correct response is important. The self-efficacy is the key of Motivational CQ (Earley, 2002). People who have high self-efficacy will believe in his/her capability to achieve desired goal in novel situation. They will commit to confront obstacles and reengage when they fail with a greater effort (Earley, 2002). People who have high Motivational CQ will feel comfortable and direct their energy to involve in uncertainty culturally diverse situation. They tend to accept new challenges in non-local culture context and more tolerate to the frustration during interaction (Chen et al., 2011a).

2.4.4 Behavioral CQ

Behavioral CQ is defined as “an individual’s capability to enact a wide repertoire of verbal and nonverbal actions when interacting with people from different cultures (Ang & Van Dyne, 2008). Hall (1959) mentioned that “the mental capabilities and motivation must be complemented with ability to perform suitable verbal and non-verbal actions”. The flexibility of verbal and non-verbal actions is essential. Certain actions should be modified before interacting in different cultures (Van Dyne et al., 2010). Because one behavior in one culture might not be appropriate in other culture. For example, personal intimacy or personal space perceived like a good friendship in some cultures but may be perceived as a harassment in the others. The facial expression such as smiling may be recognized as a good hospitality in a particular culture but may be perceived as an inappropriate manner in some cultures. The other behaviors, both verbal and non-verbal, such as words, gestures should be adapted to particular cultures before taking actions (Gudykunst et al., 1988; Van Dyne et al., 2010). People who have high behavioral CQ will know which action is suitable to particular culture they involved in. They tend to adapt their behaviors to suit the given context and they can determine where the particular behavior is needed and how to perform it effectively (Earley, 2002).

2.4.5 Outcome Associated with CQ

CQ has been using to study in many contexts. For instance, expatriates, cultural adaptation, individual and firm performance. CQ enables people from other

cultures to interpret and understand other cultures' thoughts or behaviors as they are local themselves (Van Dyne et al., 2010). To date, the empirical studies of CQ associated with various outcomes has been investigated. For example, individuals with higher CQ tend to have more effectiveness in cross-cultural adaptation (Ang et al., 2007; Chen et al., 2014; Koo Moon et al., 2012; Lee & Sukoco, 2010; Lin et al., 2012; Oolders et al., 2008; Templer et al., 2006; Ward et al., 2011). Higher level of CQ was found to facilitate persons to work effectively in international team (Adair et al., 2013; Mor et al., 2013; Scholz, 2012). A number of scholars found that high CQ persons tended to demonstrate cross-cultural leadership effectiveness (Groves & Feyerherm, 2011; Kim & Van Dyne, 2012; Rockstuhl et al., 2011). Expatriates with higher CQ were found to demonstrate higher job performance in oversea assignment. (Lee & Sukoco, 2010; Ramalu et al., 2012). Studies also showed that firms whose entrepreneurs possessed high level CQ tended to demonstrate higher international capabilities, which in turn, allowed them to achieve satisfactory export performance. (Peerayuth Charoensukmongkol, 2015, 2016). The summary of benefits of CQ found in research are reported in table 2.1.

Table 2.1 Research Outcomes Associated with CQ

Authors	Research Contexts	Findings
Ang et al. (2007)	Students in US and Singapore, International managers and Professional in consulting firms and their supervisors	Metacognitive CQ and Cognitive CQ tend to explain cultural judgment and decision making effectiveness. Motivational CQ and Behavioral CQ have a relation to cultural adaptation-cultural adjustment and wellbeing.
Lin, Chen and Song (2012)	International university students in Taiwan	Students with high CQ tend to have high cross-cultural adjustment

Table 2.1 (Continued)

Authors	Research Contexts	Findings
Chen, Wu and Bian (2014)	International university students in Taiwan	Students with higher CQ capability are likely to exhibit better general adjustment and interaction adjustment.
Templer, Tay and Chandrasekar (2006)	Global professional in small, medium and large enterprise in Singapore	Expatriates with high Motivational CQ tend to have high cross-cultural adjustment. The result indicated that Motivational CQ tend to relate to all 3 facets of cross-cultural adjustment which is General adjustment, work adjustment and interaction adjustment.
Oolders et al. (2008)	Undergraduate Students in New Zealand	Students with CQ ability tend to have higher adaptive performance when interacting with people from others culture.
Moon, Choi and Jung (2012)	Expatriates in top ten Korean Enterprise in South Korea	Expatriates who have a higher CQ tend to exhibit better cross-cultural adaptation.
Lee and Sukoco (2010)	Taiwanese expatriates who have experience overseas more than three years	Expatriates with higher CQ demonstrate better cultural adaptation which in turn, benefits expatriates' performance.

Table 2.1 (Continued)

Authors	Research Contexts	Findings
Ward et al. (2009)	International university students in New Zealand	The researcher found that CQ unables to explain psychological, sociological and academic adaptation of international student. There is no distinction between CQ and Emotional intelligence.
Ward, Wilson and Fischer (2011)	International university students in New Zealand	Motivational CQ tends to relate with sociocultural and psychological problems. Metacognitive CQ tend to associate sociocultural problems.
Ramalu et al. (2012)	Expatriates who currently work and reside in Malaysia	CQ predicted expatriates' cross-cultural adaptation, which in turn, enhanced expatriates' job performance.
Nafei (2013)	Employees of Saudi Arabia Hospital	Employees with high CQ tend to demonstrate higher job performance.
Ziaey Nikpour, Shahrakipour and Karimzadeh (2013)	Academic members in Iran University	Faculty members who have high CQ tend to exhibit more effectiveness in their workplace.
Rockstuhl et al. (2011)	Military leaders and their peers at the Swiss Military Academy, ETH Zurich	CQ explains cross-border leadership effectiveness.

Table 2.1 (Continued)

Authors	Research Contexts	Findings
Kim and Dyne (2011)	People who participated in international professional conference in US.	Respondents with higher CQ tend to have a higher International Leadership Potential.
Adair, Hideg and Spence (2013)	Undergraduate students in Canada	Motivational CQ and Metacognitive CQ enhance shared value of team members of in culturally homogeneous team.
Groves and Feyerherm (2011)	International Leaders who attended MBA program in US and their followers	CQ of leader tends to predict followers' perception of leader performance and team performance in diverse cultures team.
Scholz (2012)	Game developers who work in various country (US, Canada, UK, etc.)	Employee with higher CQ tends to demonstrate higher teamwork quality.
Moon (2013)	Students in a business schools in Korea.	Multicultural teams in which members have higher CQ tend to exhibit a better performance than teams in which members have lower CQ team.
Chen, Lui and Portnoy (2012)	US real estate sales agents	Sales agents with motivational CQ tend to achieve higher cultural sales performance. This relationship is positively moderated by firm Motivational CQ.

Table 2.1 (Continued)

Authors	Research Contexts	Findings
Mor, Morris and Joh (2013)	MBA Students in an American Business Schools	Students who have CQ ability tend to have higher ability to work effectively in their international teams.
Remhof, Gunkel and Schlägel (2013)	German business students	CQ of students positively explain intention to work abroad.
Imai and Gelfand (2010)	American and East Asian negotiators	CQ associated with intercultural negotiation effectiveness.
Bücker, Furore, Poutsma and Buyens (2014)	Chinese managers who work for foreign multinational companies	Managers who have higher CQ may experience lower anxiety.
Peerayuth Charoensukmongkol (2015)	Entrepreneurs of small and medium export firms in Thailand	Firm whose owners exhibited high CQ tend to demonstrate high level of international learning acquisition capability and adaptive capability. International learning acquisition capability was subsequently found to explain better export performance.
Peerayuth Charoensukmongkol (2016)	Entrepreneurs of small and medium export firms in Thailand	Entrepreneurs with high CQ tend to have good relationship with foreign customers, foreign suppliers,

Table 2.1 (Continued)

Authors	Research Contexts	Findings
		and foreign competitors. Good Relationship with foreign customers and foreign suppliers were subsequently found to explain better export performance.

2.5 Intercultural Communication Competence

According to Bush et al. (2001), intercultural communication competence is defined as “an impression that message behavior is appropriate and effective in a given context”. There are two elements in this concept which is “effectiveness” and “appropriateness” (Bennett, 1998; Bradford et al., 1998; Kim, 2004; Spitzberg, 2000). Effectiveness is an accomplishment of value, goal and reward relatively to cost and alternatives (Spitzberg, 2000). Additionally, Kim (2004) describing effectiveness as a successful communication and interaction outcome. Appropriateness is the ability to perform behaviors considered to be proper and acceptable to others in respective situations (Spitzberg & Cupach, 1984). Moreover, Spitzberg (1991) described Appropriateness as “The valued rules, norms, and expectancies of relationship are not violated significantly”.

Spitzberg (1991) mentioned that the dimensions of Intercultural competence are fragmented. Researchers have developed their own dimensions with plenty of labels (Bradford et al., 1998). This study has focused on model of Hammer’s Intercultural communication effectiveness (Hammer et al., 1979) which is a multidimensional construct consisting of three aspect including 1) ability to deal with psychological stress, 2) ability to establish interpersonal relationship and 3) ability to deal with different communication styles. This model is selected because the prior research has shown that it is appropriate to be applied to service providers who work

with customers from culturally diverse background (Hammer, 1987). The model has also applied in different occupational groups such as salesperson (Bush et al., 2001), Health care provider (Ulrey & Amason, 2001), multinational companies' employee (Crossman & Noma, 2013) and university lecturer (Kim, 2004). Thus, this model of intercultural communication competence might be appropriate for this research which involves cabin crews who generally have to interact with passengers from different cultures. The review of each dimension is below.

2.5.1 Dimensions of Intercultural Communication Competence

The first aspect of intercultural communication competence is an ability to deal with psychological stress. Generally, individuals who possess this characteristic tend to have capability to deal with stress occurred effectively in various aspects. For example, individuals can control their emotion and behavior when having an interpersonal conflict with foreign colleagues by not showing their frustration. They can also manage their feelings under pressure from work environment such as unfamiliar social system or pressure from supervisors and customers. They are able to deal with anxiety that caused by cultural or uncertain situations (Gudykunst, 1993; Hammer et al., 1979). The second aspect of intercultural communication competence is an ability to establish interpersonal relationship. Generally, when persons communicate with other people from other cultures, they might not feel comfortable at an initial state of relationship development (Bush et al., 2001). However, people with an ability to establish interpersonal relationship can develop and maintain relationships with other people by trying to understand and empathize with others' feelings. They can work effectively with colleagues from other societies or cultures without dissatisfaction. The relationships between themselves and others can be maintained and developed into a satisfaction stage (Hammer et al., 1979). Lastly, the third aspect of ICC is an ability to deal with different communication styles. The individual with this ability can initiate an interaction with strangers comfortably even there are different communication styles between them and others. The person may effectively deal with communication misunderstandings caused by culture difference. They may use an appropriate dialogue that suits different persons in different situations they are facing. (Hammer et al., 1979).

Because every culture has their own verbal and non-verbal expressions that differ from one to the other (Kim, 1988), service providers have to learn what is appropriate for each culture and communicate with suitable manners. In particular, previous research shows that intercultural communication competence is considered to be an important skill for service providers. For example, Ulrey and Amason (2001) indicated that the effective intercultural communication is an important competence of service providers to deal with culturally diverse customers. Intercultural communication competence was found to be related to perception of services reliability and satisfaction of foreign customers (Ihtiyar & Ahmad, 2015). Redmond and Bunyi (1993) found that international students with high intercultural communication competence are likely to cope with their stress in new cultural environment better than those who are lack of this competency.

2.6 Cultural Intelligence and Intercultural Communication Competence

This research proposes that CQ can be a competency that positively associates with three dimensions of intercultural communication competence. Firstly, CQ might help persons to develop an ability to deal with psychological stress. According to Hammer et al. (1979, p. 390), “[a person] who has developed a high degree of third-culture perspective may be able to deal effectively with the psychological stress” The third culture perspective refers to the ability to understand and interpret ambiguity of unknown cultural action in unfamiliar cultural environment (Hammer et al., 1979). The high degree of third-culture perspective allows persons to capably encounter intercultural situation by understanding the difference from their own culture perspective to host cultural perspective. This ability made persons monitor the interaction as the third person by comparing action and reaction from both side. In particular, CQ can be a skill that facilitate individuals to develop third-culture perspective. Generally, CQ’s dimensions which consist of knowledge, awareness, motivation and ability to demonstrate suitable actions in different cultures (Earley & Ang, 2003) seem to be the capabilities that might help individuals to entirely understand other cultures. Cognitive CQ is a critical aspect of developing third culture perspective because the knowledge of other cultures helps persons to understand what

different thoughts and behaviors of other culture are. These shape how people are different from one culture to the others (Van Dyne et al., 2012). Metacognitive CQ is also important for the third cultural perspective to develop because it provides the ability to detect unfamiliar reactions during and after interaction. It facilitates individuals to learn and question why this action reacts in nonjudgmental way. If the result does not match with their own cognitive, they will withdraw the existing knowledge with a new one (Earley & Ang, 2003). Moreover, individuals with motivational CQ might experience lower psychological stress during intercultural communication because it reflects the level of efficacy of individuals to cope effectively with difficulties that may experience during the interaction (Van Dyne et al., 2010). Even responses from people from another culture is not consistent to their attention, they might reengage and motivate themselves to make another attempts (Van Dyne et al., 2012). Behavioral CQ help persons to exhibit both verbal and non-verbal communication effectively to particular cultures which could make people satisfy with those interactions as if they communicate with persons from their own cultures (Ang et al., 2007). When communicating with persons who feel satisfied, it will be easy to deal and might lower stress from culturally diverse interactions.

Secondly, CQ tend to enhance an ability to establish interpersonal relationship. In particular, persons with high cognitive CQ and metacognitive CQ tend to have sufficient cultural knowledge and ability to adjust their cultural knowledge, which makes them have good understanding about how to build good interpersonal relationship with people from different cultures. (Earley & Ang, 2003). Triandis (2006) studied how metacognitive CQ works as a critical component of relationship development in diverse cultural organization. He found that this aspect of CQ enables persons to enhance their sensitivity to new culture environment and adapt their thoughts to suit that context which they could interpret events occurred accurately. In addition, previous research of Rockstuhl and Ng (2008) also found that cognitive CQ and metacognitive CQ have an effect to relationship building in heterogeneous team. Team members with higher cognitive CQ and metacognitive CQ tend to adjust themselves better with other foreign members than members who has lower metacognitive CQ.

Moreover, motivational CQ might enhance ability to establish interpersonal relationship because it involves intrinsic motivation to engage with intercultural

interaction which makes individuals feel comfortable to initiate a relationship with persons from other cultures (Van Dyne et al., 2010). This motivation may help individuals overcome obstacles that might happen in a very first stage of creating a relationship (Ang et al., 2007). Moreover, Templer et al. (2006, p. 156) mentioned about high motivational CQ person tend to “value novel cultural experiences and enjoy interacting with people from different cultural backgrounds”. This characteristic tends to help individuals to develop good intercultural relationship due to an appreciation of diverse cultural environment which motivates them to keep on interacting with foreigners regularly. Therefore, high motivational CQ persons who see the value of those intercultural relationships are able to control their cognitive and behaviors and sustain energy to establish and maintain good relationship with foreigners persistently (Van Dyne et al., 2012).

Lastly, behavioral CQ can also enhance the ability to establish interpersonal relationship because it allows individuals to demonstrate proper behaviors to satisfy cultural expectations of foreigners (Ang et al., 2007). Generally, persons who have high behavioral CQ tend to adjust their service effectively in diverse culturally setting. Abilities to perform necessary actions and dispose unwanted behaviors to particular culture made them behave as if they were native people to those cultures. Earley and Mosakowski (2004, p. 3) elaborated that “by adopting people’s habits and mannerisms, [you] eventually come to understand in the most elemental way that it is likely to be them”. These characteristics of behavioral CQ can, therefore, contribute to the development of good interpersonal relationship with foreigners.

Thirdly, CQ may increase an ability to deal with different communication styles. In particular, cognitive CQ and metacognitive CQ are important to help individuals achieve this goal because they enhance wide range of knowledge of other cultures and an awareness during interaction, which make them effectively deal with unknown reactions when interacting with people from another culture who demonstrate communication styles that differ from the individuals’ culture (Earley & Ang, 2003).

Additionally, Motivational CQ might increase this aspect of Intercultural communication competence because an adequate knowledge and behavioral competency are not sufficient for success in high diversity culture setting (Earley,

2002). Motivational CQ may drive individuals to apply those crucial skills into difficult culturally situations (Earley & Ang, 2003). Ang et al. (2004) described persons with motivational CQ have high degree of self-efficacy in intercultural interaction. According to Van Dyne et al. (2010, p. 304), explained self-efficacy that “It also includes a sense of confidence to interact with locals who have different cultural backgrounds and confidence to work in culturally diverse groups and settings.” This self-confident characteristic tend to support individual to be more persistent and willing to use more effort especially when dealing with people from various cultures (Hansen et al., 2011). Hence, motivational CQ might enhance an ability to deal with different communication style aspect

Lastly, behavioral CQ supports the ability to deal with different communication styles because it reflects the capability to demonstrate wide range of behaviors when communicating with people from foreign cultures. (Ang et al., 2007). Moreover, individuals with high behavioral CQ are able to exhibit flexible speech acts: the certain words or phrases use when communicate specific type of messages (Van Dyne et al., 2010). Because in different cultures there are many do’s and don’ts actions in communication such as hand gestures or facial expression (Herbig & Kramer, 1992), persons with high behavioral CQ tend to be more effective in this situation because they are able to modify their actions and behaviors preciously (Van Dyne et al., 2012). Given all supports about the roles of CQ which might facilitate individuals to develop intercultural communication competence, the follow hypothesis is presented:

Hypothesis 1: The level of CQ of cabin crews will positively associate with Intercultural communication competence.

2.7 Intercultural Communication Competence and Anxiety of Cabin Crews

This study proposed that intercultural communication competence might relate to lower job anxiety in cabin crews. First, cabin crew with high intercultural communication competence may experience lower job anxiety because the third culture perspective that facilitates them to understand and interprets differences

between cultures in nonjudgmental way (Hammer et al., 1979) tend to make cabin crews cope effectively with stress that might rise from ambiguous actions from culturally diverse passengers. Second, the aspect of ICC that involves an ability to initiate a relationship may help persons avoid job anxiety because persons with this aspect of ICC could work excellently with persons from different cultures (Hammer et al., 1979). Cabin crews with this ability tend to develop relationship with foreign passengers without or with lower job stress. Third, the aspect of ICC that involves the ability to deal with different communication styles can also help cabin crews feel more comfortably to deal with foreign passengers because it allows them to use appropriate dialogs or actions to solve problems and avoid misunderstanding that might rise from cross-cultural communication (Bush et al., 2001). In contrast, cabin crew without intercultural communication competence may easily experience job anxiety because they could not understand other culture communication; and consequently, they might be unable to communicate effectively with people from other cultures. This communication problem can lead to passenger's dissatisfaction and undesirable reactions, which can cause anxiety to the cabin crews. All of these supports lead to second hypothesis:

Hypothesis 2: The level of intercultural communication competence of cabin crews will negatively associate with job anxiety

2.8 Service Attentiveness

The perception in services quality is considered as an important factor in customer perspective (Parasuraman et al., 1985). Previous research indicated that an individualized attention to customers' needs make them feel satisfied in services (Parasuraman et al., 1985). Service attentiveness appeared to be the most affective dimension to customers' satisfaction than others (Johnston, 1995, 1997). According to Johnston (1995, p. 60), service attentiveness was defined as "the extent to which the service, particularly of contact staff, either provides help to the customers or gives the impression of interest in the customers and shows a willingness to serve". The service attentiveness is not equal to providing an actual help to customers but goes beyond than that. Additionally, the researcher investigated that the primary difference

between actual help and impression of service attentiveness is helpfulness (Johnston, 1995). Although, service providers might not have sufficient resources to solve customers' problems but they can show willingness of trying to help which made customers feel impressed (Johnston, 1995). For example, Johnston (1995) indicated the service attentiveness is the most significant factor making customers satisfy in bank services. Jun et al. (2004) found that service attentiveness of online retailers could explain online customers' satisfaction. In restaurant industry, servers with high service attentiveness tend to exhibit better customers' satisfaction (Fitzsimmons & Maurer, 1991; Lee, 2015).

Nonetheless, being attentive to expectations of foreign customers tend to be a complex task due to the expectations of customers that tend to vary by nationalities (Lee, 2015). The example of differences in service attentive expectations in restaurants is how service providers attend to their customers' need after serving meals. Some cultures prefer service providers to ask them about quality of foods, checking for more beverages or frequently go back to the table and see what they can do for favors; however, people from some cultures feel that it is inappropriate and they tend to be uncomfortable about it (Lee, 2015). Similarly, cabin crews are also the occupational groups who have to face with differences in service expectation of foreign passengers. For example, research by Sultan and Simpson Jr (2000) shows that passengers from different cultures tend to expect different service quality from cabin crews. Therefore, if cabin crews can adjust their service to suit particular cultures, these interactions tend to lead to passengers' satisfaction (Sultan & Simpson Jr, 2000).

2.9 Cultural Intelligence and Service Attentiveness

This study proposed that CQ of cabin crews might associate with their ability to demonstrate service attentiveness toward foreign passengers. First, in order to have a clear understand the service expectations of foreign passengers that tend to vary culture-by-culture, it is important for cabin crews to exhibit adequate level of knowledge about cultural characteristics of foreign passengers to precisely predict what they expect from the service provider. Cognitive CQ can be crucial for cabin

crews in this case because it represents the quality of cultural knowledge about foreigners' expectations for various cultures which can help cabin crews to have good understandings about what are the types of service delivery that match with their cultural expectations (Van Dyne et al., 2012). In particular, research suggests that the knowledge of similarity and dissimilarity in service expectations is the key that makes a success in service (Lee, 2015). If cabin crews can understand an expectation from their foreign passengers, they can decide a right service suitable to that culture effectively (Lee, 2015).

In particular, metacognitive CQ seems to be another crucial characteristic of CQ that can enhance service attentiveness. Because knowledge might not be sufficient in complex culturally situations, an awareness during intercultural interactions is an important capability to detect undesirable reactions that mismatch to cabin crews' existing cultural knowledge (Ang et al., 2007). Metacognitive CQ can enhance service attentiveness when dealing with foreigners is by allowing individuals to be mindful during intercultural interactions (Ulrey & Amason, 2001; Van Dyne et al., 2010). When individuals are mindful when interacting with foreigners, they will attend to culturally interaction and not respond automatically but choosing an appropriate knowledge to respond which consist to their intention (Thomas, 2006). Metacognitive CQ, in this regard, supports cabin crews to perform better service by being aware of foreign passengers' expectations in service and adapting their strategy to deal with unexpected or unknown requirements of the foreign passengers (Ang et al., 2007).

Motivational CQ also plays an important role to facilitate service providers to demonstrate good quality of service attentiveness. Service attentiveness is not only taking a good care of passengers' needs but also required personal intrinsic motivation to continue to satisfy their passengers to the level (Van Dyne et al., 2012). Having motivational CQ can enhance the degree of service attentiveness because it provides a sense of self-efficacy which help cabin crew to exert energy to understand and to satisfy service expirations of foreign passengers. According to Earley (2002, p. 278) "highly efficacious people do not require constant rewards to persist in their actions". This characteristic might help cabin crews to achieve cross-cultural service above standard level. Moreover, high motivational CQ persons are goal-oriented and perseverant in culturally interactions, they tend to continue and reengage rather than

withdraw until they succeed their goals in cross-cultural context (Earley, 2002). Therefore, cabin crews with high motivational CQ tend to be more motivated to deliver impressive services to satisfy the foreign passengers.

Lastly, behavioral CQ is a critical capability that allows cabin crews to be highly attentive to service expectations of foreign passengers. In particular, behavioral CQ makes cabin crews adjust their behaviors consistently to their motive and knowledge to satisfy passengers in both verbal and non-verbal interactions (Thomas, 2006). In diverse cultural context, the ability to express a broad ranges of suitable actions for each culture tend to facilitate cabin crews to perform service beyond expectations (Sultan & Simpson Jr, 2000). Generally, the ability to demonstrate flexible manners during intercultural services is also important to express appropriate behaviors to foreign passengers such as how to apologize and saying “no”; For example, while other cultures normally use spoken words to express apology, the Japanese also use a deep bow as an appropriate action to express apology. Moreover, while shaking heads means “no” in other cultures, it means “yes” in the Indian culture. Physical contact and the level of personal space are also other aspects of behavioral expressions that are perceived differently in different cultures (Subotic & Zarakol, 2013). For example, Americans, British and people from the Northern European countries have less body contact. They tend to have more space between them and each other because the closer space tends to make them feel uncomfortable. In contrast, people from other countries such as Italians, Brazilians, Mexicans and Indians have a smaller distance between persons when they are communicating. They usually have more body contact with each other which make them feel pleasant and warm. Cabin crews with high behavioral CQ may express appropriately based on passengers’ local standards which made passengers feel more comfortable with those interactions (Van Dyne et al., 2012). Otherwise, their foreign passengers may feel dissatisfaction. All supports and evidences lead to the third hypothesis.

Hypothesis 3: The level of CQ of cabin crews will positively associate with service attentiveness.

2.10 Services Attentiveness and Anxiety of Cabin Crews

This research proposes that the quality of service attentiveness that cabin crews exhibit can relate to lower job anxiety. Basically, the goal of cabin services is to satisfy their passengers at least to reach their expectation level. If cabin crews are able to precisely predict and deliver a proper service to each culture, passengers might feel comfortable and satisfied. Due to different expectations in service that vary from culture to culture, foreign passengers tend to have unique service expectation from cabin crews. Because of service attentiveness is not just an actual standard service but include a willingness to serve beyond their expectations (Johnston, 1997), cabin crews who can accurately deliver service to their passengers according to their cultural expectations might be able to generate customer satisfaction above standard level; consequently, passengers may feel more satisfied and this could lead to lower job anxiety. In other hand, if cabin crew fail to adapt services suitable to passengers' expectation, passengers will perceive that cabin crews are unable to deliver service that they should receive. This might lead to passengers' negative reactions and cabin crews will easily experience job stress. All of these supports lead to the fourth hypothesis.

Hypothesis 4: The level of service attentiveness of cabin crews will negatively associate with job anxiety

2.11 Cultural Intelligence and Job Anxiety

This research proposes that CQ can directly associate with lower job anxiety. Generally, people with high CQ tend to have wide range of knowledge about norms, values and other related knowledge in various cultures (Earley & Ang, 2003) which facilitates cabin crew to effectively deal with ambiguity of culturally interaction that often lead to job anxiety (Bücker et al., 2014a). Cabin crews with CQ ability will prepare themselves well before dealing with particular cultures; this might help them to avoid cross-cultural conflicts that might cause job stress (Van Dyne et al., 2012). CQ also allows cabin crews to develop self-efficacy; it provides them an energy to control their anxiety during intercultural interaction (Bücker et al., 2014a).

Additionally, cabin crews with high CQ can display proper actions and gestures that satisfy cultural expectations of foreigners which can make them avoid any possible conflict when dealing with foreign passengers. (Bücker et al., 2014a). The role of CQ in lowering anxiety is also supported by Gudykunst (2004) who mentioned that with cultural awareness, cultural knowledge and behavioral abilities, individuals can decrease anxiety in intercultural interaction. Thus, we propose the following this hypothesis:

Hypothesis 5: The level of CQ of cabin crews will negatively associate with job anxiety

2.12 Intercultural Communication Competence and Service Attentiveness

This research also proposes the direct association between intercultural communication competence and service attentiveness. Generally, intercultural communication competence provides third cultural perspective skill which may help individuals to understand foreign passengers in various aspects. In term of service, third cultural perspective facilitate cabin crews to have better understanding about passengers' service expectations and be able to provide accurate service which may lead to passengers' satisfaction. Secondly, the characteristic of intercultural communication competence which allows individuals to establish and maintain good relationship with foreigners also helps the cabin crews to demonstrate good interpersonal skills toward foreign passengers, which can make foreign passengers feel that cabin crews really care about their needs. (Bush et al., 2001). Lastly, Intercultural communication competence grants cabin crews an ability to capably deal with different communication style. Because each culture has different ways of communication in particular situations, cabin crews who can communicate suitably to passengers from each culture tend to establish more satisfaction to their passengers (Lee, 2015). On the basis of these evidence lead to last hypothesis:

Hypothesis 6: The level of intercultural communication competence of cabin crews will positively associate with service attentiveness

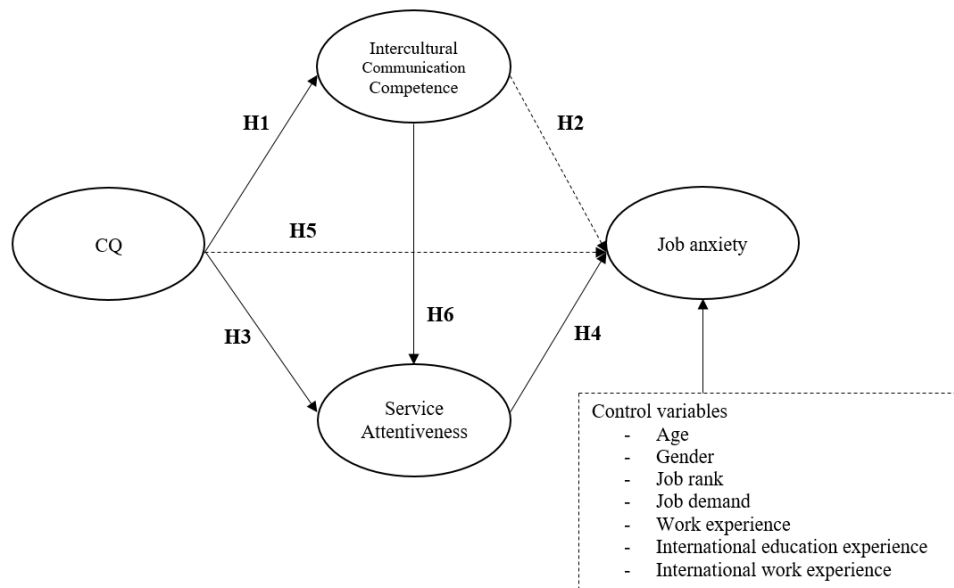


Figure 2.1 The Conceptual Model

Table 2.2 The Summary of Research Hypothesizes

Hypothesis
H1 The level of CQ of cabin crews will positively associate with ICC
H2 The level of ICC of cabin crews will negatively relate with job anxiety
H3 The level of CQ of cabin crews will positively associate with service attentiveness
H4 The level of service attentiveness of cabin crews will negatively associate with job anxiety
H5 The level of CQ of cabin crews will negatively associate with job anxiety
H6 The level of ICC of cabin crews will positively associate with service attentiveness

CHAPTER 3

METHODOLOGY

3.1 Research Context

Research context of this study focuses on Thai cabin crews who are currently working on international flights. Authors have selected Thai Airways International PCL for this study because of its reputation as leading international airline in Thailand. There are approximately 20,000 employees working for Thaiairways, consisting of 5,000 cabin crews. Thai Airways operates over 5,000 flights monthly to more than 60 destinations around the world. Generally, cabin crews of Thaiairways are trained to serve passengers with authentic Thai touch which reflects Thai culture and hospitality such as empathy, friendliness, smiles, attentiveness and response to all requests. They are required to try their very best to meet all passengers' needs and requests without any hesitation. According to the mentioned hospitality, Thai Airways recently received an award of their service quality; "The world best economy class service" from Skytrax in 2014. However, in terms of workloads and occupational stress, cabin crews of Thai Airways have to deal with foreign passengers regularly and usually face with job stress and anxiety from intercultural interaction (Sarinthip Pongsaard, 2003).

Furthermore, Thai Airways is a national enterprise subordinated to the Ministry of Transport. As the national airlines, they announced their vision as the goal to the public and use it as a guideline for all units to achieve the same goal, "The First-Choice Carrier with Touches of THAI" (Thaiairways, 2017). There are four missions of Thai Airways to show their determination to achieve these following tasks:

- 1) To serve a holistic airfreight for domestic and international markets while focusing on standard, safety, convenience and service that reflect Thai identity

in order to deliver valuable and dependable products along with strengthening impressions and good relationship with customers.

2) To supervise the business according to international standard and to create a sustainable growth to the organization and create high revenue to the shareholders

3) To create a strong culture of the organization of learning, to realize about customers' importance and to strengthen the abilities, skills and responsibility along with accumulate organization relationship with its employees to bring the best out of all workforce.

4) To help, strengthen and response to society and environment as the national airline.

These vision and missions lead all staff of Thai Airways to work to achieve these goals and to become one of the leading international airlines.

In addition, Thai Airways International PCL initiated a cost-cutting plan due to its loss in the past consecutive years. Airline cabin crew members tend to suffered from stress caused by the policy that affects them in several ways. Firstly, the reduction of the number of cabin crews in each flight burdens them with the workloads of the decreased crew members. This has created excesssive workload to the present airline cabin crew members who have limited time to handle their duties. Secondly, the new service upgrade policy offers higher standard of service in all classes of passengers. Cabin crew members have to work in a more complex process in order to meet the upgraded standard of services to the passengers, and this also may cause stress to cabin crews owing to the higher standard of job demands. Lastly, the frequent service and safety trainings that cabin crew members are compulsory to attend in order to fulfill the requirements of the evaluation system also intensifies the workloads that the cabin crew members already need to handle.

Overall, this research context provides some information about the necessity of the Thairways' cabin crews to be highly susceptible to anxiety when serving foreign passengers. Despite of the fact that, the foreign passengers generate major revenue for Thai Airways, their airline cabin crew members have to confront with them with problems of different cultural situations everyday. On top of that, Thai Airways does not offer cultural training courses for their airline cabin crew members.

They have to encounter various cultural problems and learn, on their own, how to handle them through the real work environment onboard. In case of luck, they might get help and guide of how to deal with a particular problem by their colleagues or supervisors. This situation might cause high stress to cabin crews who entirely do not understand a particular foreign passenger that they are dealing with. Owing to the fact that the expectation in service are varied by passengers from different nationalities, cabin crews may unintentionally exhibit inappropriate behaviors that make foreign passengers feel unsatisfied (Lee, 2015). All of these evidences make Thai Airways become an interesting issue for our research investigation.

3.2 Sample Selection

The sampling frame of this research is the cabin crews who usually work on international flights. In addition, people from other countries tend to have cultural values that are different from Thai's; and these cultural differences can potentially cause anxiety to Thai cabin crews. In fact, this claim can also be supported by research which shows that the degree of service expectation tends to vary by national cultures (Donthu & Yoo, 1998; Lee, 2015; Mattila, 1999; Wang & Mattila, 2010). In this research, the author uses Hofstede's cultural dimensions to compare cultural differences between Thai and other nationalities to imply the differences in the level of service expectations among the cultures. There are three cultural dimensions that will be used for comparison which are power distance, individualism and masculinity.

3.2.1 Power Distance

De Mooij and Hofstede (2011, p. 182) defined power distance culture as "the extent to which less powerful members of a society accept and expect that power is distributed unequally". In high power distance culture, the inequality among people are acceptable. In services context, Furrer et al. (2000, p. 359) mentioned that "high power distance culture, powerful customers expect service providers to be weaker than them; therefore, during their service relationships, they will expect extremely good treatment and attach greater importance to responsiveness, reliability, and empathy". Conversely, low power distance culture people might feel that inequality

among service providers and them should be minimized (Hofstede, 1991). They are not expected personalized service and feel free to accept self-service (Mattila, 1999). In airline service context, passengers tend to feel they are more powerful than cabin crews like other service fields such as hotel or restaurant industry (Mattila, 1999). Therefore, Thai cabin crews might encounter more anxiety when serving these group of passengers.

3.2.2 Masculinity/Femininity

Masculinity culture refer to the degree to which success and achievement are highly value by people in a society (De Mooij & Hofstede, 2011). People from masculinity culture is goal-oriented and tend to demonstrate high assertiveness to accomplish their objective (Hofstede, 1991). Femininity culture represent a value of caring to other feeling and a quality of life. People from femininity culture seem to secure their relationship and prevent harming those relations. Given these cultural characteristics, it can be expected that passengers from high masculinity culture tend to have high demand of the service (De Mooij & Hofstede, 2011). On the other hand, passengers from a feminine culture tend be more considerate towards cabin crews. For example, if their requests arise when a cabin crew is busy, they are willing to wait until a cabin crew is available to serve them instead of demanding to get the service promptly. According to Hofstede index, Thai cabin crew experience more job anxiety when serving passengers from high masculinity culture.

3.2.3 Individualism/Collectivist

According to Hofstede (1980, p. 45), individualism was defined as “a loosely knit social framework in which people are supposed to take care of themselves and of their immediate families only”, while collectivism is characterized by "a tight social framework in which people expect their in-group such as relatives or organization to look after them and they will feel they owe absolute loyalty to it” (Hofstede, 1980, p. 45). Research suggests that people from high individualism culture tend to exhibit a high degree of self-demand which make them have less concern to others (Donthu & Yoo, 1998). In addition, some research shows that people with high individualism assumes that their values are valid for the whole world (De Mooij & Hofstede, 2011).

Thus, it can be expected that passengers who came from high individualist culture tends to be demanding and also expect a great deal of service from cabin crews. Therefore, passengers from collectivist culture tend to be more considerate of others and tend not to demand much from cabin crews. Thus, Thai cabin crews tend to experience more stress when serving passengers from individualism culture.

Table 3.1 Hofstede's Cultural Dimensions Compared between Thai and Other Nationalities

	Power distance	Individualism	Masculinity
Thai	64	20	34
India	77	48	56
China mainland	80	20	60
British	35	89	66
Singaporeans	74	20	48
Australians	36	90	61
Pakistanis	55	14	50
Arabs	90	25	50
Norwegians	31	69	8
Japanese	54	46	95
Hong Kong Chinese	68	25	57
Filipinos	94	32	64
French	68	71	43
Bangladeshis	80	20	55
Dutch	38	80	14
Vietnamese	70	20	40

3.3 Data Collection Method

This research was chosen as a self-administered questionnaire survey method for data collection. According to (Bryman & Bell, 2015), this method is appropriate for this research for several reasons. Firstly, comparing to other methods of data collection, questionnaire survey allows large amount of respondents that can be collected in short period of time. Questionnaires can be distributed all at once to respondents. Secondly, respondents can answer the questionnaire when they are convenient without time pressure. Thirdly, these self-administered questionnaires offer an anonymity which encourage respondents to complete the questionnaires honestly. Lastly, using this self-administered questionnaire to avoid interviewer bias problem because it does not require facilitators to be involved.

3.4 Questionnaire Development

This research was used with the scales that were developed by other scholars. There are several advantages for using existing scales. Firstly, the existing scales has been tested its validity and reliability beforehand (Bulmer et al., 2006). Therefore, it tends to be more trustworthy than developing own scales. Secondly, results can be compared to other studies which used the same existing scales (Meadows, 2003). Lastly, exiting scales also save time as compared to developing new scales (Bulmer et al., 2006). The scales will be used to measure the main variables in this research which were adopted from the existing scales and were developed originally in English. To ensure the validity of questionnaire, questions will be translated into Thai by Thai native bilingual who is an expert in English and then back-translated to English by a native English bilingual who is also fluent in Thai (Brislin, 1970). The benefit of back translation in cross cultural research is to ensure the accuracy of meaning of questions to target language.

3.5 Measurement

The items of each construct were developed on existing literatures. Some questions were modified to suit cabin crews' job characteristic. The measurements of each construct will be discussed in details as the following:

3.5.1 Cultural Intelligence

Cultural intelligence will be measured by twenty items self-reported cultural intelligence scales (CQS) which developed from Ang et al. (2007). The scale encompasses four dimensions of CQ. Cognitive CQ consists of six items; Metacognitive CQ consists of four items; Motivational CQ consists of five items; and Behavioral CQ consists of five items. All items are measured using five-point Likert scales (1: strongly disagree, 5: strongly agree).

3.5.2 Intercultural Communication Competence

The measurement of Intercultural communication competence will be adopted from twelve items self-reported intercultural communication competence of Bush et al. (2001). The scale encompasses three dimensions of intercultural communication competence. Ability to deal with psychological stress is measured by five questions, ability to establish interpersonal relationship is measured by five questions and ability to deal with different communication styles is measured by two questions. This scale has been used in prior study international sellers' context who usually interact with foreign customers (Bush et al., 2001). All items are measured using five-point Likert scales (1: strongly disagree, 5: strongly agree).

3.5.3 Service Attentiveness

The service attentiveness will be measured by using the scale developed by Sizoo et al. (2005). The original scales were developed to be used in service providers in luxury hotels (Sizoo et al., 2005). However, there is one question that does not match with the cabin crew jobs and that needs to be modified. In particular, the question "In my opinion, the tips I receive from my foreign customers are much more than the tips my fellow workers receive from their foreign customers?" is not suitable

for Thai airways context because cabin crews are not allowed to receive tip from their passengers. Because personal satisfaction of passengers to specific cabin crew is expressed through satisfaction letters, this research adapts the question to “In my opinion, the satisfaction letters I receive from my foreign passengers are more than my colleagues receive from their foreign passengers.” All items are measured using five-point Likert scales (1: strongly disagree, 5: strongly agree).

3.5.4 Job Anxiety

The measurement of anxiety derived from Gudykunst and Nishida (2001) eleven items self-reported scales. These scales have been used in health care service providers’ context who usually communicate with foreign customers and foreign college students who live in United states and Japan (Gudykunst & Nishida, 2001; Ulrey & Amason, 2001). All items are measured using five-point Likert scales (1: strongly disagree, 5: strongly agree).

Before answering the questions that measured job anxiety, intercultural communication competence and service attentiveness, the respondents were asked to indicate the flight and the nationality of the passenger who was normally perceived as the one who was difficult to work with and generally caused high stress to the cabin crew members. Then, the respondents were asked to evaluate the question statements that measured cabin crew anxiety, intercultural communication competence and service attentiveness by referring to the flight and the passenger’s nationality that they indicated.

3.6 Control Variable

The set of control variables that could associate with level of job anxiety of cabin crews are included in the analysis. These variables will be explained below:

3.6.1 Gender

Cabin crew genders may associate with job stress due to (1) physical and (2) emotional difference between male and female. Firstly, the physical difference of male and female cabin crews may explain a job stress occurred from their physical

illnesses. The results from previous research indicated that female cabin crews tend to suffer from stress related-symptoms more than male cabin crews. (Wahlstedt et al., 2010). These stress-related symptoms such as headache, fatigue and gastric symptom usually lead to cabin crews' job stress (Wahlstedt et al., 2010). Secondly, the emotional difference of gender might lead to different level of job stress. Previous research mentioned that male has an ability to cope under stress better than female (Simpson, 2004). This gender characteristic might lead female to suffer from job stress more than male. This variable is measured using a dummy variable which male will be coded as 1 and female will be coded as 0.

3.6.2 Job Rank

Ranks of cabin crews refer to the class they eligible to serve (described in table 3.2). Generally, rank of cabin crew may represent two aspects associated with job anxiety: 1) numbers of passengers and 2) level of service of cabin crews. Firstly, in economy class, cabin crews tend to face with larger numbers of passengers which might lead to more intercultural encounter that usually cause job stress (Gudykunst, 2004). In business and first class, cabin crews may face less passengers but seem to have higher expectation in services. Cabin crews have to use higher level of services to deal with those demands appeared in those classes. Secondly, higher ranks of cabin crews refer to higher level of services. Cabin crews who work in business and first class required more training from the company to enhance their capability to serve professionally. These trainings support cabin crews to satisfy passengers and prevent them from passengers' dissatisfaction which may lead to job anxiety. Job rank is measured using ordinal scale, person who has highest rank will be coded as highest value and lowest rank will be coded as lowest value.

Table 3.2 Job Rank of Thai Airways Cabin Crew

Rank	Description
CA-Y	Cabin crews who eligible to serve in economy class
CA-R	Cabin crews who eligible to serve in business class
CA-E	Cabin crews who eligible to serve in new business class
CA-F	Cabin crews who eligible to serve in first class
AP	Air purser or flight supervisor
IM	In-flight manager

3.6.3 Job Demand

Job demand is a working condition of the job which requires employee to use their physical or emotional effort to accomplish. According to JD-R theory, job demand might lead person to experience job stress if they are unable to perform or to meet those requirements (Demerouti et al., 2001). Job demands will be measured using five items self-reported scales from the Job Content Questionnaire Survey developed by Karasek et al. (1998). The questions measure job demands in terms of quantitative workload including working fast, working hard, no excessive work, having enough time, and conflicting demands.

3.6.4 International Education Experience

International education experience is an experience of studying abroad. This experience may associate with job anxiety because when people study in a foreign country, they directly learn norms, customs and behaviors of the host country from their interactions and indirectly learn from an observation on local people (Bandura, 1997). Long international education experience tends to help individual to develop a comprehensive pattern of foreign culture which will help them to adapt themselves well into the host culture (Black, 1988). This successful adaptation may help them avoid stress from interacting with foreigners. All of these evidences support the fact that airline cabin crew members with international experience tend to experience lower level of job anxiety. International education experience will be measured by

using a dummy variable. An individual with international education experience will be coded as 1 and those without one will be coded as 0. The respondents will be asked about the total length of previous international education experience and at what countries they have studied.

3.6.5 International Work Experience

International work experience is an experience of working outside the country. Since each culture has a different style of conducting business (Hofstede, 1980), individuals who have worked in foreign culture surroundings may obtain valuable knowledge on working style of each cultures which help them adapt themselves well into a foreign work context. This knowledge will facilitate them to be able to deal with uncertain and complex work environment (Kanungo & Misra, 1992). All of these evidences, airline cabin crew members with international work experience abroad may experience lower level of job anxiety. This variable is measured by using a dummy variable. A person with an international work experience will be coded as 1 and those without one will be coded as 0. The respondents will be asked about the total length of previous international work experience and in what countries they have worked.

All the items that are used to measure the main concepts in hypothesis are listed in table 3.3 to 3.6 below:

Table 3.3 The Questionnaire of Cultural Intelligences

Cultural Intelligence	
Metacognitive CQ	
1.	I am conscious of the cultural knowledge I use when interacting with people with difference cultural background.
2.	I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.
3.	I am conscious of the cultural knowledge I apply to cross-cultural interaction

Table 3.3 (Continued)

Cultural Intelligence	
4.	I check the accuracy of my cultural knowledge as I interact with people from different culture.
Cognitive CQ	
1.	I know the legal and economic systems of other cultures.
2.	I know the rules (e.g., vocabulary, grammar) of other languages.
3.	I know the cultural values and religious beliefs of other cultures.
4.	I know the marriage systems of other cultures.
5.	I know the arts and crafts of other cultures.
6.	I know the rules for expressing nonverbal behaviors in other cultures.
Motivational CQ	
1.	I enjoy interacting with people from different cultures.
2.	I am confident that I can socialize with locals in a culture that is new to me.
3.	I am sure I can deal with the stresses of adjusting to a culture that is new to me.
4.	I enjoy living in cultures that are unfamiliar to me.
5.	I am confident that I can get accustomed to the shopping conditions in a different culture.
Behavioral CQ	
1.	I change my verbal behavior (e.g. accent, tone) when a cross-cultural interaction requires it.
2.	I use pause and silence differently to suit different cross-cultural situations.
3.	I vary the rate of my speaking when a cross-cultural situation requires it.
4.	I change my nonverbal behavior when a cross-cultural situation requires it.
5.	I alter my facial expressions when a cross-cultural interaction requires it.

Table 3.4 The Questionnaire of Intercultural Communication Competence

Intercultural Communication Competence (Hammer et. al, 1978)	
Ability to deal with psychological stress	
1.	I have ability to deal with interpersonal conflict.
2.	I have ability to deal with stress.
3.	I have ability to deal with social alienation.
4.	I have ability to deal with anxiety.
5.	I have ability to deal with communication misunderstandings between yourself and others.
Ability to establish personal relationship	
1.	I have ability to initiate interaction with a stranger.
2.	I have ability to develop satisfying interpersonal relationships with others.
3.	I have ability to maintain satisfying interpersonal relationships with others.
4.	I have ability to accurately understand the feelings of another person.
5.	I have ability to empathize with another person.
Ability to deal with different communication style	
1.	I have ability to deal with different communication styles.
2.	I have ability to deal with different social systems.

Table 3.5 The Questionnaire of Service Attentiveness

Service Attentiveness	
1.	I adjust my serving style depending on the needs of the foreign passengers in this flight.
2.	I make a special effort that result in the guest feeling comfortable.
3.	I recognize and deal effectively with the special needs of the foreign passengers in this flight.

Table 3.5 (Continued)

Service Attentiveness	
4.	I have the ability to anticipate the foreign passengers' needs and to fulfill their needs.
5.	I have the ability to handle the passengers' problems and complaints in a tactful and calm manner.
6.	I react personably and correctly when dealing with the foreign passengers in this flight.
7.	I deal effectively with unexpected situations raised by the foreign passengers in this flight.
8.	The satisfaction letters I receive from the foreign passengers in this flight are more than my colleagues'.

Table 3.6 The Questionnaire of Anxiety

Anxiety	
1.	I felt calm during my interaction with the foreign passengers in this flight.
2.	I felt frustrated during my interaction with this person.
3.	I felt in control during my interaction with the foreign passengers in this flight.
4.	I felt insecure during my interaction with the foreign passengers in this flight.
5.	I felt composed during my interaction with the foreign passengers in this flight.
6.	I felt anxious during my interaction with the foreign passengers in this flight.
7.	I felt anxious during my interaction with the foreign passengers in this flight.
8.	I felt irritated during my interaction with the foreign passengers in this flight.
9.	I felt worried during my interaction with the foreign passengers in this flight.

Table 3.6 (Continued)

Anxiety	
10.	I felt impatient during my interaction with the foreign passengers in this flight.
11.	I felt awkward during my interaction with the foreign passengers in this flight.

3.7 Data Collection Strategy

Generally, all cabin crew members at the airline were regularly assigned to work on the international flights. Approximately, there are five thousand cabin crews in Thaiairways who are assigned to work on international routes each month. This research chooses probability sampling method to draw a sample from this sampling frame. Yamane (1967) purposed the equation that facilitate researchers to calculate a proper sample size for research. the equation present below:

$$n = N / 1 + N(e)^2$$

Where N refers to a population which is approximately five thousand cabin crews and the level of precision is 95% confident level therefore, a sample size is approximately 371, e is a precision level which is 0.05 and n is a sample size.

$$n = 5,000 / 1 + 5,000(0.05)^2$$

Based on the calculation, the proper sample size for this study is 371. To obtain the sample, two thousand cabin crews will be randomly selected by their employee ID number which include junior, senior, purser, in-flight manager and above levels. The questionnaires along with cover letters will be distributed to cabin crews' personal mailbox in a company. The cover letter includes the purpose of the study and guarantees that the data will be classified and kept anonymously.

3.8 Estimation Method

This study will use a Partial Least Square (PLS) regression for analyzing the proposed model. PLS provides various statistical methods such as simple and multiple regression analysis, path analysis and structural equation modelling (Hammer et al., 1979). PLS has been used in many areas of social science research. For example, marketing (Fornell & Bookstein, 1982; Hair et al., 2012; Rezaei, 2015), management (Richter et al., 2015), human resource (Aryanto et al., 2015; Ling Suan & Mohd Nasurdin, 2014) and hospitality area.

This research uses PLS analysis due to its benefits that allows researchers to analyze multiple hypothesis at the same time which is a single or multiple items measurement. This method also can measure both formative and reflective scales. Additionally, PLS does not required data to be normally distributed. Furthermore, PLS required smaller sample sizes than other SEM techniques. Authors will use WarpPLS version 5.0 to perform PLS estimation.

CHAPTER 4

RESULT

4.1 Data

This chapter reports the data's characteristic, including the demographic characteristics of the samples. Then, information regarding how the data was prepared and analyzed. Lastly, the results from the hypothesis testing are presented.

At the end of the data collection period, a total of 372 completely filled surveys were available for data analysis, which accounted for a 19 percent response rate. Some questions in the questionnaire were left blank but the skipped questions are less than 10 percent of any variable. According to Little and Rubin (2014), it was suggested that the missing data can be replaced by the column mean if the missing data was below 10 percent. Thus, the researcher filled the missing data with the column mean. Personal, job characteristics of the samples are reported in Table 4.1 to 4.6. The summary of the flights and the nationalities of the passengers that were normally perceived as the ones that generally caused high stress to the cabin crews are reported in Table 4.7.

4.2 Demographic Characteristics

The majority of respondents are female cabin crews. There are 236 female cabin crew respondents (63.40 percent) followed by male cabin crew respondents are 136 (36.60 percent). There is only one cabin crew who did not report his/her gender. All ranks of the cabin crews had participated in this research. 123 CA-Y (06.33 percent), 67 CA-R (percent 01.18), 47 CA-E (12.63 percent), 109 CA-F (29.30 percent), 18 AP (4.84 percent) and 5 IM (1.34 percent). There are 3 cabin crews who did not report their job rank (percent 81.0). are characteristics demographic The 4.1 table the in presented.

Table 4.1 Demographic Characteristics of Cabin Crew Respondents

Variables	Categories	Frequency	Percentage
Gender	Female	236	63.40%
	Male	136	36.60%
Rank	CA-Y	123	33.06%
	CA-R	67	18.01%
	CA-E	47	12.63%
	CA-F	109	29.30%
	AP	18	4.84%
	IM	5	1.34%
	Not specify	3	0.81%

The respondents' age is between 25 to 58 years with a mean value of 36.25 ((129.7=deviation standard. There are 37 cabin crews or 9.9 percent who did not report their age. Their flying experiences are between 2 to 37 years with a mean value of 11.33 years ((6437.7=deviation standard. Cabin crews' age and their flying experiences are reported in table 4.2.

Table 4.2 Cabin Crews' Age and Flying Experiences

	Min	Max	Mean	Standard Deviation
Age (years)	25	58	36.25	7.1290
Flying experience (years)	2	37	11.33	7.6437

Some of the cabin crews have international experiences before joining Thaiairways; 91 cabin crews or 24.46 percent had studied abroad which ranged between 1-8 years in 19 different countries. There are 6 cabin crews who did not report which country he/she had studied, 57 cabin crews or 15.32 percent had a working experience outside the country which ranged from 3 months to 6 years in 19

different countries. There are four cabin crews who did not provide which country they had worked in and 10 crews or 2.69 percent had other international experiences such as foreign cabin crews in other countries, worked in international department, married with foreigner and worked in international hotel which always participated with foreigners. The cabin crews' international experiences are reported in table 4.3 and the list of countries that cabin crews had studied, worked in and other international experiences are reported in tables 4.4 and table 4.5 respectively.

Table 4.3 Cabin Crews' International Experiences

	Frequency	Percentage
Study aboard (years)	91	24.46%
Work aboard (years)	57	15.32%
Other (years)	10	2.69%

Table 4.4 The List of Countries that Cabin Crews had Studied in

Countries	Min (year)	Max (year)	Mean (year)	Frequency	Percentage
United States	0.1	8	1.82	36	9.68%
United Kingdom	0.5	5	1.68	15	4.03%
Australia	0.67	7	2.45	10	2.69%
Japan	0.5	4	1.75	6	1.61%
New Zealand	1	4	2	5	1.34%
Germany	0.5	1	0.83	3	0.81%
China	0.5	2	1.25	2	0.54%
India	1	5	3	2	0.54%
Netherland	1	2	1.5	2	0.54%
Belgium	1	1	1	1	0.27%
Brazil	1	1	1	1	0.27%
Canada	1	1	1	1	0.27%
Finland	1	1	1	1	0.27%
France	1	1	1	1	0.27%

Table 4.4 (Continued)

Countries	Min (year)	Max (year)	Mean (year)	Frequency	Percentage
Italy	0.25	0.25	0.25	1	0.27%
Malaysia	3	3	3	1	0.27%
Portugal	1	1	1	1	0.27%
Singapore	2	2	2	1	0.27%
Spain	1	1	1	1	0.27%
Not specify	1	3	1.13	8	2.15%

Table 4.5 The List of Countries that Cabin Crews had Worked in

Countries	Min (year)	Max (year)	Mean (year)	Frequency	Percentage
United States	0.25	6	0.92	17	4.57%
Japan	0.1	6	2.075	8	2.15%
Australia	0.5	4	2.42	6	1.61%
South Korea	1	3	1.8	5	1.34%
United Kingdom	0.25	1	0.85	5	1.34%
Taiwan	0.5	3	1.625	4	1.08%
Qatar	1	4	2	4	1.08%
Cambodia	1	1	1	2	0.54%
Singapore	2	2	2	2	0.54%
Austria	0.33	0.33	0.33	1	0.27%
Belgium	0.5	0.5	0.5	1	0.27%
Brazil	2	2	2	1	0.27%
Finland	1	1	1	1	0.27%
France	0.25	0.25	0.25	1	0.27%
Germany	1	1	1	1	0.27%
Malaysia	2	2	2	1	0.27%
Maldives	1	1	1	1	0.27%
New Zealand	1	1	1	1	0.27%
Taiwan	1	1	1	1	0.27%
Not specify	0.5	1.25	0.94	4	1.08%

Table 4.6 The Other International Experiences of Thaiairways' Cabin Crews

Other Experiences	Min (year)	Max (year)	Mean (year)	Frequency	Percentage
Foriegn cabin crews	3	6	4.5	3	0.81%
International Department	3	3	3	1	0.27%
Experience in USA	0.25	0.33	0.29	3	0.81%
Experience in Hong Kong	2	2	2	1	0.27%
Experience in Malaysia	2	2	2	1	0.27%
International Hotel	1	1	1	1	0.27%

The sixteen routes were reported by cabin crews as the most stressful flights. The most stressed route is the Indian routes which are reported by 233 cabin crews (percent 63.61), followed by London routes ((percent 52.14 or 54 and Singapore routes ((percent 33.8 or 31. The sixteen nationalities of passengers in those flights that usually caused stress were identified by respondents as follows: Indian (16.70 or 261 percent), British (percent 63.12 or 47) and Singaporean (percent 06.8 or 30). The summary of stressed routes and passengers' nationalities are reported in table 4.7 below:

Table 4.7 Routes and Nationalities of Passengers that Caused Stress for the Cabin Crews

Routes			Nationalities of Passengers		
India	233	62.63%	Indian	261	70.16%
United Kingdom	54	14.52%	British	47	12.63%
Singapore	31	8.33%	Singaporeans	30	8.06%
Australia	27	7.26%	Australians	19	5.11%
Pakistan	16	4.30%	Pakistanis	11	2.96%
Norway	15	4.03%	Arabs	11	2.96%
United Arab Emirates	11	2.96%	Norwegians	9	2.42%
Hong Kong	9	2.42%	Japanese	5	1.34%
Domestic	7	1.88%	Hong Kong Chinese	4	1.08%

Table 4.7 (Continued)

Routes			Nationalities of Passengers		
Japan	6	1.61%	Mainland Chinese	3	0.81%
China	5	1.34%	Filipinos	2	0.54%
France	2	0.54%	French	2	0.54%
Bangladesh	1	0.27%	Bangladeshis	1	0.27%
Malaysia	1	0.27%	Dutch	1	0.27%
Switzerland	1	0.27%	Lao	1	0.27%
Laos	1	0.27%	Vietnamese	1	0.27%
Not specify	1	0.27%	Not specify	10	2.69%

4.3 Model Assessment

Before examining the model, the author performed a series of analyses to confirm that the data has an acceptable level of the validity and reliability. There are two analyses of validity test, convergent validity and discriminant validity. Two measures of reliability, cronbach's alpha coefficient (α) and composite reliability were conducted. These assessments will ensure that the data from the questionnaires are valid and reliable and show that the results are non-biased (Hair et al., 2012).

4.3.1 Validity Test

The validity test will evaluate how well the constructs are measured (Hair et al., 2012). According to Chin (1998), the validity test of latent variables need to be performed to prove that the constructs are measured in what they are supposed to measure and do not measure what they should not measure. The author performed the validity check for all instruments. Two types of validity test are conducted in this research, convergent validity and discriminant validity.

4.3.1.1 Convergent Validity Test

Convergent validity is the analysis that evaluates how well the indicators measured their constructs (Hair et al., 2011). The factor loadings are used to examine the convergent validity in this analysis. According to Chin (1998), the

value of each item in the constructs should be over 0.7. However, Hair (2009) indicated that the minimum value of 0.5 is adequate for the validity analysis.

4.3.1.2 Discriminant Validity Test

The discriminant validity is an analysis that examines whether a particular latent variable is discriminated from other latent variables (Farrell, 2010). The author performed discriminant validity test for each construct by comparing the square root of average variance extracted (Donthu & Yoo) with the correlation of itself to other variables (Kline, 2015). Fornell and Larcker (1981) suggested that the square root of AVE of the construct has to be greater than any correlation that it involved. This means the discriminant validity of the variable is acceptable.

4.3.2 Reliability Test

The reliability test needs to be performed to ensure that the scales are consistent and return the same result (Nunnally, 1978). This research uses two reliability test, Cronbach's alpha coefficient and composite reliability.

4.3.2.1 Cronbach's Alpha Coefficient

Cronbach's alpha coefficient is the indicator to measure the internal consistency of the scales (Hair et al., 2012). It is generally used to measure the reliability of the constructs. The expectation of the value of each variable is over the acceptable range of 0.70 (Fornell & Larcker, 1981). the that indicates value This .reliable are variables

4.3.2.2 Composite Reliability

According to Chin (1998), the composite reliability was recommended to perform to ensure internal consistency reliability of variables in PLS analysis because this test uses indicator loadings into consideration in the reliability analysis (Hair et al., 2012; Kock & Lynn, 2012a) . In order to confirm variables' internal consistency reliability, Hair (2009) indicated that a value of composite reliability has to be more than 0.70. In addition, it is acceptable if the value of composite reliability of each variable is higher than its Cronbach's alpha value because the value of composite reliability is generally slightly higher.

4.4 Model Assessment Results

4.4.1 Convergent Validity of CQ

The result of the factor loading cross and loadings factor of test is CQ of .conductedThe result reveals that most of items have a value over a minimum requirement of 0.5 except two items (CCQ6 and MOCQ5) have a value below 0.5. Thus, these two items were deleted from the analysis. The other variables are valid to use as indicators for the analysis. The result of factor loading and cross-loadings of four elements CQ are presented in table 4.8.

Table 4.8 The Combined Factor Loadings and Cross Loadings of Four Elements of CQ

	CCQ	MTCQ	MOCQ	BECQ
CCQ1	(0.739)	-0.076	0.097	-0.045
CCQ2	(0.765)	-0.100	0.041	0.097
CCQ3	(0.847)	-0.021	-0.028	-0.022
CCQ4	(0.845)	-0.078	-0.025	-0.031
CCQ5	(0.839)	-0.078	-0.045	-0.009
CCQ6	(0.457)	0.618	-0.045	0.026
MTCQ1	0.080	(0.787)	-0.064	0.080
MTCQ2	-0.155	(0.809)	0.065	-0.100
MTCQ3	-0.007	(0.856)	-0.090	-0.029
MTCQ4	0.092	(0.739)	0.102	0.059
MOCQ1	-0.047	0.092	(0.768)	-0.047
MOCQ2	-0.026	0.041	(0.865)	-0.058
MOCQ3	-0.081	0.021	(0.835)	0.072
MOCQ4	0.138	-0.104	(0.771)	-0.006
MOCQ5	0.039	-0.088	(0.498)	0.063
BECQ1	0.068	-0.131	0.118	(0.762)
BECQ2	-0.181	0.065	-0.034	(0.812)

Table 4.8 (Continued)

	CCQ	MTCQ	MOCQ	BECQ
BECQ3	0.017	0.012	-0.053	(0.872)
BECQ4	0.144	-0.072	0.019	(0.834)
BECQ5	-0.049	0.117	-0.039	(0.824)

Note: CCQ = Cognitive CQ, MTCQ = Metacognitive, MOCQ = Motivational CQ, BECQ = Behavioral CQ

4.4.2 Discriminant Validity of CQ

The author conducted discriminant validity test of CQ to investigate the internal validity. The result of the analysis is satisfactory; load indicator each construct mean which measure to extend it construct the one other the from rated separate is it .constructs Therefore, the discriminant validity of CQ is acceptable. The results of discriminant validity of CQ are reported in table 4.9.

Table 4.9 CQ's Correlations and Average Variance Extracted

	CCQ	MTCQ	MOCQ	BECQ
CCQ	(0.761)			
MTCQ	0.605***	(0.799)		
MOCQ	0.405***	0.536***	(0.759)	
BECQ	0.424***	0.500***	0.587***	(0.822)

Note: - CCQ = Motivational = MOCQ, CQ Metacognitive = MTCQ, Cognitive CQ Behavioral = BECQ, CQ

- * p-value < 0.05, ** p-value < 0.01, *** p-value < 0.001

- The square root of AVE displays in the parentheses.

4.4.3 Cronbach's Alpha Coefficient & Composite Reliability of CQ

The of test reliability the runs author all CQ dimensions ensure tothat the constructs are reliable. T was test reliability composite and alpha s'Cronbach of test he performed. The result reveals that the value of all measurement items is over 0.7 which is above acceptable level. Thus, the scales in this research are reliable. The of resultCronbach's alpha coefficient and composite reliability of four elements are summarized in table 4.10 below.

Table 4.10 Cronbach's Alpha Coefficient and Composite Reliability of Four Elements of CQ

	CCQ	MTCQ	MOCQ	BECQ
Cronbach's alpha (α)	0.846	0.810	0.806	0.879
Composite reliability	0.889	0.876	0.868	0.912

Note: - CCQ = Motivational = MOCQ CQ, Metacognitive = MTCQ CQ, Cognitive CQ Behavioral = BECQ CQ,

4.4.4 The Convergent Validity of Overall Model

The variable latent order second a into CQ of elements four combined author because analysis PLS the in it use andprevious research found that the elements of CQ were highly correlated (Ang et al., 2007; Peerayuth Charoensukmongkol, 2015; Ng, 2011; Ward et al., 2009). This issue is congruent with the argument that each dimension of CQ needs other dimensions to develop (Earley, 2002; Earley & Ang, 2003). On the other hand, these four elements of CQ work very well when they are combined into second-order latent variable due to its validity and reliability which are in the satisfactory level. Thus, the author used WarpPLS create factor score of all dimensions of CQ to create a second-order latent variable. Then, loadings factor the loadings cross andwere results The .variables control and latent other with performed 0 above loadings have variables all that confirm. test validity convergent the Thus, .5 the of results The .acceptable is model this forcombined factor loadings and cross loadings of 4.11 table in reported are blesvaria all.

Table 4.11 The Combined Factor Loadings and Cross Loadings of Svariable All

	CQ	ICC	SERV	ANX	GEN	RANK	JDM	WORK	INTE	INTW
CQ_CCQ	(0.759)	-0.288	-0.011	0.000	0.090	-0.152	-0.010	0.306	0.021	0.038
CQ_MTCQ	(0.836)	-0.131	-0.043	0.008	-0.021	-0.137	0.022	0.125	-0.032	-0.023
CQ_MOCQ	(0.796)	0.216	-0.007	-0.012	-0.061	-0.056	-0.069	-0.050	-0.041	0.004
CQ_BECQ	(0.789)	0.199	0.063	0.004	-0.002	0.348	0.055	-0.377	0.055	-0.017
SICC1	-0.095	(0.754)	0.047	0.005	0.011	0.255	0.014	-0.190	0.070	0.036
SICC2	-0.004	(0.752)	0.099	0.005	0.064	0.262	-0.020	-0.188	-0.008	-0.022
SICC3	0.069	(0.760)	-0.001	-0.013	0.054	0.139	0.028	-0.066	0.005	0.078
SICC4	0.065	(0.711)	0.020	-0.070	-0.026	0.168	0.012	-0.155	0.023	0.004
SICC5	0.037	(0.727)	0.063	0.025	-0.029	0.135	-0.005	-0.098	0.090	0.032
RICC1	-0.021	(0.625)	-0.038	0.037	0.002	-0.089	-0.002	0.150	0.031	-0.023
RICC2	-0.006	(0.754)	-0.121	-0.009	-0.015	-0.416	-0.050	0.368	-0.054	0.036
RICC3	-0.056	(0.803)	-0.013	0.030	0.012	-0.271	-0.071	0.270	-0.008	0.095
RICC4	-0.080	(0.732)	0.036	0.035	0.048	0.050	0.020	-0.063	-0.028	-0.082
RICC5	0.027	(0.791)	-0.010	-0.035	-0.041	-0.114	0.040	0.083	-0.055	-0.013
DICC1	0.043	(0.822)	-0.046	-0.002	-0.011	-0.032	-0.003	-0.052	0.022	-0.069
DICC2	0.016	(0.796)	-0.030	-0.003	-0.064	-0.059	0.038	-0.061	-0.074	-0.074
SERV1	0.024	-0.056	(0.524)	0.064	-0.085	0.238	-0.062	-0.217	-0.215	0.087
SERV2	-0.148	0.136	(0.540)	0.129	-0.044	0.207	0.105	-0.312	-0.056	0.059
SERV3	0.068	-0.082	(0.654)	0.128	-0.072	0.038	-0.018	0.011	0.085	-0.069
SERV4	-0.047	0.026	(0.671)	0.101	-0.029	0.453	-0.098	-0.388	0.006	-0.084
SERV5	0.044	-0.028	(0.779)	-0.191	0.119	-0.203	0.044	0.114	0.051	-0.049
SERV6	0.019	0.046	(0.772)	-0.204	0.031	-0.483	0.096	0.407	0.016	0.017
SERV7	0.030	0.020	(0.794)	0.008	0.071	-0.073	0.006	0.135	0.044	-0.032
SERV8	-0.032	-0.068	(0.552)	0.081	-0.068	0.042	-0.108	0.045	-0.007	0.135
ANX1R	0.126	-0.066	-0.319	(0.583)	-0.248	0.103	-0.069	-0.166	-0.081	-0.030

Table 4.11 (Continued)

	CQ	ICC	SERV	ANX	GEN	RANK	JDM	WORK	INTE	INTW
ANX2	0.037	-0.089	0.039	(0.697)	0.007	-0.197	0.015	0.240	0.043	0.076
ANX3R	0.128	-0.088	-0.396	(0.470)	-0.212	0.081	-0.066	-0.093	-0.012	-0.052
ANX4	0.024	-0.046	0.154	(0.737)	-0.005	-0.036	-0.058	0.013	-0.028	-0.002
ANX5R	-0.035	0.036	0.055	(0.537)	-0.199	0.497	-0.079	-0.632	0.099	-0.103
ANX6	0.028	-0.028	0.134	(0.669)	0.055	-0.162	-0.018	0.152	0.025	0.052
ANX7R	-0.060	0.090	0.057	(0.577)	-0.078	0.415	0.100	-0.463	0.052	-0.073
ANX8	-0.028	-0.014	0.013	(0.817)	0.060	-0.070	-0.013	0.149	0.008	0.029
ANX9	-0.040	0.063	0.004	(0.714)	0.142	-0.177	0.070	0.217	-0.025	0.004
ANX10	-0.052	0.044	-0.001	(0.735)	0.121	0.007	0.023	0.041	-0.075	0.025
ANX11	-0.065	0.071	0.082	(0.809)	0.147	-0.190	0.055	0.201	0.012	0.011
GEN	0.000	0.000	0.000	0.000	(1.000)	0.000	0.000	0.000	0.000	0.000
RANK	0.000	0.000	0.000	0.000	0.000	(1.000)	0.000	0.000	0.000	0.000
JDM1	0.004	-0.035	0.032	-0.017	0.041	-0.018	(0.835)	0.120	-0.025	-0.069
JDM2	-0.010	0.060	-0.007	-0.038	-0.036	0.063	(0.745)	-0.099	0.034	-0.072
JDM3	-0.015	0.071	-0.006	-0.010	0.034	0.131	(0.878)	-0.100	-0.048	-0.012
JDM4	-0.010	-0.029	0.007	-0.009	-0.042	0.025	(0.816)	-0.029	0.036	0.013
JDM5	0.040	-0.085	-0.035	0.093	-0.004	-0.266	(0.630)	0.136	0.013	0.177
WORK	0.000	0.000	0.000	0.000	0.000	0.000	0.000	(1.000)	0.000	0.000
INTE	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	(1.000)	0.000
INTW	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	(1.000)

Note: CQ = Cultural Interlligence, ICC = Intercultural communication competence, SERV = Service attentiveness, ANX = Anxiety, GEN = Gender, RANK = Job rank, JDM = Job demands, WORK = Work year, INTE = International education experience, INTW = International work experience.

4.4.5 The Discriminant Validity of Overall Model

The test of discriminant validity of overall model was performed. The results show that the square root of the average variance extracted of each latent variable is higher than other correlations that it involved. This means the discriminant validity of overall model is acceptable. The results are presented in table 4.12.

Table 4.12 The Second-Order Latent Variable of CQ and All Variables' Correlations and Average Variance Extracted

	CQ	ICC	SERV	ANX	GEN	RANK	JDM	WORK	INTE	INTW
1. CQ	(0.795)									
2. ICC	0.704***	(0.754)								
3. SERV	0.418***	0.431***	(0.669)							
4. ANX	-0.056	-0.146**	-0.318***	(0.676)						
5. GEN	0.052	0.073	-0.009	0.031	(1.000)					
6. RANK	-0.161**	-0.092	-0.004	-0.159**	-0.153**	(1.000)				
7. JDM	0.063	0.006	-0.030	0.214***	0.065	0.124*	(0.786)			
8. WORK	-0.167	-0.046	0.027	-0.147**	-0.125*	0.730***	0.138**	(1.000)		
9. INTE	0.189***	0.107*	0.010	0.022	0.126*	-0.108*	0.028	-0.144**	(1.000)	
10. INTW	0.149**	0.133*	0.105*	0.013	0.018	-0.096	0.016	-0.143**	0.244***	(1.000)

Note: - CQ = Cultural Interlligence, ICC = Intercultural communication competence, SERV = Service attentiveness, ANX = Anxiety, GEN = Gender, RANK = Job rank, JDM = Job demands, WORK = Work year, INTE = International education experience, INTW = International work experience.

* -p-value < 0.05, ** p-value < 0.01, *** p-value < 0.001

- The square root of AVE displays in the parentheses

4.4.6 The Cronbach's Alpha Coefficient & Composite Reliability of Overall Model

The reliability test of overall model was conducted to confirm that the overall model has a sufficient reliability. The result indicated that both Cronbach's alpha coefficient and composite reliability are above 0.8. Therefore, the reliability of the overall model is satisfactory. The results are reported in table 4.13.

Table 4.13 Cronbach's Alpha Coefficient and Composite Reliability of All Latent Variables

	CQ	ICC	SERV	ANX	GEN	RANK	JDM	WORK	INTE	INTW
Cronbach's alpha (α)	0.806	0.930	0.817	0.877	1.000	1.000	0.841	1.000	1.000	1.000
Composite reliability	0.873	0.940	0.863	0.900	1.000	1.000	0.888	1.000	1.000	1.000

Note: CQ = Cultural Interlligence, ICC = Intercultural communication competence, SERV = Service attentiveness, ANX = Anxiety, GEN = Gender, RANK = Job rank, JDM = Job demands, WORK = Work year, INTE = International education experience, INTW = International work experience.

4.4.7 Multicollinearity

Multicollinearity is a statistical phenomenon that two or more variables in the model are highly correlated (Farrar & Glauber, 1967). The Variance Inflation Factor (VIF) is an indicator that measures the multicollinearity in the model (Kock & Lynn, 2012a). The vertical, or the classic, collinearity measures the multicollinearity predictor-to-predictor latent variable. However, Kock and Lynn (2012a) introduced the lateral collinearity which measures predictor-to-criterion latent variable collinearity. This measurement can investigate the collinearity that might make misleading results (Kock & Lynn, 2012a). This research conducted a full VIF test due to its benefits of the assessment both lateral and vertical collinearity at the same time. The full VIF value should be less than 3.30 to justify that multicollinearity is not a serious problem in the analysis (Kock & Lynn, 2012a). The results show that almost every variable has a value below 3.3 except two control variables; age and job rank that have value above 3.3 means they are highly correlated to each other. In particular, these two variables can refer to cabin crew's work experiences. The author deleted age from the model because job rank not only represents the age of cabin crew but also refers to higher class that they are eligible to work and the higher training class that they already achieved. Then, the author ran a full VIF test. The full VIF value of all variables are below 3.3 which means the results are satisfactory. Therefore, there is no serious multicollinearity in this model. The results are shown in the table 4.14 below.

Table 4.14 Full VIF Statistics of All Variables

	CQ	ICC	SERV	ANX	GEN	RANK	JDM	WORK	INTE	INTW
Full VIF	2.231	2.135	1.415	1.230	1.050	2.202	1.111	2.245	1.122	1.098

Note: CQ = Cultural Interlligence, ICC = Intercultural communication competence, SERV = Service attentiveness, ANX = Anxiety, GEN = Gender, RANK = Job rank, JDM = Job demands, WORK = Work year, INTE = International education experience, INTW = International work experience.

In addition, Kock and Lynn (2012b) suggested that the full collinearity VIF test can be used to capture the possibility of common method bias (CMB) in the PLS model. The analysis showed that the full collinearity VIF of all variables ranged from 1.111 to 2.231, which was below the minimum requirement of 3.3 as suggested by Petter et al. (2007) Therefore, the result suggested that CMB may not be a serious issue in the analysis.

4.5 Normal Distribution

To investigate the normality of the data, WarpPLS 5.0 provides two tests for the normality test normality, Jarque-Bera test of normality (Normal-JB) and Robust Jarque-Bera test of (Normal-RJB). The results show that there are variables that do not follow the normal distribution. The results are presented in table 4.15.

Table 4.15 The Normalization of the Data

	CQ	ICC	SERV	ANX	GEN	RANK	JDM	WORK	INTE	INTW
Normal-JB	Yes	Yes	No	Yes	No	No	No	No	No	No
Normal-RJB	Yes	Yes	No	Yes	No	No	No	No	No	No

Note: CQ = Cultural Intelligence, ICC = Intercultural communication competence, SERV = Service attentiveness, ANX = Anxiety, GEN = Gender, RANK = Job rank, JDM = Job demands, WORK = Work year, INTE = International education experience, INTW = International work experience.
- Yes means the data follow normal distribution, No means the data do not follow normal distribution

To interpret the result, “Yes” means the data are normalized. In contrast, “No” means the data do not follow the normal distribution. The results indicate that service attentiveness as well as all control variables, gender, job rank, job demand and work year, are not normalized which allows PLS analysis to maximize its benefits with these kinds of data. Therefore, the PLS-SEM is an appropriate method for this

researchSEM-PLS that show researches previous because provides a robustness result even when the data are highly non-normal (Cassel et al., 1999; Hair et al., 2012; Reinartz et al., 2009). All of these evidences confirm that PLS-SEM is a suitable research method for this research.

4.6 Test of Hypotheses

This study purposes six hypotheses with linear relationship which are shown earlier in table 2. The results of PLS analysis will be reported in this section. The author uses several measurement terms to explain the results. First, the p-value determines the null hypothesis that it will be accepted or rejected. If the p-value is below 0.05, the null hypothesis will be rejected and the alternative hypothesis will be accepted. Thus, the hypothesis will be statistically significant (Kline, 2004). On the other hand, If the p-value is above 0.05, the null hypothesis cannot be rejected. Hence, this hypothesis will not be statistically significant (Rice, 1989). Second, the path analysis indicates the strength of linkage between variables. Beta coefficient (β) is a widely-used term to illustrate the path coefficient of PLS analysis. If the beta coefficient is positive, there is a positive relationship between the variable block. Otherwise, if the beta coefficient is negative, there is a negative relationship between the variables. Third, r-squared coefficient reflects the percentage of the variance in the latent variable that is explained by the latent variables that are hypothesized to affect it. Therefore, the higher r-squared refers to higher predictive power of the overall model.

Due to PLS-SEM analysis it has a characteristic about a good working with distribution-free and small sample size data which rely on resample technique such as bootstrapping. Henseler et al. (2009) mentioned that “[A bootstrapping] procedure can be used in PLS path modeling to provide confidence intervals for all parameter estimates, building the basis for statistical inference”. The bootstrapping techniques will randomly draw an existing data to create larger data, or subsamples, to represent a population. The recommended number of subsamples is 100 (Efron et al., 2004). Therefore, the researcher followed the recommended value for the accuracy result. The results from PLS analysis are shown in Figure 4.1.

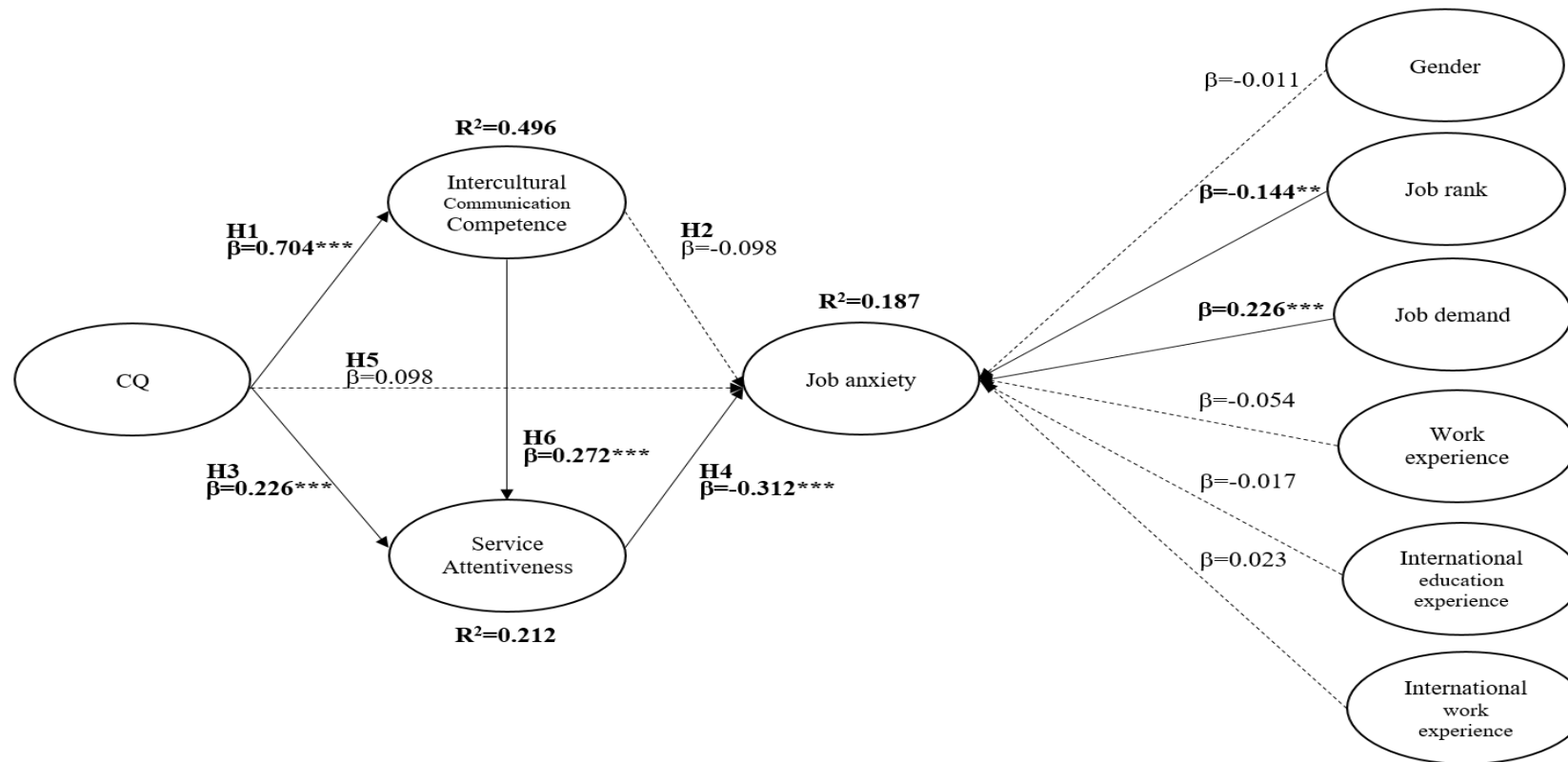


Figure 4.1 Main Model Results

Note: - ***, **, * means p-value < 0.001, <0.01, 0.05

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

Hypothesis 1: The level of CQ of cabin crews will positively associate with Intercultural communication competence.

The result showed that they are positively related, which means that cabin crews who possessed a higher level of CQ tended to exhibit a higher level of intercultural communication competence. The result was also statistically significant ($\beta=.704$; $p<.001$), which suggests that there is a low potential that their positive association may occur purely by chance. Thus, hypothesis 1 is supported.

Hypothesis 2: The level of intercultural communication competence of cabin crews will be negatively associate with job anxiety

The analysis that tested this hypothesis showed that these two variables are negatively related, which means that cabin crews who possessed higher intercultural communication competence tended to experience a lower level of job anxiety. However, the relationship was not statistically significant ($\beta=-.098$; $p=.135$), which means that there is a high potential that their negative association may occur purely by chance. Thus, hypothesis 2 is not supported.

Hypothesis 3: The level of CQ of cabin crews will positively associate with service attentiveness.

The result revealed a positive relationship between these two variables ($\beta=.226$; $p<.001$), which means that cabin crews who possessed a higher level CQ tended to demonstrate a higher level of service attentiveness. The result was also statistically significant, which suggests that there is a low potential that their positive association may occur purely by chance. Thus, hypothesis 3 is supported.

Hypothesis 4: The level of service attentiveness of cabin crews will negatively associate with job anxiety.

The result showed a negative relationship between these two variables ($\beta=-.312$; $p<.001$), which means that cabin crews who had the ability to demonstrate a higher level of service attentiveness tended to encounter a lower level of job anxiety. The result was also statistically significant, which suggests that there is a low potential that their negative association may occur purely by chance. Thus, hypothesis 4 is supported.

Hypothesis 5: The level of CQ of cabin crews will negatively associate with job anxiety.

Unexpectedly, the result from PLS analysis suggests a positive relationship among these variables and p-value is not statistically significant at 5 percent ($\beta=0.098$, $p=0.139$). The hypothesis 5 is not supported.

Hypothesis 6: The level of intercultural communication competence of cabin crews will positively associate with service attentiveness.

The result showed that they are positively related ($\beta=.272$; $p<.001$), which means cabin crews who exhibited a high level of intercultural communication competence tended to demonstrate a higher level of service attentiveness. The result was also statistically significant, which suggests that there is a low potential that their positive association may occur purely by chance. Thus, hypothesis 6 is supported.

The result of control variables from PLS-SEM analysis implies that some cabin crew's characteristics are related to the level of job anxiety. The result indicates that job rank of cabin crew is negatively associated with lower level of job anxiety. This finding is statistically significant ($\beta=-.144$; $p=.01$). This means the high-ranking cabin crews tends to experience the lower job stress. The rank of cabin crews not only represents the class of passengers they are eligible to serve but also represent the higher level of service trainings they have achieved. The higher rank experiences more complex demands from a higher class of passengers. This situation makes cabin crews learn how to solve those problems. Therefore, they can develop their serving skills through routinely complicated situations. Once they achieved a professional serving skills, they are capable of solving any problems about service they are encountered. This might lead cabin crew to reduce their level of job anxiety. The result shows that job demand is positively related with lower level of job anxiety. This finding is also statistically significant ($\beta=.226$; $p<.001$). This means the higher job demands relate to a higher level of job anxiety. Generally, cabin crews have a limited time compared to their tasks. If they are required to work faster, harder, with more complicated tasks, these can explicitly increase their job stress. On the other hand, if they have a sufficient time, clear job tasks and enough time for resting, cabin crews may lessen their job anxiety.

4.7 Model Fit Indices

The model fit indices are a set of indicators that measure a quality of the model comparing to the data. Apart from hypotheses testing, these measurements provide information for the author to compare which model is more suitable for the study (Kock & Lynn, 2012a). WarpPLS 5.0 provides ten global model fit and quality indices to analyze the research model.

4.7.1 Average Path Coefficient (APC)

The average path coefficient (APC) refers to how strong the paths are in the overall model. It is recommended that the p-value should equal to or below 0.05. The result from PLSanalysis indicates that APC has a value of 0.182 with p-value lower than 0.001. Thus, APC is statistically significant.

4.7.2 Average R-squared (ARS)

The average R-squared (ARS) refers to overall explanatory power of the model. It is recommended that the p-value should equal to or below 0.05. The result reveals that ARS value is 0.298 with p-value below 0.001. Therefore, ARS is statistically significant.

4.7.3 Average Adjusted R-squared (AARS)

Average adjusted r-squared (AARS) is slightly different from the average R-squared (ARS). The Average adjusted r-squared corrects spurious increases in R-squared coefficients due to predictors that add no explanatory value in each latent variable block. It is recommended that the p-value should equal to or below 0.05. The result from the test shows that AARS has a value of 0.290 with p-value less than 0.001. Thus, AARS is statistically significant.

4.7.4 Average Variance Inflation Factor (AVIF)

The average variance inflation factor (AVIF) is an indicator which measures model's vertical or classic collinearity. WarpPLS 5.0 suggests that an acceptable value of AVIF is equal to or less than 5 and ideal value is equal to or less than 3.3.

The result reveals that AVIF index is 1.668 which means the collinearity in this model is ideally acceptable.

4.7.5 Average Full Variance Inflation Factor (AFVIF)

The average full variance inflation factor (AFVIF) measures both vertical and lateral collinearity, or multicollinearity, of the model. WarpPLS 5.0 suggests that an acceptable value of AFVIF is equal to or less than 5 and ideal value is equal to or less than 3.3. The result indicates that AFVIF value of this model is 1.584, the p-value is below 0.001. Thus, the multicollinearity in this model is ideally acceptable.

4.7.6 Tenenhaus GoF (GoF index)

GoF index or Tenenhaus GoF is a measurement of model's explanatory power. GoF index defined the square root of the product between what they refer to as the average communality index and the ARS. GoF index is equal to or greater than 0.1 means small explanatory power, GoF index is equal or greater than 0.25 means medium explanatory power and GoF index is equal or greater than 0.36 means large explanatory power. The result indicates that GoF index of this model is 0.480. Thus, the result has a large explanatory power to the model.

4.7.7 Simpson's Paradox Ratio (SPR)

The Simpson's paradox ratio (SPR) is an indicator which indicates a possibility to have a Simpson's paradox in the model (Wagner, 1982). An acceptable value of SPR is 0.7 or 70 percent of paths in the model are free from Simpson's paradox. The result indicates that SPR value is 0.750 that means 75 percent of paths do not have a Simpson's paradox issue. Thus, SPR index in this model is acceptable.

4.7.8 R-squared Contribution Ratio (RSCR)

The R-squared contribution ratio (RSCR) measures a negative r-squared which comes from a Simpson's paradox issue (Pearl, 2009). An acceptable value of RSCR is equal to or above 0.9 or over 90 percent of r-squared in the model and has a positive sign. The result from PLSanalysis reveals that RSCR index is 0.993 which means that 99.3 percent of paths of r-squared in this model have a positive sign. Therefore, the RSCR index of this model is acceptable.

4.7.9 Statistical Suppression Ratio (SSR)

The statistical suppression ratio (SSR) is another index that measures a causality problem in the model (Spirtes et al., 1993). The SSR indicates that the hypothesized path in the model is not reasonable or should be reversed. The ideal SSR index is 1 which means there is no SSR issue in the model. The acceptable value is 0.7 which means over 70 percent of paths are not associated with SSR issue. The result of this model is 0.833 which means over 83.3 percent of paths in the model are free from SSR. Thus, this model is acceptable.

4.7.10 Nonlinear Bivariate Causality Direction Ratio (NLBCDR)

The nonlinear bivariate causality direction ratio (NLBCDR) measures the correctness of direction of causality in non-linear relationship. Acceptable values of NLBCDR is equal to or greater than 0.7 which means 70 percent of path-related instances have weak or no suggestion to reverse hypothesized direction. The result shows that NLBCDR index is 0.917 which means this model is acceptable for the non-linear of direction of causality. Since this model is purposed in linear relationship which means NLBCDR should not be considered in the test.

Conclusively, results from ten model fit indices are in acceptable range or above, and these results confirm that the author used a suitable technique for the data and this model is reliable (Browne et al., 1993). All model fit indices are shown in table 4.16 below.

Table 4.16 Model Fit Indices

Model Fit Indices	Coefficient	Result
Average path coefficient (APC)	0.182***	Significant
Average R-squared (ARS)	0.298***	Significant
Average adjusted R-squared (AARS)	0.290***	Significant
Average block VIF (AVIF)	1.668	Ideally
Average full collinearity VIF (AFVIF)	1.584	Ideally
Tenenhaus GoF (GoF)	0.480	Large

Table 4.16 (Continued)

Model Fit Indices	Coefficient	Result
Simpson's paradox ratio (SPR)	0.750	Acceptable
R-squared contribution ratio (RSCR)	0.993	Acceptable
Statistical suppression ratio (SSR)	0.833	Acceptable
Nonlinear bivariate causality direction ratio (NLBCDR)	0.917	Acceptable

Note: ***, **, * means significant at 0.001, 0.01, 0.05 level

CHAPTER 5

DISCUSSION

5.1 Overall Finding

The results from PLS-SEM analysis indicate that four out of six hypotheses in this research are statistically supported. The results are reported in table 5.1 below.

Table 5.1 Summary of Hypotheses Testing Results

	Hypotheses	Result
H1	The level of CQ of cabin crews will positively associate with Intercultural communication competence.	Supported
H2	The level of intercultural communication competence of cabin crews will negatively associate with job anxiety	Not supported
H3	The level of CQ of cabin crews will positively associate with service attentiveness.	Supported
H4	The level of service attentiveness of cabin crews will negatively associate with job anxiety	Supported
H5	The level of CQ of cabin crews will negatively associate with job anxiety.	Not supported
H6	The level of intercultural communication competence of cabin crews will positively associate with service attentiveness.	Supported

Regarding the results, CQ has a strong positive relationship to intercultural communication competence and service attentiveness. The result of CQ and intercultural communication competence is congruent with a previous research of CQ and communication effectiveness in context of multinational company. Bückner et al. (2014a) found that Chinese managers who have a higher level of CQ can enhance the effectiveness of their communication with their foreign executives in the company. This finding indicates that CQ is a foundation for intercultural communication in cabin crew context. The finding about CQ has a positive relationship to service attentiveness which coincides with a study of Sharma et al. (2009) who proposed that the service employee whose culture is different from their customer tends to make them feel uncomfortable. In cabin crew context, it can be explained that if cabin crew's culture is different from their passengers, some of the service styles in their cultures may be inappropriate in the passenger's culture; this might make their passenger feel unsatisfied. On the other hand, if cabin crew who have a sufficient knowledge of other cultures tend to make customers feel more satisfied through an understanding of expectation and offer a right service to a particular foreign passenger.

Furthermore, the service attentiveness was found that it strongly associated with lower cabin crews' job anxiety. One of cabin crews' duties on board is to satisfy passengers by their services. If cabin crews fail their duty, it apparently makes their passengers feel unsatisfied which might lead to undesired reaction. Consequently, stress may occur. In contrast, cabin crews who are energized to serve their customer not only match to their expectation but also go beyond the standard level and might make passengers feel more satisfied. Cabin crews may experience a smooth service without any disruption. Hence, they might lower their level of job anxiety even during the most stressful flight. There is lack of research on service attentiveness associated with lower level of anxiety. Therefore, this finding provides an extra contribution to the hospitality sector especially in cabin crew context.

Moreover, this research found a strongly positive relationship between intercultural communication competence and service attentiveness. These findings accord to Sizoo et al. (2005)'s result which indicates that employee with higher intercultural sensitivity scored significantly higher in terms of service attentiveness.

Sizoo et al. (2005) mentioned that intercultural sensitivity is defined as “a sensitivity to the importance of cultural differences and to the points of view of other people” (Bhawuk & Brislin, 1992). This can explain that persons who possessed intercultural sensitivity can understand foreigner’s perspective and deliver an exceptional service to their customers. This ability is similar to intercultural communication competence which is based on a third-culture perspective, an ability to think like they are non-local people. Therefore, the research is congruent with results from this study.

Although the analysis did not find statistical support for the direct linkage between intercultural communication competence and lower job anxiety, the positive relationship between intercultural communication competence and service attentiveness suggests that the contribution of intercultural communication competence on lower cabin crew anxiety could be achieved through the ability of the cabin crews to use their cross-cultural communication skills to deliver exceptional service to the foreign passengers.

The findings support the role of CQ in the appraisal theory and job demand-resource model. Generally, both theories aim to reduce the level of stress in the job. The result indicates that CQ is a crucial skill that facilitates service attentiveness and intercultural communication competence to associate with lower level of job anxiety. In appraisal theory, primary appraisal, when persons encounter the threatening situation they will assess their own ability to handle the threat. In secondary appraisal, CQ considers to be an important ability to lessen individual’s stress through a mechanism of intercultural communication competence and service attentiveness. Therefore, cabin crews can lessen their job anxiety. In job demand-resource model, stress will intensify when persons evaluate themselves that they lack resources for solving problems. According to the results, CQ plays a crucial role in initiating an intercultural communication competence and service attentiveness. These skills will be an important resource to deal with cabin crew job demands. One particular job demand that create a high stress to cabin crew is when they are serving foreign passengers. Due to the expectations are which are different from each culture, cabin crews who possessed CQ, intercultural communication competence and service attentiveness are capable of dealing with cross-cultural interactions effectively. These are the critical job resources that help cabin crew to lessen their job anxiety. Overall,

this study contributes evidences about how CQ associates with a lower level of job anxiety of those theories.

Two control variables (job rank and job demand) that are significantly associated with job anxiety also need to be discussed. First, job ranks of cabin crews negatively associate with job anxiety. This means cabin crews with higher rank tend to experience lower level of stress when they work with foreign passengers. This dues to the fact the senior cabin crews represents an achievement of a higher level of service training which includes techniques of handling demanding passengers and service styles. This might help cabin crews to alleviate stress by applying those skills set with passengers and will strengthen cabin crew's skill through these routine situations. Second, job demand has a positive relationship with job anxiety. This result corresponds with the study of Totterdell et al. (2006) which reported that the higher level of work demands of portfolio workers associates with higher anxiety. As for the cabin crews, every cabin crew member has their own duties on board assigned before the flight. If there are additional duties come up without notice, they might encounter a difficulty to complete that additional tasks due to their time limitation. These additional tasks can be explained as job demands in "Job demand-resource model" (JD-R) that could create job stress on to the cabin crews.

In conclusion, to summarize the overall findings, having CQ allowed the cabin crews to develop intercultural communication competence and service attentiveness; these two competencies served as the mechanisms that explain why the cabin crews with high CQ tended to experience lower anxiety when working on stressful international flights.

5.2 Additional Findings from Cabin Crew Interview

To additionally confirm the findings from the quantitative analysis, the author had conducted an informal interview with cabin crew members on board. They were asked whether or not the knowledge, as well as awareness, motivation, verbal and nonverbal behavior, and repertoire of other cultures could help them to communicate and initiate a relationship in diverse cultural situations better? Do these competencies help them to be able to offer better services? And, do these abilities lessen stress from

serving foreign passengers? Most of cabin crews agreed that the knowledge of other cultures is very important to communicate with foreign passengers. For example, when dealing with Japanese passengers, if cabin crew members make some mistakes and apologized them, thier verbal, facial and body expressions have to make them feel that they are really sorry for the mistakes that they have done. Otherwise, the passengers will have a negative perception with the airline services and they might report the company of what happened. This might cause negative attitude to the company reputation and they may discontinue using the service of the airline in the future. The cabin crew members also mentioned that if they understand the passengers' culture, they can easily initiate an impression to the relationship and offer exceptional services to those passengers.

They mentioned that even the most stressful flight such as Indian routes with a full-house of Indian passengers, they still can work smoothly without stress serving a said-to-be the most demanding passengers with understanding how to treat them in a particular situation. For example, if an Indian passenger asks for vegetarian food which is not requested prior the flight, instead of saying NO right away, if the crew says "Please let me check if it is available." Fully acknowledging that the vegetarian food was not available, if cabin crews deny the passenger in the first place, he might turn furious, but if cabin crews show their effort to fulfill his request, that will make the passenger feel better even though later on the passenger could not get what he wants. This is because cabin crew understand their nature. This supports the believe that CQ is a crucial competency to help cabin crews lessen their anxiety through an intercultural communication capability and service attentiveness when serving foreign passengers.

The result of the control variables coincides with the result from the informal interview with the Thairways cabin crew members on board, namely; their stress caused by the decreasing number of the cabin crews and the work upgrade policy; experienced cabin crews and those with higher rank have less stress than the lower rank ones. These evidences indicate that the result from the informal interview with cabin crews on board corresponds with the findings from this research.

CHAPTER 6

CONCLUSION

6.1 Summary

CQ has been proposed to be an important skill in cross-cultural context. However, there is lack of CQ studies in service providers who usually interact with foreign customers. This research will provide an empirical evidence about the role of CQ in cabin crew context which has not been investigated before. The main objective in this study is to investigate how CQ relates to the lower level of job anxiety in cabin crew. The overall results from the PLS-SEM analysis support this prediction. To summarize the overall findings, having CQ allowed the cabin crew members to develop intercultural communication competence and service attentiveness; these two competencies served as the mechanisms that explain why the cabin crew members with high CQ tended to experience lower anxiety when working on stressful international flights.

The overall findings from this study are consistent with prior research, which found the evidence regarding the contribution of CQ in helping individuals develop the crucial skills required to be effective in various areas of cross-cultural interaction (Peerayuth Charoensukmongkol, 2015; Guðmundsdóttir, 2015; Jyoti & Kour, 2015; Ott & Michailova, 2016). In conclusion, the results that were obtained from the cabin crews sampled provided additional support to CQ research focusing on employees in the service sectors (Alshaibani & Bakir, 2016; Fakhreidin, 2011).

6.2 Limitations

Despite the contributions this research provides, there are some research limitations that need to be considered. First, the results of this research came from the

survey conducted at only one organization in Thailand. Using a single organization can limit the generalizability of the results to a larger population. Second, the analysis was based on the survey data that were collected on a cross-sectional basis. Using cross-sectional data makes the direction of causality difficult to be inferred. Therefore, the results can only be interpreted in terms of association rather than causation. Third, survey data can also be susceptible to subjective bias from the respondents.

6.3 Theoretical Contributions

The results from this research provide an extra theoretical contribution by showing some mechanism by which CQ helped employees in the service industry to experience lower anxiety during cross-cultural service encounters. The findings from this study accord to previous researches that CQ is found to be a crucial skill that helps persons to be effective in cross-cultural interaction. Particularly, the results contribute an evidence of CQ in service sectors and specifically in airline industry. The mechanism of CQ that associates with lower level of job anxiety of this research contributes an understanding about how cabin crew can alleviate their job stress. Although this research does not found a direct relationship between CQ and job anxiety. The mechanism can indirectly explain through intercultural communication competence and service attentiveness. The results indicate that only CQ alone is not adequate for cabin crews to lower their job anxiety. Cabin crews with CQ ability can develop their cross-cultural communication skill to communicate to particular culture effectively and it also facilitates cabin crews to understand the differences in service expectation precisely in each culture. Therefore, they can deliver an extraordinary service to make passengers feel impressed. This mechanism of CQ can help cabin crews to have a lower level of job anxiety.

6.4 Practical Implications

The results from this research have implications for airline industries, regarding interventions aimed to enhance the work competencies of their cabin crews.

Given the results regarding the positive contributions of CQ, this research suggests that CQ can be a cultural competency that cabin crews need to develop to enhance their ability to interact effectively with foreign passengers, as well as to help the cabin crews to have a better understanding of the service expectations of foreign passengers, so that they can deliver the service that precisely matches the foreign passengers' expectations. Particularly for the airline that is used as a case study in this research, to date there is no cultural training provided to the cabin crews to help them to understand and deal effectively with foreign passengers. Although the airline provides service training to the cabin crews on a regular basis, the contents of the training only focus on service delivery in general, without considering the differences in values and service expectations of passengers from various cultures. As a result, the cabin crews had to learn to understand and to deal with foreign passengers on their own, during the flight, without any guidance from the airline. This created tremendously high tension for the cabin crews. Therefore, CQ training should be offered to make the cabin crews more effective in cross-cultural service encounters.

CQ is a competency that can be developed through trainings (MacNab, 2012; Rehg et al., 2012). Therefore, this research suggests that the airline companies should incorporate CQ training as part of their cabin crew development programs. Generally, it is mandatory for the airline to hold security and service trainings for their cabin crews to attend every year. Thus, the airline should consider adding cultural training into the service training session. The training needs to emphasize helping the cabin crews to gain in-depth knowledge about cultural differences so that they can develop a deeper insight into the service expectations of diverse foreign passengers. The training can begin in a classroom setting, where experts are invited to provide knowledge about things that the cabin crews need to be aware of when they interact with foreigners. In order to enhance the effectiveness of the cultural training, experts who are foreigners from various cultures should provide knowledge to the cabin crews about appropriate verbal and non-verbal behaviors that are highly valued in their cultures, as well as inappropriate behaviors that the cabin crews should avoid. In addition to the general knowledge about cultures, the training should allow the cabin crews to apply the knowledge and skills in cross-cultural service activities. For example, the cabin crews must be trained to demonstrate appropriate gestures, facial

expressions and word choices when interacting with foreign passengers in various situations, such as greeting passengers, serving meals to passengers, or handling passengers' requests and complaints, etc. The training should also require the cabin crews to get feedback from the instructors to make improvements and to make sure that they can correctly apply the knowledge they have learned to provide impressive service to foreign passengers. The cabin crews who pass the cultural training should be assigned to the international flight to test their skills and to assess the learning outcomes in a real situation. The cabin crews should be asked to report the level of job stress they experience before and after the training to evaluate the training effectiveness in the area of stress reduction. Moreover, in-flight managers or supervisors can determine the effectiveness of the training through evaluating the improvement in service performance of the cabin crews, based on the appreciation letters and complaint letters they receive from foreign passengers.

In conclusion, the management team of the airline companies should consider integrating the research's findings into the airline's policy according to the following issues. First, the management team should establish an in-flight cultural division to respond to all activities concerning foreign cultures such as cultural trainings, solving foreign passengers' problems and evaluation system. This division is not only enhancing an overall performance of airline cabin crew members but also facilitating the airline companies to have a sustainable growth when expanding the routes to other countries. Second, the cabin crews' recruitment processes should be revised. According to the research result, cross-cultural competencies especially CQ is apparently important to cabin crews' job characteristic. One way or another, the assessment process on the level of CQ of the candidates should be added into the company's recruitment process and use the result as a significant qualification to select the right candidates. These will help the airline companies not only that the companies could save any additional cost on CQ training in the future, but also that the airline cabin crew members could work smoothly without stress when serving foreign passengers. Lastly, the cultural policies initiated by an in-flight service department should be applicable to other frontline staff who usually encounter with foreign passengers such as the ground staff team to boost up their performance and to decrease their job anxiety that might occur from interacting with foreign passengers.

6.5 Future Research

There are some suggestions for future research that need to be explored. First, the mechanism to lessen the stress in cabin crews needs to be explored in other aspects. There are many factors that are associated with job stress in service industry and are not yet investigated in cabin crew context. For example, the emotional exhaustion is the aspect that creates a lot of anxiety in service providers (Deery et al., 2002; Grandey, 2003; Kim, 2008). CQ may be associated with this aspect and it may help cabin crews to lessen job stress. This will contribute more mechanism on how CQ can be associated with lower job anxiety. Second, the benefits of CQ in the service industry will need to be explored in more detail and also other mechanisms by which CQ can help people enhance outcomes in various areas of cross-cultural service encounters. For example, how stress affects the turnover intention and job satisfaction of cabin crews. This study can help the airline company to identify factors that reduce the turnover rate and retain the employee to work with satisfaction in their job which will help overall operation performance of the airline company. Lastly, this model can be conducted in another country where cabin crew's characteristics are different from Thai cabin crew. The result can be compared to this research and can determine how CQ related to lower job stress in each country.

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