



Contribution of Cultural Intelligence to Job Performance of Domestic Hotel Employees in Thailand: The Mediating Roles of Communication Effectiveness and Job Stress

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Received 5 April 2020; Received in revised form 20 July 2020

Accepted 11 August 2020; Available online 25 November 2020

Abstract

This study investigated the contributions of cultural intelligence (CQ) on job performance. Communication effectiveness and job stress were proposed as two competencies that mediated the linkage between cultural intelligence and job performance. Survey data were collected from 427 frontline employees working for domestic chain hotels in Thailand. The results computed from a partial least squares (PLS) regression analysis showed that communication effectiveness and job stress mediated the linkage between cultural intelligence and job performance of the frontline hotel employees. The results also showed that communication effectiveness negatively and partially mediated the relationship between CQ and job stress, and job stress positively and partially mediated the relationship between communication effectiveness and job performance of the frontline hotel employees. The findings indicate that CQ can improve frontline hotel employees' job performance by increasing their communication effectiveness and reducing their job stress.

Keywords

Cultural intelligence, Job performance, Communication effectiveness, Job stress, Hotel employees

Introduction

In the globalized world, where people are more connected than ever, the hotel industry is one of the fastest-growing sectors. Thailand, one of the most popular tourist destination countries in the world, is home to many hotels that harshly compete with one another. Among them are international chain hotels multiplying throughout the country, especially in Bangkok and other big cities, such as Chiangmai, Pattaya, Phuket, and Krabi (Lunkam, 2017). According to Jansiriratanakorn (2018), there were 1,023 chain hotels in Thailand operated by 237 domestic and international brands in 2017. Among them were 93 international brands operating 317 international chain hotels, expanding rapidly and gaining a more significant market share. With such a competitive condition, domestic hotel chains are losing their grounds to their foreign rivals. Thereby Thai chain hotels, which counted for 144 brands and 706 hotels, according to Jansiriratanakorn (2018), need competitive advantages to stay competitive and survive. For hotel businesses that mainly provide accommodation and services to their guests, their employees' performance is spotlighted. In general, hotel employees tend to encounter cultural diversity existing among themselves and guests (Sucher & Cheung, 2015). According to research, cultural diversity can lead to challenges prohibiting employees in organizations from achieving successful job performance (Jyoti, Kour, & Bhau, 2015). There is evidence that cultural diversity can negatively impact job performance, such as job stress, conflict, etc. (Jyoti et al., 2015). To achieve a high level of job performance, they need to overcome these cultural diversity issues. On the other hand, previous studies also revealed that employees' positive job-related feelings and attitudes could also foster job performance (Hayat et al., 2019). Thereby, the employees required a cultural competency that can lower their negative job-related feelings and increase positive job-related ones to drive their job performance in intercultural contexts.

Although research shows that many job-related feelings contribute both positive and negative effects to job performance, job stress and communication effectiveness were chosen in this study because they were found to be potential antecedents to higher job performance (Deng et al., 2019; Platis, Reklitis, & Zimeras, 2015). The cultural competency proposed in this study was cultural intelligence (CQ), a set of skills that enables individuals to perform effectively in intercultural situations (Earley & Ang, 2003). An individual with high CQ can understand others' behaviors from different cultures and adapt themselves well to unfamiliar cultural settings (Suthatorn & Charoensukmongkol, 2018). CQ has been selected in this study since, according to prior research, CQ fosters individuals' performance in several areas in cross-cultural contexts (Alshaibani & Bakir, 2017; Jyoti & Kour, 2017; Rahmatsyah et al., 2018).

This study focuses on how to increase the job performance of domestic chain hotels' employees who must function in cross-cultural environments. Even though prior

studies have explored the role of CQ in enhancing job performance (Henning, 2017; Rahmatsyah et al., 2018), only a limited number of studies have focused on the benefits of CQ for frontline employees in the context of domestic chain hotels in Thailand (Sucher & Cheung, 2015). Most CQ studies focus on the management levels, while studies focusing on frontline employees are still limited (Paparoidamis, Tran, & Leonidou, 2019). Especially in the hotel industry, even though CQ research on job performance already exists in the literature, only a few researchers focus on this industry. In particular, the benefits of CQ in the context of frontline hotel employees in Thailand have not yet been widely revealed in the research.

Nevertheless, instead of the direct linkage between CQ and job performance, this research proposes that CQ's contribution can be indirectly explained by communication effectiveness and job stress of domestic chain hotel employees. CQ was introduced in this research as a characteristic of hotel employees that can increase communication effectiveness and offset job stress, enabling hotel employees to perform better when performing in intercultural situations.

The purpose of this research was to acquire empirical evidence about the role of CQ in enhancing the job performance of hotel employees when dealing with foreign colleagues and guests. The research objectives of this study were to: (1) examine the mechanism that links the level of CQ that the hotel employees exhibited and their job performance; (2) investigate the relationship between the level of CQ that the hotel employees presented and their level of communication effectiveness and job stress; and (3) demonstrate the mediating effects of communication effectiveness and job stress that explain the relationship between the levels of hotel employees' CQ and job performance. Results from this research provide new knowledge and empirical evidence in CQ and job performance studies. They also offer some implications for hotel businesses. For example, a guideline to the management on improving employees' performance and the importance of developing cultural competencies of their frontline employees can help foster better performance in providing superior service to foreign guests.

Literature Review

Cultural intelligence

CQ is defined as an individuals' capability to perform effectively in cross-cultural contexts (Earley & Ang, 2003). CQ is a multidimensional concept comprising of four aspects (Livermore, 2011). First, cognitive CQ refers to individuals' knowledge about cultures and cultural environments, such as norms and customs in different cultural settings (Van Dyne, Ang, & Tan, 2017). Individuals with a high level of cognitive CQ tend to be more culturally knowledgeable and competent in applying their cultural knowledge in cross-cultural situations than others (Ang, Rockstuhl, & Tan, 2015). The cultural knowledge helps them understand

diverse aspects of cultures and how they are different from one to another context (Van Dyne et al., 2017). Second, metacognitive CQ refers to a level of cultural mindfulness of individuals that controls their cultural knowledge and understanding (Van Dyne et al., 2012). This CQ dimension allows individuals to plan and apply cultural knowledge to interact appropriately in intercultural situations (Ratasuk & Charoensukmongkol, 2020). It promotes a dynamic learning process to cope with the complexity and unexpected intercultural situations (Ang & Van Dyne, 2015). Individuals with a high level of metacognitive CQ tend to be mindful of cross-cultural situations and question their cultural assumptions (Ang et al., 2015). They are also open to new and unexpected intercultural interactions and adjust their cultural knowledge according to the actual cross-cultural situations for the best outcomes possible (Earley, 2002).

Third, motivation CQ refers to individuals' capability to direct their attention and energy towards learning and engaging in cross-cultural situations (Van Dyne et al., 2012). Individuals with a high level of motivation CQ tend to enjoy challenging and being involved in situations shaped by cultural diversity (Van Dyne et al., 2017). Finally, behavioral CQ refers to individuals' ability to perform both verbally and nonverbally when interacting with others from different cultures (Ang et al., 2015). Individuals with a high level of behavioral CQ tend to be flexible in their verbal and nonverbal behaviors in cross-cultural situations and determine the best appropriate actions for the best outcomes (Pandey & Charoensukmongkol, 2019; Van Dyne et al., 2012)

Job performance

Job performance can be defined as the aggregated value of behaviors and achievements that employees contribute to their jobs and organizations' goals (Rich, Lepine, & Crawford, 2010; Wang, 2016). The study of an employee's job performance has become increasingly important because it contributes to organizations' success (Nam & Park, 2019). It is a crucial indicator of business performance and also adds to the competitive advantage of a business. Employers and managers can use job performance as a tool to improve their business performance. Therefore, many organizations strive to recruit talented employees and increase their performance. Job performance is a popular business, and organizational outcomes are studied in many different areas (Mahlamäki, Rintamäki, & Rajah, 2019; Ozcelik & Barsade, 2018)). This study explores the cross-cultural context in the hospitality industry in Thailand, along with other variables such as communication effectiveness, job stress, and CQ.

Communication effectiveness

The ability to communicate effectively is the key to success in intercultural business contexts (Bücker et al., 2014; Puyod & Charoensukmongkol, 2019)). Communication effectiveness refers to how well an individual can understand, interpret, and share

information in appropriate manners (Sharma & Patterson, 1999). In intercultural settings, excellent communication skills in the workplace are required for effective interpretation and correct understanding, which are believed to lead to positive organizational outcomes, such as trust, high job performance, and knowledge sharing ((Nasri, Heydari Bafghi, & Jararh, 2017; Patterson, 2016; Presbitero & Attar, 2018). Therefore, in the hotel industry, the ability to communicate effectively is necessary for hotel employees in understanding and sharing information across cultures.

Job stress

Job stress is defined as individuals' adaptive response, moderated by their differences, caused by actions, situations, phenomena, or events that create specific demands on them at work (Davis et al., 2020; DeFrank & Ivancevich, 1998). Job stress can be developed from uncertain working conditions, workplace conflict, excessive workload, and over-skilled work requirements (Yuen et al., 2018). High stress can lead to negative work outcomes, such as lower satisfaction and job performance and a higher turnover rate (Charoensukmongkol, 2014; Malik et al., 2018; Yuen et al., 2018). However, according to Malik et al. (2018), once the stressor is addressed or overcome, the degree of stress tends to decrease dramatically without causing any negative outcomes. Abbas and Raja (2015) stated that individuals who have positive psychological resources, such as optimism and efficacy, are less likely to experience job stress. Prior research revealed that job stress could lower job satisfaction and job performance (Parker & DeCotiis, 1983).

Social Identity Theory

Social identity theory (SIT) is a well-known theory that is widely used to explain multicultural teams' characteristics and nature (Tajfel & Turner, 1986). SIT explains that people tend to identify and classify themselves and others according to their cultural backgrounds (Ashforth & Mael, 1989; Hogg, 2016; Tajfel & Turner, 2004). They view others who share common characteristics with them as their in-group and those who are different from them as an out-group (Hogg & Terry, 2000). According to SIT, people tend to favor and prefer to cooperate with in-group members rather than out-group members ((Hogg, 2016; Wickramasinghe & Nandula, 2015)). Thus, this potentially discourages frontline hotel employees from interacting effectively with colleagues and hotel guests from different cultures by making them feel uncomfortable and eventually limiting their work performance.

Communication effectiveness and job performance

Individuals with a high level of communication effectiveness can convey and receive messages with more precision and less error, creating efficiency in the intercultural work environment (Bücker et al., 2014)). These achievements reflect their job performance (Wang,

2016). Lan et al. (2020) found that the communication effectiveness of communication software users in Taiwan positively affected their job performance. According to Yu and Ko (2017), communication competency positively correlates with job performance in nursing. In a cross-cultural work environment, communication effectiveness may include language competency and an understanding of different cultures that help individuals overcome barriers resulting from cultural diversity. Accordingly, the following hypothesis was proposed:

Hypothesis 1: Communication effectiveness is positively associated with job performance of hotel employees.

Job stress and job performance

Job stress tends to lead to negative results, such as job dissatisfaction, job burnout, and turnover intentions (Yunita & Saputra, 2019)). According to prior research, job stress is negatively associated with employees' job performance (Vijayan, 2017; Wu, Hu, & Zheng, 2019). Deng et al. (2019) found a negative and significant relationship between job stress produced in the workplace and job performance among Chinese healthcare workers. Banerjee and Mehta (2016) also found that teachers' teaching stress leads to job avoidance and limits their job performance. Accordingly, the following hypothesis was proposed:

Hypothesis 2: Job stress is negatively associated with job performance of hotel employees.

Communication effectiveness and job stress

Individuals with a high level of communication effectiveness tend to perform well in cross-cultural environments because they can convey a more explicit message and better understand others from other cultures allowing them to enjoy interacting with others more (Suthatorn & Charoensukmongkol, 2018). As a result, they tend to have less stress when dealing with others. According to previous research, communication effectiveness was found to have a negative association with job stress. For example, Lim (2019) found a negative relationship between organizational communication and workers' job stress in Korea. Lim (2019) also found that communication effectiveness was negatively associated with Medicaid case managers' job stress in Korea. In addition, Clayton et al. (2019) found a negative effect of communication effectiveness on hospice nurses' nursing stress. Accordingly, the following hypothesis was proposed:

Hypothesis 3: Communication effectiveness is negatively associated with job stress of hotel employees.

Communication effectiveness, job stress, and job performance

According to previous research, communication effectiveness can reduce job stress (Clayton et al., 2019; Lim, 2019). Moreover, job stress was found to negatively affect job performance (Banerjee & Mehta, 2016; Deng et al., 2019). Therefore, job stress can potentially mediate the relationship between communication effectiveness and job performance. Accordingly, the following hypothesis was proposed:

Hypothesis 4: Job stress mediates a positive association between communication effectiveness and job performance.

CQ and communication effectiveness

This study puts forwards that CQ can enhance cross-cultural communication skills of hotel employees, which can potentially lead to better work performance. With CQ, hotel employees should understand people from other cultures and appropriately convey accurate information to them (Ang et al., 2015; Charoensukmongkol & Pandey, 2020). Hotel employees with a level of CQ are expected to effectively communicate with foreign guests and provide them decent service, which can potentially build their satisfaction (Ratasuk & Charoensukmongkol, 2020). Moreover, hotel employees with high CQ tend to communicate effectively with foreign colleagues and create quality workflow and teamwork. Accordingly, the following hypothesis was proposed:

Hypothesis 5: CQ is positively associated with the communication effectiveness of hotel employees.

CQ and job stress

In cross-cultural situations where hotel employees must interact with foreign colleagues and guests, they may experience stress caused by cultural dissimilarity. A cultural competence that enables them to adapt themselves to fit better in the cross-cultural environment is required to help them feel more comfortable and less tense (Pao-Cheng, Robbins, & Pei-Kuan, 2019). Therefore, CQ, which is the capability of an individual to adapt to unexpected cultural situations, is supposed to help reduce hotel employees' job stress in intercultural contexts. Accordingly, the following hypothesis was proposed:

Hypothesis 6: CQ is negatively associated with job stress of hotel employees.

CQ, communication effectiveness, job stress, and job performance

This study proposes that CQ can indirectly contribute to a higher level of job performance in cross-cultural settings. In general, individuals with a high level of CQ tend to be knowledgeable about the norms and values of other cultures. This allows them to communicate effectively and cope with the uncertainty existing in cross-cultural situations

that often create job stress, which can prohibit their job performance (Jyoti & Kour, 2017; Ramli, 2019; Seriwatana & Charoensukmongkol, 2020). Accordingly, hotel employees with a high level of CQ tend to be motivated, confident, and well prepared for encountering with unfamiliar cross-cultural situations enabling them to address possible cultural issues that may potentially lead to conflict and stress (Bücker et al., 2014; Caputo & Ayoko, 2016). The role of CQ in increasing job performance is also supported by Costers, Van Vaerenbergh, and Van den Broeck (2019)). They found that CQ has a more significant impact on job performance than rewards and empowerment. Charoensukmongkol (2020) found that CQ enhances the international sales performance of Thai salespeople assigned to work at international trade shows in foreign countries. However, in this research, the mechanism by which CQ can increase the job performance of hotel employees will be investigated. It can be explained by two variables that might be associated with CQ: (1) communication effectiveness and (2) job stress. Given the benefits of CQ, the following hypotheses were proposed:

Hypothesis 7: Communication effectiveness negatively mediates between CQ and job stress.

Hypothesis 8: Job stress positively mediates between communication effectiveness and job performance.

Hypothesis 9: Communication effectiveness positively mediates between CQ and job performance.

Hypothesis 10: Job stress positively mediates between CQ and job performance.

Methods

Sample and data collection procedure

This study's context focused on frontline hotel employees who worked at domestic hotel chains in Thailand. These employees routinely function in a cross-cultural work environment interacting with colleagues and guests with diverse cultural backgrounds. A self-administered questionnaire survey was employed for data collection. The samples were selected using a purposive random sampling method. A total of 500 frontline hotel employees from 25 domestic chain hotels located in Bangkok, Chiangmai, Pattaya, Krabi, and Phuket were randomly approached with the survey. The survey was conducted starting from early August, and it ended in late September 2019. It was distributed to each department by asking supervisors for cooperation from employees who were on duty at the time of data collection and the supervisors to evaluate their subordinates' job performance who participated in the study. Participation in the survey was voluntary. The questionnaire package included a cover letter stating clearly the research objectives and instructions. The participants were informed

about the anonymity of the data collection. The reason why the data were collected from both the supervisors and the employees was to avoid common method bias. This method has been frequently implemented in prior research (Eisenbeiss et al., 2008; Jiang & Chen, 2018). The data of CQ, intercultural communication competence, and job stress were collected from the employees, while the data about the job performance of employees were collected from their supervisors. However, only 427 of them agreed to participate and complete the survey. The characteristics of the participating employees are presented in Table 1. The characteristics of the sample of restaurant teams are presented in Table 1.

Table 1 Characteristics of the sample

Characteristics	Descriptive statistics
Gender	Male: 239 (55.97%) Female: 188 (44.03%)
Age	Mean: 29.494 S.D.: 6.48
Hospitality Education	Yes: 231 (54.10%) No: 196 (45.90%)
International Experience	Yes: 238 (55.74%) No: 189 (44.26%)
Locality	Yes: 132 (30.91%) No: 295 (69.09%)

Measures

All variables were measured using scales adapted from previous studies that were proved to be valid and reliable.

CQ was measured using twenty items self-reported cultural intelligence scales (CQS), which developed from Ang, Van Dyne, and Koh (2006). The twenty-item scale was derived from the 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 were measured using five-point Likert scales (1: strongly disagree, 5: strongly agree). Sample items were “I am confident that I can socialize with locals in a culture that is unfamiliar to me.” and “I enjoy interacting with people from different cultures.”

Communication effectiveness was measured using a six-item scale adapted from the cross-cultural communication effectiveness scale developed by Bückner et al. (2014). For example, “How effective are you in understanding colleagues/clients/salespeople from another culture?”. All items were measured using five-point Likert scales (1: strongly disagree, 5: strongly agree).

Job stress was measured using the four-item job stress scale adapted from Keller (2001). All items were rated on five-point Likert scales ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Sample items were "I experience tension from my job." and "Aspects of my job are a source of frustration to me."

Job performance was measured using a ten-item performance appraisal form adapted from Otoo and Mishra (2018). All items were rated on five-point Likert scales ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Sample items were "Regular and punctual attendance in accordance with Association's days and hours of operation." and "Produces high levels of outputs in a timely manner under normal and pressure conditions."

Control variables

This study included five control variables, including gender, age, hospitality education, international experience, and locality. These variables were found in previous research as factors that affected organizational outcomes, especially in intercultural contexts.

This data collection process and tool were approved by the Research Ethics Committee (REC), and a reference number of PIM-REC 001/2563 was granted.

Data analysis

This study used a partial least square (PLS) regression for analyzing the proposed model. PLS combines a principal component analysis, path analysis, and a set of regressions to generate estimates of the standardized regression coefficients for the model's paths and factor loadings for the measurement items (Chin & Newsted, 1999). Additionally, PLS does not require data to be normally distributed (Kline, 2005). WarpPLS 7.0 was selected and considered suitable for this study because the normality test suggested that only CQ was normally distributed while the rest of the variables were not normally distributed. In this case, PLS has been shown to produce less bias than other structural equation modeling techniques (Hair, Sarstedt, Ringle, & Mena, 2012).

Table 2 Correlation among variables and square root of average variance extracted

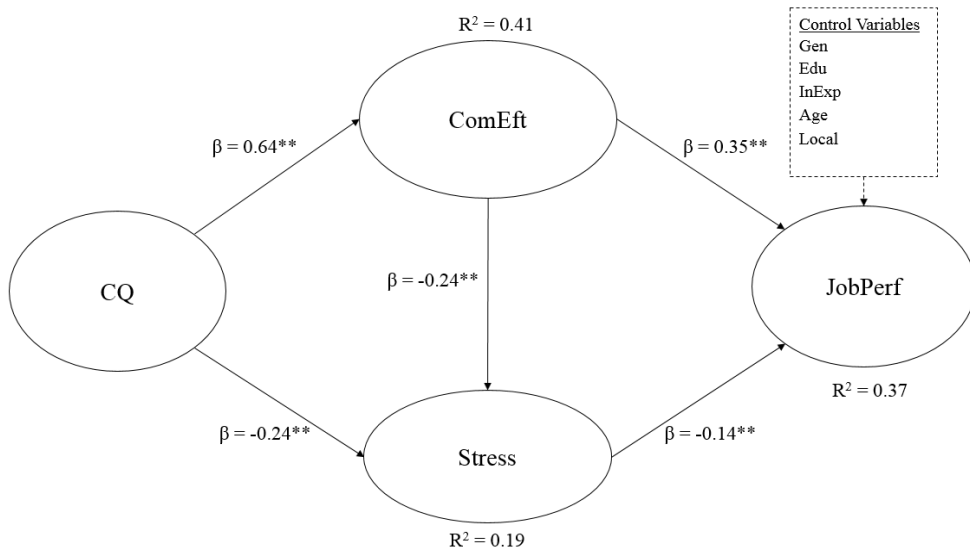
Variables	Cronbach's alpha coefficient	Composite reliability coefficient	CQ	Stress	ComEft	JobPerf	Gen	Edu	InExp	Age	Local
CQ	.964	.973	(1.000)								
Stress	.968	.974	-.374**	(1.000)							
ComEft	.869	.911	.567**	-.388**	(1.000)						
JobPerf	.918	.948	.769**	-.307**	.471**	(1.000)					
Gen	n/a	n/a	-.222**	.050	-.189**	-.395**	(1.000)				
Edu	n/a	n/a	.163**	-.065	.131**	.288**	-.357**	(1.000)			
InExp	n/a	n/a	.218**	-.126**	.173**	.301**	-.382**	.376**	(1.000)		
Age	n/a	n/a	.023	.009	-.009	-.006	-.010	-.064	-.073	(1.000)	
Local	n/a	n/a	.136*	-.086	.145**	.307**	-.375**	.332**	.308**	-.108*	(1.000)

Note: * p-value < .05, ** p-value < .01; CQ=cultural intelligence, Stress=job stress, ComEft=communication effectiveness, JobPerf=job performance, GEN=gender, Edu=education, InExp=international experience, Age=age of participant, Local=city of birth place; the square root values of AVE are displayed in the parentheses

Results

The results indicated that the AVE's square root was greater than the other correlations, suggesting that the level of discriminant validity was satisfied (Fornell & Larcker, 1981). Table 2 reports the correlations among all variables in the model and the AVEs of all latent variables. After that, construct reliability was determined using Cronbach's alpha and composite reliability coefficients. As shown in Table 2, all coefficients met the minimum requirement of .7 (Nunnally, 1978). Finally, the full collinearity variance inflation factor (VIF) test was performed to assess multicollinearity problems. The full collinearity VIF test calculated by WarpPLS is more robust than the traditional VIF test because it simultaneously determines vertical and lateral collinearity. Also, Kock and Lynn (2012) 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 indicated that the full collinearity VIF of all variables ranged from 1.022 to 3.005, below the minimum requirement of 3.3, as suggested by Petter, Straub, and Rai (2007).

Table 2 also shows that all main variables were statistically correlated. Besides, the correlation table includes all control variables to be alternative explanations for the results and to reduce error terms and increase statistical power in the study as recommended by Becker (2005)



Note: * p-value < .05, ** p-value < .01; CQ=cultural intelligence, Stress=job stress, ComEft=communication effectiveness, JobPerf= job performance, GEN= gender, Edu=hospitality education, InExp= international experience, Age=age of participant, Local=city of birthplace; the square root values of AVE are displayed in the parentheses.

Figure 1 Main model results

Hypothesis 1: Communication effectiveness is positively associated with job performance of hotel employees. The results showed that the two variables are positively related ($\beta=0.350$; $p<0.001$). The relationship was also statistically significant. Thus, hypothesis 1 was supported.

Hypothesis 2: Job stress is negatively associated with job performance of hotel employees. The results showed that the two variables are negatively related ($\beta= -0.138$; $p<0.001$). The relationship was also statistically significant. Thus, hypothesis 2 was supported.

Hypothesis 3: Communication effectiveness is negatively associated with job stress of hotel employees. The results showed that the two variables are negatively related ($\beta= -0.242$; $p<0.001$). The relationship was also statistically significant. Thus, hypothesis 3 was supported.

Hypothesis 4: Job stress mediates a positive association between communication effectiveness and job performance. The mediating effect test was conducted using the Sobel test suggested by Preacher and Hayes (2004). The results supported the positive mediation of job stress ($t= 2.550$; $p= 0.01$); the result was also statistically significant. Therefore, hypothesis 4 was supported. Considering the direct association between communication effectiveness and job performance that was statistically significant, the mediating effect of conflict was a partial mediation.

Hypothesis 5: CQ is positively associated with the communication effectiveness of hotel employees. The results showed that the two variables are positively related ($\beta= 0.636$; $p<0.001$). The relationship was also statistically significant. Thus, hypothesis 5 was supported.

Hypothesis 6: CQ is negatively associated with job stress of hotel employees. The results showed that the two variables are negatively related ($\beta=-0.238$; $p<0.001$). The relationship was also statistically significant. Thus, hypothesis 6 was supported.

Hypothesis 7: Communication effectiveness negatively mediates between CQ and job stress. The mediating effect test was conducted using the Sobel test suggested by Preacher and Hayes (2004)). The results supported the negative mediation of communication effectiveness ($t= -4.850$; $p<0.001$); the result was also statistically significant. Therefore, hypothesis 7 was supported. Considering the direct association between CQ and job stress that was statistically significant, the mediating effect of communication effectiveness was a partial mediation.

Hypothesis 8: Job stress positively mediates between communication effectiveness and job performance. The mediating effect test was conducted using the Sobel test suggested by Preacher and Hayes (2004)). The results supported the positive mediation of job stress

($t=2.550$; $p=0.01$); the result was also statistically significant. Therefore, hypothesis 8 was supported. Considering the direct association between communication effectiveness and job performance that was statistically significant, job stress's mediating effect was a partial mediation.

Hypothesis 9: Communication effectiveness positively mediates between CQ and job performance. The mediating effect test was conducted using the Sobel test suggested by Preacher and Hayes (2004). The results supported the positive mediation of communication effectiveness ($t=6.732$; $p<0.001$); the result was also statistically significant. Therefore, hypothesis 9 was supported.

Hypothesis 10: Job stress positively mediates between CQ and job performance. The mediating effect test was conducted using the Sobel test suggested by Preacher and Hayes (2004). The results supported the positive mediation of job stress ($t=2.540$; $p=0.001$); the result was also statistically significant. Therefore, hypothesis 10 was supported.

Regarding the effect of the control variables, the results showed that hospitality education ($\beta=0.082$; $p=0.044$), international experience ($\beta=0.064$; $p=0.090$), age ($\beta=0.052$; $p=0.138$), and locality ($\beta=0.115$; $p=0.008$) were positively associated with job performance and only gender ($\beta=-0.224$; $p<0.001$) were negatively associated with job performance. However, only the effect of gender, hospitality education, and locality were statistically significant.

Discussion and conclusion

General discussion and research contributions

The results from this research have implications for the hotel industry regarding efforts to enhance frontline hotel employees' work performance. 1) The positive association between communication effectiveness indicates that frontline hotel staff who have better communication skills tend to perform their job better than ones who have less communication effectiveness. This could be explained by the nature of their jobs. They have to interact with hotel guests from different cultures regularly, and therefore need to communicate effectively. This result is in line with prior studies (Lan et al., 2020; Yu & Ko, 2017). 2) The negative association between job stress and job performance indicates that the staff who have lower job stress tend to perform better. This may because the stress caused by cultural diversity could limit their positive attitudes and performance during their interaction with colleagues and guests in intercultural settings. This finding is concurrent with previous studies (Khuong & Yen, 2016; Mittal & Bhakar, 2018; Vijayan, 2017). 3) The negative relationship between communication effectiveness and job stress indicates that the staff with higher communication effectiveness tend to face lower stress in their jobs. This may because better

communication allowed them to enjoy a lower level of misunderstanding and conflict, especially in cross-cultural situations. This result is in line with prior research (G. H. Lee & Lee, 2018; M. A. Lee & Lim, 2018)). 4) The positive mediation of job stress between communication effectiveness and job performance indicates that communication effectiveness can increase employees' performance in cross-cultural situations by lowering their stress. This result is in line with social identity theory, which states that individuals tend to group with their kind, and tend to have stress when dealing with out-group members. This may limit their performance. Effective communication would allow employees to understand each other better, lowering the stress that prohibits their performance in cross-cultural contexts (Ratasuk & Charoensukmongkol, 2019)). 5) The positive association between CQ and communication effectiveness indicates that frontline hotel employees with a higher level of CQ tend to communicate more effectively than those who have lower CQ in cross-cultural work environments. CQ enables them to interact better and interpret and understand more effectively those with unfamiliar cultural backgrounds. This finding is in line with prior CQ research. For example, Suthatorn and Charoensukmongkol (2018)) found a positive contribution of CQ on the communication competence of airline cabin crews. Bückner et al. (2014) found that CQ increases the communication effectiveness of Chinese host country managers working for foreign multinational enterprises in China. 6) The negative relationship with job stress indicates that employees with high CQ tend to suffer less stress from their work since they tend to enjoy working in an intercultural work environment ((Ratasuk & Charoensukmongkol, 2020)). 7) The negative mediation of communication effectiveness between CQ and job stress indicates that CQ enables the employees to have better cross-cultural communication skills allowing them to enjoy their work and have less stress. 8) The positive mediation of job stress between communication effectiveness and job performance indicates that communication effectiveness can lower the employees' stress caused by ambiguity and uncertainty in the workplace and consequently promote their job performance. 9) The positive mediation of communication effectiveness between CQ and job performance indicates that CQ enables the employees to have better cross-cultural communication skills allowing them to perform their work more effectively. 10) The positive mediation of job stress between CQ and job performance indicates that CQ enables the employees to overcome stress caused by cultural diversity existing in their work allowing them to perform their work more effectively. 11) According to the effects of control variables, male staff tend to have better work performance than females. Staff with hospitality education also perform better than those with no hospitality education. Lastly, frontline staff who were born and raised in the area where the hotel is located tend to have better job performance than those who come from other places. Thus, HR managers can use these control variable effects in their recruitment considerations.

Therefore, the overall findings suggest that CQ allows frontline hotel employees to develop and improve their ability to interact and communicate effectively with foreign guests and even among their colleagues who have diverse cultural backgrounds. Consequently, this enables them to handle possible stress during unfamiliar cultural situations better. For the domestic chain hotels in Thailand, even though many of these hotels provide training to their employees regularly, the contents of these exercises tend to focus on service delivery in general, without considering the diversity in values and service expectations of guests and coworkers from diverse cultures.

As a result, it is inevitable for frontline hotel employees to encounter cross-cultural situations. This may result in misunderstanding, conflict, and a low level of customer satisfaction. This tends to create a high level of tension and stress for them. Both poor communication and work stress can potentially lower their work performance. Therefore, CQ training should be provided to enhance their ability to perform effectively in cross-cultural service encounters.

CQ is a cultural competency developed through cultural training (MacNab, 2012; Rehg, Gundlach, & Grigorian, 2012)). In general, these domestic chain hotels regularly provide various training for their frontline employees, but most are basic service training. Therefore, the hotel should consider including CQ or cultural training and other activities in their employee development programs. The training should allow the frontline hotel employees to gain profound knowledge about cultural diversity to develop more insight into guests and coworkers from different cultures' expectations. The training should include CQ or cross-cultural experts who are invited to provide cultural knowledge that the frontline hotel employees need to know when they encounter cross-cultural situations. The experts should provide insight into appropriate verbal and nonverbal behaviors that are valued in different cultures and inappropriate behaviors that should be avoided. The training should also allow the employees to apply the knowledge and skills in real cross-cultural situations, especially service activities. They must be trained to demonstrate, for example, appropriate gestures, facial expressions, and word choices when encountering different types of cross-cultural situations, for example, greeting, answering questions, handling requests and complaints, etc. The training should provide elaborated feedback to the employees to apply their cultural knowledge from the training to correct their inappropriate actions. This should allow them to communicate more effectively with their counterparts and, as a result, decrease tension and stress caused by cultural diversity. This should eventually increase guests' satisfaction and job performance. The employees should be required to undertake a work-related stress assessment and report their stress levels before and after the training to evaluate the training's effectiveness. Otherwise, it can be assessed by comparing the evaluation cards and complaint letters they receive from their guests before and after the training.

Limitations

Despite the contributions this research provides, some research limitations need to be considered. First, these research results came from a survey conducted at only 30 hotels in 5 cities. This may limit the ability to represent the actual population and the generalizability of the results. Second, the analysis was based on survey data collected on a cross-sectional basis, making the direction of causality difficult to conclude. Therefore, the results can only be interpreted as an association among variables rather than causation among them. Third, since the data collection was conducted using self-assessment, the respondents may have given favorable answers that could have caused the data to be susceptible to subjective bias.

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