Speak to your heart: The joint moderating effects of language proficiencies on cultural intelligence and expatriates’ work performance

Angela Shin-Yih Chen
Department of Business Administration, National Taipei University

Yi-Chun Lin
Graduate Institute of International Human Resource Development, National Taiwan Normal University

Abstract: The purpose of the current study is to examine the relationship between cultural intelligence (CQ) and proficiency in the host-country language and English and the impact of these on expatriates’ in-role performance. On-line questionnaires were used to collect data from 232 Taiwanese managers who had taken up assignments in Vietnam. The data were explored via a three-way interaction to examine the effects of CQ and language proficiencies on expatriates’ performance. Confirmatory factor analysis (CFA) and the Harman’s one-factor test and ULMC technique were performed before the data were analyzed, and all results indicated that the CMV was not a serious problem in this study. In testing the hypotheses, the results demonstrated that CQ is positively related to expatriates’ work performance. Furthermore, both proficiency in the host-country language and English can enhance the link between CQ and in-role job performance. In terms of the three-way interaction effect, it was found that expatriate managers who are higher proficient in English as well as in the language of the host country, will have a stronger relationship between CQ and performance than those who are less proficient in the

1 Corresponding author: Yi-chun Lin, Graduate Institute of International Human Resource Development, National Taiwan Normal University, No. 162, Section 1, Ho-Ping East Road, Taipei City, 10610, Taiwan, R.O.C., E-mail: lin.hrd@ntnu.edu.tw.

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host-country language proficiency. Our findings contribute new knowledge to the field of international human resource management studies. Our results also have managerial implications for international human resources selection strategies.

**Keywords:** Cultural intelligence, host-country language proficiency, English proficiency, in-role performance, expatriates.

### 1. Introduction

Globalization has resulted in a rapid increase in the number of organizations entering foreign countries for international business (Chen, Chen, and Cañete, 2017; Koo Moon, Kwon Choi, and Shik Jung, 2012). Organizations are able to expand the scope of their business and its scale by establishing branches and factories in different countries and they then rely on expatriate staff to boost their competitiveness in the global market place (Chen et al., 2010; Harrison, Shaffer, and Bhaskar-Shrinivas, 2004). This movement across geographical and cultural boundaries has resulted in economic, political, and cross-cultural social
interaction becoming more frequent. In recent years, countries in Asia have shown signs of being the fastest growing economies compared with other regions in the world. In this regard, Southeast Asia warrants particular attention as it is predicted that the countries in this area will lead the growth of the global market.

Expatriates are now becoming common, with people of various nationalities living and working in different countries. However, overseas postings are often associated with challenges of adjusting to the unfamiliar and complex work environment of the host country (Chen et al., 2010). How expatriates deal with these challenges will have an influence on the success or failure of their assignment (Caligiuri, 2000; Shaffer and Harrison, 1998). “Cultural intelligence” (CQ), which refers to an individual’s ability to adjust to a new cultural setting (Ang et al., 2007; Earley and Ang, 2003), has been widely discussed in relation to improving and enhancing expatriate managers’ work performance in the host country. Previous studies have shown that CQ serves as an antecedent of an individual’s task performance: those with a high CQ are consciously aware of others’ cultural preferences before and during interactions, and are able to adjust their mental models during intercultural experiences (Ang et al., 2007; Chen, 2015; Guðmundsdóttir, 2015; Ott and Michailova, 2018).

During an overseas posting, expatriates usually encounter differences in the culture, language and their work role (Kumar and Rose, 2008). According to Kwantes et al. (2008), individuals’ learned social beliefs and their culture influence their perception of how they should carry out their work and in the case of expatriates, these will define their main duties as well as their job performance. “Culture is communication” (Hall, 1960): language reflects and affects culture. Language, the verbal network, facilitates internal and external communication and helps build relationships: for expatriates in the international business community, language is critically important (Harzing and Feely, 2008). The languages used in the business environment of non-English speaking countries, usually include the language of the host country and English. The expatriate usually prefers to use the language that is most appropriate and is used by the local employees. Many potential cross-cultural misunderstandings could be reduced by expatriates with a high level of language proficiency.

The use of the host-country language would certainly help expatriates interact with local people in their daily life and work situations (Feely and
Harzing, 2003). However, theories of social identity indicate that employees’ behavior cannot be understood with reference to language skills alone (Bourdieu, 1991; Jenkins, 2000). According to Taifel and Turner’s (1979) theory, social identity is not determined only by language; language can also be used strategically as a symbolic tool to identify with a cultural and social group (Lauring 2008; Tange and Lauring, 2009). The language used will affect expatriates’ identification with the group and the emotions attached to this group membership (Matsunaga et al., 2010). On the other hand, local employees use the language with which they are familiar to interact with expatriates. This can motivate in-group favoritism – namely the preferential treatment of in-group over out-group members, as discussed by Taifel and Turner (1979). Local employees categorize people (including themselves) into an in-group or an out-group, and this categorization affects their perceptions, attitudes, and behaviors in terms of relating to expatriates. Therefore, the greater the expatriates’ familiarity with the host-country language, the more they will understand the culture and the more easily they will be able to adjust to their new work and social environment. There is no doubt that communication is crucial to management and the effectiveness of the general communication depends to a large extent on the language used in the work place (Selmer, 2006).

A number of studies support the theory that language proficiency leads to greater inclusivity and a sense of connectedness (Marschan, Welch, and Welch, 1997). It has been indicated that one of the main factors in close social networks is proficiency in the local language. Expatriates who have developed fluency, have acquired knowledge (e.g. norms) of the culture and have shown they can adjust their behavior in response to the cultural setting are usually treated as in-group members. They typically interact well with their colleagues and enjoy high levels of trust, support, and rewards (Mackie, Devos, and Smith, 2000).

However, some studies have linked language and social identity to international business and management studies (Lauring, 2008; Vaara et al., 2003a; Vaara et al., 2005). When examining the effects of CQ on outcomes, the studies indicate that language proficiency is the main factor (Huff, 2013; Ott and Michailova, 2017; Shannon and Begley, 2008). Ang and Van Dyne (2008) reported that one way to gain CQ is by being proficient in a foreign language. This study builds on social identity theory to develop a contingency model that
takes into account both the effects of the language spoken in the host country and English proficiency in the foreign business workplace. A gap in the research has to do with how expatriates in non-English-speaking countries use both the host-country language and English (spoken in the work environment) to complement each other. We propose a three-way interactive relationship: discussion of proficiency in both the host-country language and English is important when considering the influence of CQ on expatriates’ in-role performance. This study considers Taiwanese people working in Vietnam, where English is not the native language, and seeks to gain insight into the effect of language proficiency during foreign postings.

2. Literature review

2.1 Cultural intelligence and in-role performance

Cultural intelligence (CQ) can be described as the ability to manage and function in different cultural settings (Ang et al., 2007) and to deal effectively with people in different cultures (Earley and Ang, 2003). CQ differs from emotional or social intelligence in that it centers on the ability to generalize and adapt across cultural settings. When individuals face a completely new environment, they need to adjust the way they interact with people or even completely change how they interact, depending on the situation and culture (Earley and Peterson, 2004). Individuals can develop behavior that is appropriate in the new cultural context (Thomas, 2006).

CQ comprises four aspects: Cognitive, meta-cognitive, motivational, and behavioral, each of which represents different capabilities. **Cognitive CQ** refers to general cognitive skills: the ability to conceptualize how to function and operate within a new culture with culture-specific knowledge (Earley and Ang, 2003). **Meta-cognitive CQ** is a higher order mental ability: personal thought processes enable a person to anticipate the cultural preferences of others and to adjust mental models during intercultural experiences (Ang et al., 2007). It includes procedure such as awareness, planning and checking (Van Dyne, Ang, and Livermore, 2010). **Motivational CQ** is the capacity to direct attention and energy to intercultural experiences and to be motivated to learn more about
differences in cultures. Behavioral CQ is the ability to choose appropriate language and physical actions, such as words, tone, gestures, facial expressions and body language, while interacting with people from different cultures (Ang et al., 2007).

In-role performance is the standard used to measure the employee’s task performance in an organization and is contingent on the rewards an individual receives (Vigoda, 2000). It refers to those behaviors that are necessary for the completion of the work for which an individual is responsible (Williams and Anderson, 1991). In-role performance includes behaviors such as working a full eight-hour day, and/or completing all required assignments (O’Reilly and Chatman, 1986; Williams and Anderson, 1991).

It has been proposed that CQ plays a pivotal role in the global workforce (Barakat et al., 2015; Crowne, 2013; Ott, and Michailova, 2018) because it is related to outcomes such as cultural adjustment (Chen, Lin, and Tsai, 2013; Chen, Wu, and Bian, 2014) and individual job performance (Chen, Lin, and Sawangpattanakul, 2011; Lee, Veasna, and Wu, 2013). It has been assumed that the superior work performance of individuals with a high CQ is due to their abundant knowledge of the norms, practices, and conventions of the local culture but using various theories, it is possible to gain new and a more detailed understanding of the role that CQ plays. Bandura and McClelland’s (1977) social learning theory posits that CQ is developed through the process of attention, retention, and reproduction which facilitate the learning of new behaviors. The development of CQ will translate into meaningful differences in work behaviors with an interaction between an individual’s perception, behavior, and the environment (Michailova and Ott, 2018). Many previous empirical studies have supported this positive relationship between CQ and work behavior outcomes. For example, Ang et al. (2007) found that meta-cognitive CQ and behavioral CQ predict task performance. Groves and Feyerherm (2011) showed that leader CQ predicted follower perceptions of leader performance and team performance in contexts where work teams were characterized by significant ethnic and nationality diversity. Lee and Sukoco (2010) stated that CQ had a positive effect on expatriate performance and promoted cultural adjustment and effectiveness in the different culture. Ramalu et al. (2010) confirmed the consistent findings that CQ predicts job performance and has a mediating effect of work adjustment.
among expatriates working in Malaysia. In Chen et al.’s (2011) study, CQ was positively related to job performance mediated by cultural shock among Philippine laborers working in Taiwan’s manufacturing industries. Therefore, CQ plays an important role in acquiring cultural knowledge and in so doing, helps employees establish what is required by the company for them to do the task at hand and perform as expected. Considering the above statements, we proposed that CQ has a positive effect on in-role performance:

Hypothesis 1: CQ has a positive effect on expatriates’ in-role performance.

2.2 The moderating effect of host-country language proficiency

Host-country language proficiency refers to an individual’s ability to communicate in the language spoken in the host country (Froesea, Peltokorpi and Ko, 2012). Previous studies have demonstrated the importance of expatriates being proficient in the language of the host country; it helps them to cope in a cross-cultural environment and also has a positive effect when cultures meet (Froese, Peltokorpi, and Ko, 2012; Shaffer et al., 1999; Zhang and Peltokorpi, 2016). Using the host-country language plays a vital role in helping expatriates to adjust to the cross-cultural environment; they become familiar with the novel environment and can more easily observe and react to cross-cultural issues (Froesea et al., 2012; Mendenhall and Oddou, 1985).

Recently, Ott and Michailova (2017) pointed out the critical relationship between language and CQ. However, a few studies have offered inconsistent findings in the link between language and CQ. For instance, Huff (2013) examined how the host-country language and CQ influenced expatriate adjustment. Their results showed that host-country language is significantly positively related to cognitive CQ but is negatively related to motivational and behavioral CQ. Eisenberg et al. (2013) also demonstrated that proficiency in a number of languages has an impact on cognitive CQ, but has no impact on the other three facets of CQ (metacognitive, motivational, and behavioral). However, while these studies examined the link between the individual’s ability to speak the host-country language and CQ development, they did not provide consistent findings (Ott and Michailova, 2017) and did not consider the impact of CQ and host-country language proficiency on other work outcomes.
It has been shown that less proficiency in the host-country language causes communication barriers, with negative effects on expatriates’ job satisfaction (Froesea, Peltokorpi, and Ko, 2012; Parker and McEvoy, 1993) and their willingness to complete their overseas posting (Froesea et al., 2012; Shaffer, Harrison, and Gilley, 1999). Some empirical studies have focused on the impact of host-country language proficiency on cross-cultural adjustment (Bhaskar-Shrinivas et al., 2005; Peltokorpi, 2008; Selmer, 2006, Takeuchi, 2010) and job satisfaction (Stepina, Perrewe, and Hassell, 1991) in several countries. Although many studies showed the importance of CQ on expatriates’ performance, researchers call for more on-going empirical studies to confirm findings in various cultural backgrounds (Chen, 2015; Lee and Sukoco, 2010; Ott and Michailova, 2018).

As noted, while some previous studies have demonstrated the connection between CQ and proficiency in the host-country language, there have been inconsistent findings and other studies have combined CQ with expatriates’ work outcomes (e.g. job performance). To date, few studies have examined the relationship among CQ, host-country language proficiency, and outcomes related to expatriate success (Chen et al., 2011). As Ang and Van Dyne (2008) noted, CQ is not dependent solely on foreign language proficiency. According to social identity theory (Tajfel, 1978; Taifel and Turner, 1979), proficiency in the language of the host-country can provide a shared identity with others in the organization, leading to the creation of in-groups which are critical in task performance (Selmer and Lauring, 2015). It is agreed that host-country language proficiency helps expatriates to establish relationships of trust with their colleagues and be accepted as an insider in the host country (Lauring and Selmer, 2012). In this study, we proposed that expatriates who are proficient in the host-country language will learn more about the host nation and use their CQ to adjust their personal mental model. They will be consciously aware of the cultural preferences of other people, enabling them to solve problems encountered at work. Thus, their job performance will improve (Ang et al., 2007; Crowne, 2013). Therefore, we propose the following hypothesis:

**Hypothesis 2:** Host-country language proficiency positively moderates the relationship between CQ and expatriates’ in-role performance, such that its
positive relationship will be stronger for expatriates who are more proficient in the language of the host country.

2.3 The moderating effect of English proficiency

“Language proficiency” is usually defined in terms of self-assessed ability to speak a language. It can also refer to how well users can communicate and accurately express meaning according to the context (Murray, 2013). The assessments for English language proficiency consider both receptive and expressive aspects of language: listening, speaking, reading and writing (Halle et al., 2012). Some of the tests that are widely known and used throughout the world are IELTS (International English Language Testing System) or TOEFL (Test of English as a Foreign Language). There are many English-speaking countries but despite having a common language, each country has a very different background and culture (Halle et al., 2012). It is perhaps the commonality of English that has allowed globalization to develop as rapidly as it has (Murray, 2013). Being able to communicate effectively in English will help those who choose to work overseas as an entrepreneur; they will be able to cooperate with others and do business more easily (Gerhards, 2014). Employees who are able to communicate well in English can be more flexible and adapt better to different working environments; therefore, they may be more confident about contributing to the process of globalization of the firm (Yamao and Sekiguchi, 2015).

Ward et al. (2009) used English language proficiency as a variable to investigate CQ related to psychological, sociocultural, and academic adaptation among international students. The result of this study showed that CQ was a good predictor of adaptation but also that English proficiency was related to fewer adjustment problems. In a recent empirical study, Chen et al. (2011) investigated the relationship between English proficiency, CQ, and expatriate outcomes with Filipina expatriates working in Taiwan. They found that English proficiency and the presence of all four facets of CQ were able to predict in-role job performance in Taiwan’s manufacturing industries. The reason for this is that because the expatriates were proficient in reading and speaking in English, they could more easily follow English instructions and machine operating manuals, were able to perform as expected and could meet the demands of their job. Lan
(2003) demonstrated that Filipina foreign laborers who are proficient in English appear to have a socioeconomic advantage in Taiwan compared to those who are less proficient in English such as laborers from Indonesia and Vietnam. In the work environment, it is the expectation of management that all international students and Filipina expatriates will speak English. This will lead to those in these groups sensing that they are functioning well in both their work and non-work environments and that they will perform well at work or their studies in non-English speaking countries. Thus, we propose the following hypothesis:

**Hypothesis 3:** English proficiency positively moderates the relationship between CQ and expatriates’ in-role performance: this positive relationship will be stronger for expatriates who are more proficient in English.

### 2.4 The effect of three-way interaction: CQ, host-country language, and English proficiency, on in-role performance

According to Masgoret (2006), language skills are strongly related to the performance of daily tasks and the establishment of interpersonal relationships in a foreign country. Language ability for expatriate managers in particular, is one of the factors that are likely to determine the success of the foreign posting (Buchanan *et al.*, 2018; Hays, 1974; Sorgen, 2015). Barner-Rasmussen *et al.* (2014) explained that cultural and language skills are complementary. Switching languages alters the cultural frame of reference for individuals, enabling them to exhibit behaviors that are culturally appropriate.

Liebkind, Jasinskaja-Lahti, and Solheim (2004) noted that language skills may increase a person’s acceptance by peers and therefore enhance their sense of belong. According to social identity theory (Taifel, 1978; Taifel and Turner, 1979), expatriates who are more proficient in the host-country language are likely to have more contact with the local citizens. They may be more confident in interacting with natives and more easily engage in culturally appropriate behavior at work and socially (Freed, 1995; Mendenhall and Oddou, 1985; Sorgen, 2015). At the same time, local employees would be more likely to categorize the expatriates as in-group members and treat them as insiders. This affects their perceptions and attitudes to the expatriates as well as their behavior which is predisposed to getting along with expatriates.
While many studies have focused on the English proficiency of immigrant workers and international students in English-speaking countries (Akresh and Frank, 2011; Fenoll, 2018; Kim et al., 2011a; Kim et al. 2011b; Redstone Akresh, 2007), there are not many studies that have focused on expatriates in non-English speaking countries where it is commonly accepted that English is the “lingua franca”: the language of international business (Crystal, 2013).

Begley (2003), Froesea et al. (2012) and Jun, Lee, and Gentry (1997) suggest that if foreign workers could master both the language of the non-English-speaking host country and English complementary to each other, it would be easier for them to understand and adapt to their host-country culture and move from engaging in surface-level to deep-level activities. It would be very interesting to consider how the use of different levels of the host country language and English proficiency would influence expatriates’ job performance. Thus, the following hypothesis is formulated:

**Hypothesis 4**: There is a three-way interaction among CQ, host country language proficiency, and English proficiency on expatriates’ in-role performance. Specifically, the interaction between CQ and host-country language proficiency on in-role performance will be stronger when expatriate’s English proficiency is high as opposed to low.

### 3. Method

#### 3.1 Samples and procedures

Our research participants were managers from Taiwan who were living and working in Vietnam during the survey period. Most of the participants who responded were male (85%, n=196) and were aged between 30 and 39 (37%, n = 86). The next largest group were aged between 40 and 49 (22.50%, n = 52). Half of the participants were college graduates (51.5%, n = 119), and most of them were married (63.6%, n = 147).

Online questionnaires were established by the MySurvey.com platform and delivered through the Internet via E-mails and the Facebook community site. To ensure validity and reliability, we arranged a focus group to establish that our participants could understand each item in the questionnaire. To further confirm
reliability, we conducted a pilot test before the formal questionnaire was distributed. The results from the pilot test showed the instrument has an acceptable reliability: the Cronbach’s alpha coefficient of the major variables showed adequate reliabilities. Within two months, a total of 283 online questionnaires were returned. Of these, 50 were not completed, giving 232 useful questionnaires.

3.2 Measures

1) Cultural intelligence (CQ)

According to Earley and Ang (2003), CQ is an individual’s ability to effectively receive, deal with and understand messages in culturally diverse settings and to interact appropriately with nationals in the host country. The researcher adopted the four-dimensional cultural intelligence scale (CQS) developed by Ang et al. (2007). The 20-item CQS includes four items for meta-cognitive CQ, six items for cognitive CQ, five items for motivational CQ and five items for behavioral CQ. Example items are “I am sure I can deal with the stresses of adjusting to a culture that is new to me”; “I use pause and silence differently to suit different cross-cultural situations”. The one-item scale was rated on a 5-point Likert scale (1=strongly disagree to 5=strongly agree). The Cronbach’s alpha coefficient of the CQ in this study was an acceptable 0.94.

2) In-role performance

To measure expatriate managers’ performance, we adopted Williams and Anderson’s (1991) 7-item in-role performance scale (with two reversed items). A high score on the in-role performance scale indicates that the employee’s behavior can meet requirement. The responses were rated on a 7-point Likert scale (1 =strongly disagree, 7 = strongly agree). A sample item was: “I adequately complete assigned duties.” The Cronbach’s alpha coefficient of this construct was 0.87.

3) Host-country language proficiency

The Taiwanese expatriate managers often use the Vietnamese language to communicate with the local people. We measured the participants’ host-country language proficiency by asking them to evaluate their own ability. The questions comprised four items that related to participants’ ability to listen, speak, read and write Vietnamese. A sample item was: “How well do you understand the spoken
Vietnam language?” The four questions were rated on a 5-point Likert scale, with 1 = “not at all”, 2 = “poor”, 3 = “average”, 4 = “good” and 5 = “excellent”. The Cronbach’s alpha coefficient of this measurement in this study was 0.94.

4) English proficiency

We measured the Taiwanese expatriate managers’ English proficiency by asking them to evaluate their own ability to listen, speak, read and write English. A sample item was: “How well do you understand spoken English?” The four questions were rated on a 5-point Likert scale, with 1 = “not at all”, 2 = “poor”, 3 = “average”, 4 = “good” and 5 = “excellent”. The Cronbach’s alpha coefficient of this measurement in this study was 0.97.

4. Results

4.1 Confirmatory factor analysis

Before testing the hypotheses, we performed confirmatory factor analyses (CFA) to evaluate the fit of our data to a measurement model by using AMOS 22.0. The goodness-of-fit indexes for the measurement model (proposed 4-factor model: CQ, host-country language proficiency, English proficiency, and in-role performance) were acceptable ($\chi^2$ [550] = 1127.22, RMSEA = 0.068, CFI = 0.924, TLI = .918, IFI = 0.924). To show the discriminant validity among the multidimensional constructs, we ran the alternative three, two, and one-factor measurement models. Fit indices revealed that the three-factor model resulted in poorer fit indices ($\chi^2$ [553] = 2459.96, RMSEA = 0.122, CFI = 0.749, TLI = .729, IFI = .750). The two-factor model resulted in worse fit indices ($\chi^2$ [555] = 3087.763, RMSEA = 0.141, CFI = 0.666, TLI = .642, IFI = 0.668), and the one-factor model has the worst model fit ($\chi^2$ [558] = 4904.471, RMSEA = 0.184, CFI = 0.427, TLI = .389, IFI = 0.430). These results suggested that the four study variables were distinct and representative of the constructs.

4.2 Assessing common source bias

Since all measures were self-reported in the same questionnaire, there was the potential for same source bias (Podsakoff et al., 2003). To assess the potential nature of this problem, we took two approaches recommended by Podsakoff et al.
(2003). First, we ran a Harman’s one-factor test to check whether the items loaded on a general single factor and, as we expected, the first factor accounted for 32.66% of variance, suggesting that same source bias might not a serious problem. Second, the ULMC (unmeasured latent method construct) technique was applied (Podsakoff *et al.*, 2003; Williams *et al.*, 1989). We added a common source construct into the final measurement model with all items loading on it. Then we compared the models with the proposed factors and the model loaded with common source latent factor (MacKenzie and Podsakoff, 2012; Richardson, 2009). The result indicated that the difference was insignificant. Hence, the CFA, Harman’s test, and ULMC results revealed that same-source bias might not a serious problem in our study.

### 4.3 Correlation and reliability

Table 1 presents the means, standard deviations and correlations among the study variables and the controls (including gender, age, and education). For the study variables, cultural intelligence was positively correlated with host-country language proficiency and in-role performance ($r = .31$, $p < .001$; $r = 0.50$, $p < .001$), as expected. All Cronbach’s alpha values were between .87 and .94 which was within the accepted range suggested by Nunnally (1978).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td>1. Gender</td>
<td>1.15</td>
<td>0.36</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>2. Age</td>
<td>40.29</td>
<td>10.61</td>
<td>-26***</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>3. Education</td>
<td>2.89</td>
<td>0.90</td>
<td>.04</td>
<td>-15*</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>4. Cultural Intelligence</td>
<td>3.65</td>
<td>0.55</td>
<td>-.05</td>
<td>-.09</td>
<td>.09</td>
<td></td>
<td></td>
<td></td>
<td>(.94)</td>
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<tr>
<td>5. HC Language Proficiency</td>
<td>2.30</td>
<td>0.92</td>
<td>-.04</td>
<td>.08</td>
<td>-.12</td>
<td>.31***</td>
<td></td>
<td></td>
<td>(.94)</td>
</tr>
<tr>
<td>6. English Proficiency</td>
<td>3.10</td>
<td>0.94</td>
<td>.04</td>
<td>-.11</td>
<td>.41***</td>
<td>.17**</td>
<td>.13*</td>
<td></td>
<td>(.97)</td>
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<tr>
<td>7. In-role Performance</td>
<td>5.91</td>
<td>0.80</td>
<td>.00</td>
<td>.05</td>
<td>.10</td>
<td>.50***</td>
<td>.00</td>
<td>.05</td>
<td>(.87)</td>
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*Notes.* $* p < .05$, $** p < .01$, $*** p < .001$. HC Language Proficiency = Host Country Proficiency. Internal consistency reliability (alpha) are in parentheses.
4.4 Testing the hypotheses

To test Hypotheses 1 to 3, hierarchical regression analyses were applied. In step 1, control variables were entered; in step 2, CQ, the moderators – host-country language proficiency (H2), or English proficiency (H3) – were entered. In step 3, the interaction item was added. As recommended by Baron and Kenny (1986), and West, Aiken, and Krull (1996), the independent and potential moderator variables were mean centred and their products derived to test for interaction effects to avoid multicollinearity.

Hypothesis 1 stated that CQ has a positive effect on expatriates’ in-role performance. As demonstrated in Model 2 of Table 2, CQ had a positive and statistically significant effect on in-role performance ($\beta = .71, p < .001$) and it was able to explain the additional $23\%$ variance ($\Delta R^2 = .23, p < .001$) of in-role performance. Thus, we found evidence to support H1.

Hypothesis 2 stated that the relationship between CQ and expatriate’s in-role performance would be moderated by host country language proficiency in such a way that the relationship would be stronger when one’s host country language proficiency was high, as opposed to when it was low. As shown in Model 4 of Table 2, the interaction of CQ and host-country language proficiency was significant, with a positive beta coefficient ($\beta = 0.27, p < 0.01$), explaining additional $4\%$ variance ($\Delta R^2 = .03, p < .001$) of in-role performance. To further

![Figure 1: Research framework](image)

In-role performance

H3

English proficiency

H2

Host country language proficiency

Cultural intelligence

H4

H1
Table 2
Moderating Effects of Host Country Language Proficiency and English Proficiency

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mode 1</th>
<th>Mode 2</th>
<th>Mode 3</th>
<th>Mode 4</th>
<th>Mode 5</th>
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<td></td>
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<td><strong>Step 1: Controls</strong></td>
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</tr>
<tr>
<td>Constant</td>
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<td>2.53</td>
<td>2.61</td>
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</table>

\(R^2\) | .02 | .25 | .28 | .31 | .25 | .27 |
\(Adj. R^2\) | .00 | .24 | .26 | .29 | .24 | .25 |
\(\Delta R^2\) | .23 | .03 | .04 | .00 | .00 | .02 |
\(F\) | 1.27 | 17.88*** | 16.31*** | 16.10*** | 14.38*** | 13.045*** |
\(\Delta F\) | 66.57*** | 7.74** | 11.18** | .51 | 5.04* |

Notes. * \(p < .05\), ** \(p < .01\), *** \(p < .001\). Unstandardized coefficients were reported.

HC Language Proficiency = Host Country Proficiency.

To understand the interaction effects that emerged, the interaction plot (Figure 2) was depicted according to procedures suggested by Aiken and West (1991) and Cohen et al. (2003). As predicted, the positive link between CQ and expatriate’s in-role performance was stronger when host country language proficiency was high, as opposed to when it was low. Hence, Hypothesis 2 was sustained.
Hypothesis 3 was similar to Hypothesis 2. Hypothesis 3 suggested that the relationship between CQ and in-role performance would be moderated by English proficiency in such a way that the relationship would be stronger when one’s English ability was high, as opposed to when it was low. As shown in Model 6 of Table 2, the interaction of CQ and English proficiency was positively significant ($\beta = 0.12$, $p < 0.01$). Further, as shown in Figure 3, the positive link between CQ and in-role performance was stronger when English proficiency was high, as opposed to when it was low, suggesting Hypothesis 3 was fully supported.

Finally, Hypothesis 4 stated that the three-way interaction among CQ, host country language proficiency, English proficiency on expatriate’s in-role performance. Specifically, we hypothesized that the interaction between CQ and host country language proficiency on in-role performance will be stronger when expatriate manager’s English proficiency is high as opposed to low. Table 3 shows the results of the three-way interaction. In the regression model, the
two-way interactions between CQ and host-country language proficiency, CQ and English proficiency, host-country language proficiency and English proficiency were entered after the main effects model (Model 3), after which the three-way interaction of CQ, host-country language proficiency, and English proficiency were entered. In Model 5 of Table 3, we found the three-way interaction term was significant ($\beta = .13, p < 0.01$). To examine the nature of the significant three-way interaction, we plotted the interaction in which median split was used for categorizing high versus low host-country language proficiency as well as high versus low English proficiency.

The plotting of the three-way interaction is shown in Figure 3. As Figure 3 suggests, the interaction between CQ and host-country language proficiency is stronger when English proficiency is higher. Of the expatriate managers with high English proficiency, those with greater host-country language proficiency had a stronger relationship between CQ and job performance than those with
Table 3  
Results of 3-way interaction analysis for the relationships among CQ, host country language and English ability on in-role performance

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
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<th>Model 3</th>
<th>Model 4</th>
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<td>.13**</td>
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</table>

R²   | .02    | .25    | .28    | .32    | .36    |
Adj. R² | .00   | .24   | .26   | .305  | .33   |
ΔR² | .23    | .03    | .05    | .03   |
F    | 1.27   | 17.88*** | 13.54*** | 11.12*** | 11.54*** |
Δ F | 66.57*** | 3.89* | 4.82** | 10.70** |

*Notes. *p < .05, **p < .01, ***p < .001. Unstandardized coefficients were reported.  
HC Language Proficiency = Host Country Proficiency.
Figure 4
The three-way interaction of CQ, host country language proficiency, English proficiency on expatriate managers’ performance
more limited host-country language proficiency. Similarly, of the expatriate managers with low English proficiency, those with better host-country language proficiency would have a stronger relationship between CQ and performance than those with lower host-country language proficiency. Therefore, H4 was supported.

5. Discussion

The aim of the study was to examine the relationship among cultural intelligence, host-country language proficiency, English proficiency, and in-role performance. After analyzing the data from 232 respondents, Taiwanese managers currently working in Vietnam as expatriates – we found that our results support the positive influence of CQ on expatriate managers’ in-role performance. We also found separate moderating effects of host-country language proficiency and English proficiency on the relationship between CQ and in-role performance. For the three-way interaction effect, when expatriate managers’ English proficiency is high, those who are more proficient in the host-country language have a stronger relationship between CQ and in-role performance than those who are less proficient in the host-country language.

All four hypotheses were supported: first, Hypothesis 1 was supported in that CQ has a positive effect on in-role job performance. This means that expatriate managers with a high CQ tend to perform well in a different culture. In other words, they have the skills and ability to adapt to a workforce from different cultural backgrounds by adjusting their behaviors and mental models. It is not surprising that these findings are consistent with previous studies (Ang et al., 2007; Huff, 2013; Kim, Kirman, and Chen, 2008; Templer, Tay, and Chandrasekar, 2006). Second, the results supported Hypothesis 2 and showed that CQ positively influenced in-role performance of expatriate managers who were more proficient in the host-country language. Individuals who have both the competence in adapting to a foreign environment and are more proficient in the host-country language would be at a great advantage. These aspects would help in achieving their goals and enhancing their work performance. This result is consistent with the study of Takeuchi et al. (2002) who found that that being able to communicate in the host-country language can help expatriates
understand their task and roles, adopt appropriate work values, understand the culture of the organization and behave appropriately in the workplace. Third, Hypothesis 3 is supported in that the results showed that CQ positively influenced in-role performance when expatriate managers’ English is good. It is understood that English is still the main international business language used to engage in cross-cultural communication.

Finally, Hypothesis 4 is supported in that expatriate managers who are more proficient in English, and who are also proficient in the host-country language will have a stronger relationship between CQ and job performance than those with lower host-country language proficiency. Similarly, expatriate managers who are not highly proficient in English but are more proficient in the host-country language will have a stronger relationship between CQ and job performance than those who are less proficient in the host-country language proficiency.

In summary, expatriates with excellent English language skills would still adapt better to the local culture and probably perform better in their jobs if they were proficient in the host-country language. This is because local people have a natural tendency to interact with people who speak their native language (Froese, 2010; Peltokorpi, 2007a). However, this does not imply that good English communication skills are not necessary. English is the most widely spoken language globally and is necessary for effective communication in the workplace, especially when expatriate’s host country language is not high proficiency. Expatriates are able to use two languages complementary to each other when suffering language difficulty.

5.1 Theoretical contribution

The aim of the present study was to develop an understanding of work-related issues in a cross-cultural environment by examining the roles of CQ, proficiency in the host-country language and English, and in-role job performance. A growing body of research has explored the role of language in the labor market for expatriates and the literature review presented above outlines extant studies on social identity theory that relate to the role of language in expatriate management. However, we are not aware of any studies that apply social identity theory to investigate the social processes linking the use of
language with expatriates’ experiences – specifically, how language can minimize the polarization of expatriates by the native employees and promote accommodation to overseas work conditions. Hence, the main contribution of the present study was to examine the three-way interactive relationships of CQ and proficiency in the host-country language and English to consider bilingual proficiencies as the main factor when examining the effect of CQ on in-role performance among expatriate managers in South Asia: Vietnam. In addition, we also contribute to the CQ literature by examining how exposure to foreign languages during an international assignment influences CQ development.

5.2 Managerial implications

Many studies of expatriates have been done in China (Kang, Shen, and Benson, 2017; Makkonen, 2015; Makkonen, 2017; Mejia et al., 2016; Selmer et al., 2016). In the past two decades, China has been the biggest market for enterprise expansion into foreign markets and the establishment of subsidiaries or original equipment manufacturers as it extends its global market. However, very few studies have focused on expatriate issues in South Asian countries such as Vietnam, despite this country being second only to China in terms of expansion. When the world’s two largest economies, the US and China, started a trade war in 2018, the result was renewed uncertainty for businesses and consumers, and a negative impact on the world economy. This has led to more and more companies or manufacturing firms moving to other countries near China (e.g., Vietnam); those that are important trading partners with the US or China. Thus, in the near future it is expected that more expatriates will be working and living in Southeast Asia. Based on the current economic situation, it would be of benefit to us to understand the different cultures within the Asian region and the difficulties the expatriates may face, especially the cultural differences due to the effect of a foreign language. Thus, this study is intended to find new knowledge regarding Taiwanese expatriate managers’ cross-cultural working experience in Vietnam. The uniqueness of our sample could provide new insights for expatriate managers posted to Vietnam and may generalize the cross-cultural issues of expatriate managers from different backgrounds.

Our findings also have managerial implications in terms of human resource operations and strategies in that organizations should select people with high CQ
to send overseas. People who work and live in a different cultural environment need an open mind to accept the differences in culture, and also need to be prepared to change their own ways of thinking and behaving to adapt to the different cultural setting. This will be necessary if they are to perform their tasks well. Proficiency in both the host-country language and English is very important as being able to communicate in both languages will help the expatriates to accomplish daily tasks and establish interpersonal relationships in the cross-cultural context. Thus, in order to increase the probability of expatriate success, one of the strategies the organization should adopt is to select candidates based on CQ and bilingual (host-country and English) proficiency. This should become a basic competence requirement and be one of the criteria for candidate selection. Another strategy that organizations can use is to train expatriates to improve their CQ. The training could take place before and/or during their overseas assignment. Training should provide cultural-oriented and host country language courses to help candidates overcome the obstacles they may experience and minimize any uncertainty caused by unfamiliarity. MacNab, Brislin, and Worthley (2012) suggest that using a contextual approach to training has an important impact on CQ development. Many researchers have started to investigate the effectiveness of different training strategies for developing CQ (Fischer, 2011, MacNab, 2012; MacNab and Worthley, 2012).

5.3 Limitations and future research

This study had several limitations. First, because the questionnaire incorporated all the independent and dependent variables, respondents answered these questions in the same time frame. This could have resulted in an obstacle that is referred to as common method variance (CMV). One of the solutions to eliminate this is to use a different Likert scale for different types of variables, e.g., five-point vs. seven-point which the researchers administered in the design of the questionnaire. Another solution is to adopt reverse items to insure that respondents answered all the items carefully and seriously. One of our measures-in-role performance did include two reversed items, which may reduce the possibility of CMV concerns. In addition to addressing prospective problems before collecting the data, Harman’s one-factor analysis was conducted to detect potential bias caused by CMV (Podsakoff et al., 2003). The researcher entered
all the scale items to an exploratory factor analysis and tested the unrotated factor solution. The first principle component accounted for 32.66% of variance, which suggests that the items did not load on a general factor (over 50%) and CMV may not be a big problem in this study. We also applied the unmeasured latent method construct (ULMC) technique to detect a CMV problem (Podsakoff et al., 2003; Williams et al., 1989). Overall, these remedies provide a convincing argument that CMV is not a severe problem of this study. Overall, these remedies provide a convincing argument that CMV is not a serious problem in this study.

Secondly, a potential limitation is that our target sample comprised Taiwanese managers working in Vietnam on behalf of their organization and who agreed to the overseas posting; this contrasts with self-initiated expatriates who choose to pursue work in another country. The findings of this research study do not extend to the latter group, but future research may well investigate this group. Peltokorpi and Froese (2009) found that self-initiated expatriates have higher adjustment scores than organizational expatriates. Future research on CQ and language may consider testing self-initiated expatriates’ cross-cultural outcomes.

Third, our target sample was gathered from expatriates in South Vietnam. For future studies, we recommend that those in North Vietnam be investigated as there is a great difference between South and North Vietnam. We also anticipate that there will be more studies investigating expatriates in other Southeast Asian countries like Thailand, Malaysia, Singapore, and India in order to generalize our conclusions. We expect future studies to investigate and take those cultural differences into account in order to yield a more comprehensive research picture.

Fourth, proficiency in the host-country language and English were self-assessed with expatriates determining their own ability to speak, read, listening and write the language. It would be better to have an objective measure of language proficiency and also to obtain an assessment of the expatriate’s ability in the language used in both the work place and that spoken by the local people, as suggested by Huff (2013). Finally, we focused only on studies concerned with individual levels of CQ. Future research should expand to an understanding of CQ at the group, team, and organization levels.
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intelligence, realistic job preview, realistic living conditions preview, and cross-cultural adjustment. *Group & Organization Management, 31*(1), 154-173.


