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How to Improve Communication within an Organization? The Relationship between Cultural Intelligence and Language Competence

ABSTRACT

Objective: This article deals with the effective functioning of an organization in the international context. It focuses on the two key aspects of the communication in this respects: cultural in-

telligence (CQ), the capacity to operate successfully in the multicultural setting, and the quality of internal communication; it is investigated whether CQ (and its components: metacognitive, cognitive, motivational and behavioural) are rather related to the number of foreign languages or the language proficiency a person (or an employee) knows (has).

Methodology: The sample of 132 undergraduate students of the English and Czech study programs at one private business university in the Czech Republic was used. The Spearman correlation coefficient, Chi-Square test for independence and the one-way ANOVA test (all of them conducted in the statistical program IBM SPSS Statistics 21) are calculated in the paper.

Findings: CQ depends on the quality (the level of proficiency) rather than the quantity (the number) of foreign language skills. This conclusion applies regardless of gender: our data did not confirm that language skills were gender-dependent.

Value Added: Recently a very fashionable cultural intelligence (CQ) construct has been explored in relation to a variety of variables and outputs. Nevertheless, insufficient attention has been given to the relationship between cultural intelligence and language competence so far; moreover, the research has brought contradictory results up to now. This study fills the actual knowledge gap.

Recommendations: It is shown that in terms of the effective functioning in a culturally unknown environment and with a restricted time to learn foreign languages, it is preferable to develop continuously one's skills in lingua franca than parallel and more superficial studies of several languages.

Key words: cultural intelligence, language competence, *lingua franca*

JEL codes: M14, M16

Introduction

The today's globalized and multicultural world is liberalizing, the companies are opening up to foreign competition. That brings new challenges to all of us not only in a daily life, but also at the workplace (Mesiti, 2011)2003. Many employers expect all potential employees to be both highly language proficient and culturally competent.

Thanks to the economic influence and power of the USA, English has become a lingua franca of the international trade. This language is a means

of common communication not only between co-workers but also with business partners from different countries (Průcha, 2010, pp. 86–87). The issue of the English usage is described both in the discourse of ‘cultural capital’ (an individual, who has good English, can benefit from this fact personally, especially in the labour market) and in the discourse of the ‘linguistic imperialism’ (the mass acquisition of English reflects and promotes the unequal power distribution in Europe and around the world. Nevertheless, non-native English speakers still perceive the need to acquire knowledge of other foreign languages because English as a lingua franca is not enough to replace the competence in other languages (Nekvapil et al., 2008).

If English is a language of the internal company communication, those who speak it fluently gain various advantages over those with a restricted knowledge of English at work (Beyene, 2007) global organizations are increasingly mandating that all employees use English as their common language, or lingua franca. Recent research suggests that such a language stipulation, in favoring native English speakers, may negatively impact collaboration between international colleagues. However, empirical inquiry of the effects of these regulations on non-native speakers and their work groups remains notably absent. Using the multiple methodologies of 41 interviews, and 196 surveys (including open-ended narratives. For example, employees attribute a higher competence (such as knowledge of cultural norms and values) to those collaborators with higher English proficiency; they are viewed as members of the Anglo – Saxon culture. It has been shown that these workers can flexibly change their attitudes, beliefs and behaviour (Thomas & Peterson, 2017).

On the other hand, employees with a lower level of proficiency in English are less involved in meetings, projects, decision-making etc., whereby the companies (especially multinational or international ones) are losing the potential of the knowledge and experience of these employees (Beyene, 2007).

As it is obvious, language skills are crucial for any multinational (or international) company. However, that is not enough. A relatively new concept of cultural intelligence (CQ), which is related to other forms of intelligence and

personality characteristics, serves as another indicator of the success (both personal and organizational) in a contact with foreigners from other cultures. This concept does not refer to a specific culture, but reflects one's capability to operate effectively in a culturally new, different environment (Ang et al., 2015).

A number of researches have been conducted to test cultural intelligence in many contexts (e.g. in terms of personality traits, international experience, etc.). In this respect, the research between cultural intelligence and foreign language skills is an exception because as yet insufficient attention has been given to this topic (Rachmawaty et al., 2018)2018. Moreover, the ambiguity of the conclusions in the studies conducted up to now is another reason why to address the issue. Ang et al. (2015) stated that there was a positive relationship between cultural intelligence and language competence. Although questioned by Rachmawaty et al. (2018), it was specified that it doesn't depend on the number of languages a person speaks, but at what level.

This study investigates the relationship between cultural intelligence and language competence or in other words, the research deals with the question of how CQ relates to language proficiency, or to lingua franca mastering. Based on the assumption of many beneficial effects of the high CQ for the life and work abroad, it retests the assumed relationship between the CQ (and its dimensions) and the language competence. The supposedly found correlation between the two variables is the first step towards the CQ development through the learning process of foreign languages. What's the best foreign languages learning strategy in terms of developing CQ: to take up a new language (i.e. a preference for the number of languages one knows), or to concentrate on deepening the knowledge of the corporate lingua franca (i.e. preference of proficiency)? Based on our sample data, it is also examined if women are somehow predisposed to have a better language competence than rather technically oriented men, as it is generally believed.

Literature review

Cultural intelligence (CQ) and other intercultural competencies

Research on intercultural competences is very complex (Holt & Seki, 2012; Johnson selemet al., 2006; Paige, 2004). In a broader focus on working relationships, intercultural competences can be defined (Leung et al., 2014) in terms of 1) personal intercultural characteristics (desire for adventure, patience, emotional resilience, flexibility, openness to foreign views, tolerance), 2) intercultural attitudes and worldviews (such as ethnocentrism or cosmopolitanism) and 3) skills (social flexibility, adaptability, ability to cooperate, language skills, CQ, knowledge). This conceptualization corresponds to the models of intercultural competences, which are reviewed by Leung et al. (2014) based on the following criteria: validity, equivalence in different cultures and psychological, behavioural and performative outcomes.

As we can see (Leung et al., 2014) CQ and language skills could be related to one another because both are intercultural skills. Cultural intelligence refers to the capability to function effectively in a culturally diverse environment (Ang & Van Dyne, 2015; Earley & Ang, 2003). This view is based on the work of (Detterman & Sternberg, 1986), who have developed an integrating model of multiple intelligences, i.e. the capabilities (mental, motivational and behavioural) with special emphasis on solving intercultural problems. Cultural intelligence is one of the variables that measures a person's capability of adjustment and adaptation in an unknown and culturally new environment (Earley et al., 2006). Cultural intelligence points out the flexibility and competence in the following three areas: knowledge of foreign culture, the ability to notice cultural nuances, similarities and differences, and to act adequately and naturally in a new cultural environment by appropriately interpreting these observations (Yitmen, 2013).

The concept of cultural intelligence is mainly applied to the field of economic – managerial studies (Triandis, 2006) and it is connected with the

organizational settings (Earley & Ang, 2003). The following table summarizes the directions (or context) that CQ studies have taken.

Table 1. CQ research in the cross-cultural studies

CQ research context in the business studies	Studies
Development of the field of studies	(Dabić et al., 2015)
Teamwork	(Adair et al., 2013)
Decision-making	(Ang et al., 2007)
Leadership	(Groves & Feyerherm, 2011)
Expats	(Che Rose et al., 2010; Elenkov & Manev, 2009; Kim et al., 2008; Lee & Sukoco, 2010; Malek & Budhwar, 2012)
Negotiations	(Imai & Gelfand, 2010)paradoxically, little research has addressed what predicts intercultural negotiation effectiveness. In this research, we examined the impact of cultural intelligence (CQ)
Knowledge transfer	(Vlajcic et al., 2019)

Source: Vlajcic et al., 2019.

Cultural intelligence is not (unlike IQ) fixed and invariable, but changes and develops throughout the life. The following table summarizes some of the studies that show the CQ development due to some stimuli or experience.

Table 2. The research on CQ development

CQ development	Studies
A stay (study or work) abroad is more effective than mere foreign (leisure time) tourism	(Crowne, 2008)
CQ helps to adapt	(Lee & Sukoco, 2010)
The relationship between CQ and cultural adaptation (adjustment) is moderated by the previous stays and traveling abroad	(Engle & Crowne, 2014)



Non-working (rather than working) international experience has a greater influence on the CQ development	(Moon et al., 2012) previous international experience, predeparture cross-cultural training, and cultural intelligence (CQ)
International experience has a positive effect on the development of all components of CQ	(Morrell et al., 2013)

Source: Vljacic et al., 2019.

CQ is composed of four components (dimensions, constructs): metacognitive, cognitive, motivational and behavioural. The metacognitive component concerns how people understand and make use of their intercultural experience (Van Dyne et al., 2012). In other words, this component refers to how an individual acquires and understands a cultural knowledge. People with high metacognitive CQ contemplate what has happened to them in a contact with foreigners, analyse their cultural knowledge, and internalize their new experience. They are able to react very sensitively and modify their future behaviour in a suitable way to new experience and knowledge.

Motivational CQ expresses the individual's desire and willingness to learn something about a new culture, to function effectively in it and to meet people from different cultures. People with high motivational CQs can direct their attention and energy towards intercultural situations; they believe that they will succeed in this unfamiliar situation. The motivational CQ is based on one's inner interest in a new cultural knowledge. It is related to the knowledge of the language and, at the same time, it affects the efficiency of the performance of certain professions, such as call centre operators communicating in their mother tongue (Presbitero, 2017). If one has a higher motivational CQ, he will not be easily discouraged by the difficulties caused by contact with strangers and unknown cultures.

Cognitive CQ expresses to what extent the individual understands and is aware of the fact that the new culture is similar (or different) to his / her own. This component of CQ refers to their knowledge of another culture.

Cognitive CQ is a critical component of total CQ because people with high cognitive CQ are less disoriented when interacting with people from culturally different backgrounds. Foreign language learning is important in this regard: language skills (especially good knowledge of English) have a positive impact on the overall satisfaction within multicultural working teams (Cramer, 2018).

Behavioural CQ is the ability of an individual to interact with foreigners, to change and use appropriate verbal and nonverbal behaviours such as words, the tone of voice, gestures, the facial expression, proxemics, a symbolic language, etc. to avoid "culturally embarrassing situations" (Earley & Ang, 2003; Ghonsooly et al., 2013).

Language during business encounters

Over the past 25 years language has become an increasingly important variable in international management as MNCs are becoming more reciprocal and multilateral in their global exchanges (Sanden, 2015). Language is a necessary constituent of ongoing sequences of decisions and resource commitments that characterize day-to-day organizational life (Brannen et al., 2017). The employees who cannot communicate with each other through their mother tongues share a neutral foreign language. Use of a 'lingua franca' (common language) has been indispensable to the development of trade in many parts of the world (Browaeyns & Price, 2015). The impact of the globalization has led to an overwhelming increase in the use of English as the business communication medium (Nickerson & Planken, 2015).

The terms ELF (English as a lingua franca) and BELF (Business English as a lingua franca), become more used and popular. As Terauchi (Terauchi et al., 2019) said "ELF is a shared resource, to be able to communicate with each other". It enables companies to communicate with a non-native speaker without cultural, political or local barriers. They have the opportunity to contact them virtually anywhere in the world. It is the management across linguistic borders (Terauchi et al., 2019).

The language policy and planning in multinational companies (MNC) in the Czech Republic is well described in the study of Nekvapil and Nekula (Nekvapil & Nekula, 2006). There might be a difference between frontstage and backstage language, and some might feel disempowered by not knowing the frontstage one enough, that's why Kankaanranta, Karhunen and Louhiala – Slamminen (Kankaanranta et al., 2018) recommend a plain language adaptable for all positions in a MNC. Du-Babcock (Du-Babcock, 2018), on the other hand, presents a two-tier system. The first one would be a BELF with a universal vocabulary used in all industries or simply commonly, and the second one a BELF for each individual industry with a certain genre specific pool of words. Due to Komori – Glatz (Komori-Glatz, 2018), BELF still lacks clear conceptualization and should be separated from corporate language. To her it's a multilingual use of English adapting to a specific content.

Language skills are shown not only by the sum of the levels in speaking, writing and comprehension, but also by the knowledge of the dialect spoken at a foreign subsidiary to which an employee has been assigned by a home company (Selmer & Lauring, 2015). The employees with better corporate language skills are likely to adapt more quickly to the new working environment (Selmer, 2006), integrate into the working group (Lauring, 2008), improve interpersonal relationships between people from different cultures (Sargent & Matthews, 1998), to gain a sense of belonging and closeness in the work team. The excellent knowledge of the corporate language has a number of desirable organizational outcomes: for example, improved relationships among close collaborators (Barner-Rasmussen & Björkman, 2007) who share their experience and knowledge more readily (Welch & Welch, 2008).

Language use is empirically separable from other cultural behaviour. Language is an extremely powerful transmitter and activator of culture, so much so that bilingual people may express somewhat different personalities in each language (Schwartz et al., 2014) with fully bilingual Hispanic participants from the Miami area, to investigate 2 sets of research questions. First, we

sought to ascertain the extent to which measures of acculturation (Hispanic and U.S. practices, values, and identifications).

CQ and language competence

Language proficiency and a good understanding of international issues is related to the overall CQ (Harrison, 2012). A person is more willing to work abroad if he has a good knowledge of foreign languages (Remhof et al., 2014). Then, he can show a better task performance in a culturally new environment (Presbitero, 2017). And true, the positive relationship between the number of foreign languages, a person knows, and the CQ score and its components was really found (Urnaut, 2014)cognitive, motivational and behavioural. The number of known foreign languages can have an impact on some relationship such as between the CQ dimensions and institutional success (Sharma, 2019), that's why this variable in the mentioned study (Sharma, 2019) was controlled.

However, the life satisfaction or work success depend rather on how well one has mastered the (corporate) language of his/her new country (company) than on the number of languages he knows. This fact was confirmed by one experimental study (Kurpis & Hunter, 2017). How comfortably one feels in his long-term term stays abroad depends on the high overall CQ scores as well (Wang et al., 2017). High CQ predicts a level of foreign language proficiency (Marcum, 2017). There is a positive relationship between excellent foreign language skills and cultural intelligence (Soldatova & Geer, 2013) which is reflected in the expats' ability to adapt to a new working environment and to be satisfied at the workplace (Huff, 2013).

On the other hand, a company is losing the creative potential of the employees who are not very fluent and skilful in the lingua franca of the organization because they are less motivated to be engaged in the discussions and talks with their workmates (Beyene, 2007)global organizations are increasingly mandating that all employees use English as their common language, or lingua franca. Recent research suggests that such a language

stipulation, in favoring native English speakers, may negatively impact collaboration between international colleagues. However, empirical inquiry of the effects of these regulations on non-native speakers and their work groups remains notably absent. Using the multiple methodologies of 41 interviews, and 196 surveys (including open-ended narratives. They can even be so frustrated that they stop working for the company. The employees' turnover working for multinationals depends on the lingua franca of the company (better if it is English) and motivational CQ (Froese et al., 2016).

The other researchers also intended to demonstrate which CQ components correlate with different aspects of language competence. One study (Ghonsooly et al., 2013) confirmed that the positive relationship between metacognitive and motivational CQ and comprehension ability exists. Later on, these results have been refined: the best predictor of the comprehension ability is motivational CQ. In this respect, it was also found (Rafieyan et al., 2014, 2015) that people with higher CQs understood better a speaker's feelings and attitudes (such as sarcasm, warnings, jokes etc.) in a conversation. They have higher pragmatic comprehension ability which depends on the cultural distance from the target language area (Rafieyan et al., 2014; Thomas & Peterson, 2017). The foreign language (English) proficiency in writing positively correlates with all components of CQ (Ghonsooly et al., 2013).

CQ is also related to the style of learning foreign languages: while less advanced students use the motivational and behavioural component of CQ to study foreign languages, more advanced students show a higher score of metacognitive and cognitive factors of CQ (Rachmawaty et al., 2018)2018.

Research objectives, methodology and data

Research questions and hypotheses

This study examines the relationship between cultural intelligence (and its components) and language skills first in terms of the number of foreign lan-

languages one knows and has ever studied, and then with regard to the level of proficiency in these languages. Based on the previous research and studies (Beyene, 2007; Mesiti, 2011; Rachmawaty et al., 2018; Wang et al., 2017)2018; Wang et al., 2017, the following hypotheses were set:

- **H1:** There is a positive relationship between the number of languages mastered at any level and CQ.
- **H2:** There is a link between the language competence and the overall CQ.

The third hypothesis (H3) is supported by many previous studies. For example, (Van Der Slik et al., 2015) reported that women were more motivated than men in foreign language learning. At the same time, women had been found to have more positive attitude toward studying a foreign language, and to have more interest in a target culture. Another study (Jiang et al., 2009) confirmed that there was a gender gap in favour of foreign language female learners in speaking and writing. As we can see, knowledge of languages depends on gender or, in other words, women are better predisposed for learning and knowing foreign languages. Therefore, we set the following hypothesis:

- **H3:** There is a statistically significant difference in the knowledge of two or more foreign languages (naturally learned or taught) mastered at the native speaker's level between men and women.

Research strategy

To test the first and second hypothesis, it is advisable to use the Spearman correlation coefficient between variables in the two relationships: cultural intelligence and the number of languages each respondent declared to know in the questionnaire, i.e. the relationship between cultural intelligence and overall language skills. The relationship between variables is assumed to be monotonous, consistently unidirectional. The language competence is quantified by conversion in this study; moreover, the respondents self-evaluated their language skills. Therefore, this recalculated score is subjective and it rather serves for the comparison of the respondents' capability to

use various languages on different levels; it expresses rather the order in terms of language competence than precise evaluation of this parameter.

Using the Chi-Square Test for Independence, the H3 was tested. The Chi-Square Test for Independence was calculated according to the formula:

Measurements and variables

Measurement items for the main variables of interest are borrowed from the established literature. The cultural intelligence constructs are borrowed from (Ang et al., 2007). The respondents were asked to read the 20 statements on the 7-point Likert scale (1 = strongly disagree, 7 = strongly agree) and select the response that best describes them. These twenty items were included in 4 measurement dimensions: the metacognitive component of CQ (items 1–4), the cognitive component of CQ (items 5–10), the motivational component of CQ (items 11–15), and the behavioural component of CQ (items 16–20). The examples of the four measurement dimensions are: "I am conscious of the cultural knowledge I use when interacting with different cultural background.", "I know the cultural values and religious beliefs of other cultures.", "I enjoy interacting with people from different cultures" and "I use pause and silence differently to suit different cross-cultural situations".

Cronbach's alpha (correlation) expresses the reliability of individual items for individual items of the measured construct. Cronbach's alpha for all four components is satisfactorily high (0.869 for the MC CQ, 0.828 for the COG CQ, 0.897 for the MOT CQ, 0.864 for the BEH CQ). The high Cronbach's alpha indicates that the data is normally distributed, which is also confirmed by the Kolmogorov-Smirnov test for normal data distribution (KS = 0.200).

The construct of cultural intelligence is evaluated using descriptive statistics techniques. The characteristics of the data collected from the respondents (N = 132) are described and summarized in Table 1.

Table 3. Cultural intelligence (descriptive statistics)

	Mean	Std. Deviation
MC(1-4)	4,94	1,13
COG(5-10)	4,42	0,99
MOT(11-15)	5,09	1,16
BEH(16-20)	4,62	1,11
CQ(TOTAL)	4,74	0,93

Source: own.

To determine if there are statistically significant differences among all four CQ subdimensions (Mesiti, 2011) 2003, Repeated–Measures Analysis of Variance (RM) was conducted. Bonferroni correction, which is used to test multiple hypotheses in order to reduce the likelihood of the Type I error, was also conducted in this study to investigate the mean differences between the particular CQ components. The Mauchly's test of Sphericity showed that the variance of the differences between all groups (i.e. all four CQ subdimensions) is equal, i.e. the null hypothesis could not be rejected, $\chi^2(5) = 9.331$, $p(= 0.097) > .05$, which means that the assumption of sphericity has not been violated. In this case, the tests of within-subjects effects have demonstrated that the differences in the values between the CQ components, i.e. metacognitive ($M = 4.94$, $SD = 1.13$), cognitive ($M = 4.42$, $SD = 0.99$), motivational ($M = 5.09$, $SD = 1.16$) and behavioural ($M = 5.09$, $SD = 1.11$) are statistically significant and not the same (zero hypothesis was rejected), $F(3.393) = 27.451$, $p = 0.000$.

The level of language proficiency, i.e. involved in four aspects of language skills: listening, speaking, reading and writing, was a kind of self–reporting questionnaire adapted from Kuchař & Buriánek (cf. Průcha 2010). Respondents were asked to rate their language skills on the scale ranging from 1 to 4. The 'fluent' or 'excellent' level (coded by 1) concerns the proficiency in all four aspects of language skills not only in general topics, but also in professional ones. The level of 'good' or 'above average' (coded by 2) differs

from the level 1; the user no longer has a good orientation in the professional terminology, but he is able to read, understand and talk on general topics. The 'average' level (coded by the number 3) expresses all above-mentioned abilities in the everyday communication (such as shopping) at the basic level. The 'beginner' level (coded by the number 4) means that the user is only able to read inscriptions, count up to ten, introduce himself and ask for directions. For example, the respondents were asked to self-evaluate their foreign (non-native) language level as "fluent" if they can understand, write, and speak without a problem on most topics, even specific ones, or as "good" if they can understand, read, write, and speak only about the most common and basic daily situations (i.e., how to ask about arrivals/departures).

This questionnaire is a revised version of the CEFR (Division, 2001, p. 24). The number 1 corresponds to a very advanced knowledge of the language (level C2 – C1), the number 2 corresponds to the level of the 'independent user' (B2 – B1), the number 3 and 4 corresponds to the 'user – beginner' (A2 and A1 respectively).

For the purpose of the statistical data processing, each self-assessment level of the language competence was weighted: 8 points were assigned to the level 1 (fluent), 6 points were assigned to the level 2 (good), 4 points were assigned to the level 2 (weak) and 2 points were assigned to the level 1 (very little). This procedure is taking into account not only the number of languages one knows, but also the level of these languages. Through this procedure we can calculate the total language competence as a sum of all languages the respondent has declared to know on a certain level.

In this study, the questionnaire was composed of three parts: Section I, determining the level of language proficiency, Section II, measuring cultural intelligence and Section III: asking for general information (gender, mother tongue of respondents). The questionnaire was created in the Google Forms and distributed to the university students in two languages: the bachelor respondents studying in the English study program completed the online questionnaire in English (104 respondents), the bachelor students studying in

the Czech study program completed the questionnaire in the Czech language (41 respondents). As part of the procedural remedies against the threat of common method bias the respondents were assured of the confidentiality of their responses and that no answers were right or wrong and encouraged to respond objectively. The data were processed using the statistical program IBM SPSS Statistics 21.

Respondents

The hypothesized relationships are studied on the sample of the students of one private business university in the Czech Republic, which might be a certain limitation to the generalizability; nevertheless, the convenience samples of college students are used quite often (Afsar et al., 2019). Furthermore, the language skills are typically determined earlier than one starts to work in an organization, therefore, the findings of this study (using the sample of college students) can be transferred to the organizational environment in which the students of the business college will start to work sooner or later.

After removing missing or otherwise defective answers, 132 of them were analysed: 52 men (39.4%), 80 women (60.6%). 24 respondents had been studying at the university for one year, 90 of all of them for two years, 13 students for three years, 2 students for four years and one for five years. The questionnaire was also completed by 3 students who had been studying at the university for one semester within the Erasmus exchange study program. 29 students do not currently use their mother tongue in everyday communication (written, spoken, read), but only 10 of them stated that they had no long-term foreign experience. The data provided by the respondents showed that 27 languages were spoken at the university. 63 students can prove the language proficiency with a certificate; 23 of them (most) reported having passed the English exam at B2 level according to the CEFR (Common European Framework of Reference for Language), i.e. at the intermediate level.

Results

Spearman correlation was performed to test the first and second hypothesis. Our data showed that the statistically significant relationship existed only between the motivational CQ and the number of languages the respondent knows at any level (H1), $r = + 0.220$, $n = 90$, $p < 0.05$, two - tailed. In accordance with the generally accepted recommendation for the interpretation of the strength of the correlation (Cohen, 1988), this relationship is weak. The coefficient of determination $r^2 = 0.0484$, which means that only 4.84% of the variance in the measurement of language proficiency is accounted for by the motivational CQ.

However, if we focus only on the level of the best foreign (non-native) language (H2), the results are quite different. In this case, the language proficiency (or the level of the respondent's knowledge) is clearly related to the overall CQ, i.e. to all its components (metacognitive, cognitive, motivational and behavioural), $r = + 0.366$ (or for the CQ subfactors $+ 0.363$, $+ 0.339$, $+ 0.356$, $+ 0.204$), $n = 132$, $p < 0.05$ for behavioural component CQ, otherwise $p < 0.01$, two-tailed test.

The Chi-square test for independence (H3) showed that there was no relationship in the sample of respondents between gender and the number of foreign languages (2 or more) that the students declared they knew. In other words, the frequency of declared foreign language proficiency (2 and more languages) does not differ for men and women, $\chi^2 = (2, n = 50) = 1.126$, $p = 0.570 > 0.05$. If we assume the relationship between CQ and the number of languages, then based on the results of Chi-Square test we can deduce that we find (or not to find) a difference in average CQ values depending on gender. The one-factor ANOVA test confirmed the assumption that there are no statistically significant differences in the overall CQ independent of gender, $F(1,130) = 2,425$, $p > 0.05$.

Discussion

Our analysis suggests that for the development of the intercultural skills, it is worthwhile to study one language more deeply and to attempt to master it at a higher level than to shatter attention and energy to learn more languages (Wang et al., 2017). Unlike other studies (Marcum, 2017; Rachmawaty et al., 2018)2018 showing that the relationship between the CQ subfactors and the level of language proficiency is not significant, our data supported the conclusion that the motivational component of CQ had some (but rather weak and not casual) influence on the language mastering development. Thus, these results are partly in line with the findings of Khodadady & Ghahari (2012), whose study confirmed a statistically significant relationship between the cognitive, resp. motivational component of CQ and the language advancement among the Iranian college students learning English as a foreign language.

Of course, the satisfaction in the personal life is related to the work efficiency. A person, who is not forced to solve some (serious) personal problems, has more energy and drive to perform his work tasks better, which can be reflected in his work performance and commitment. If the lingua franca of the organization and the national language commonly used in the country are different, an employee with the perfect lingua franca knowledge can be even more successful at work if he feels comfortable in the culturally new environment, for example by creating some network of friends and he succeeds in socializing himself in a culturally new environment thanks to some knowledge of the local language. As it can be seen, it is certainly desirable for the employees to know the language of the country to which they were assigned by their organization, not only the lingua franca, although perfectly mastered. Therefore, the company recruiters should select for the foreign assignment the employees who already know the language of the country in which they are sent out or to choose those employees who score high in the CQ measurement. These candidates are likely to succeed in their new foreign destination because they are able to cooperate with foreigners or they can

adopt easily, and secondly, they are probably motivated to learn new cultural things and issues. Although the language skills are an indirect indicator of high CQ, it can be recommended to complement the recruitment process with a CQ measurement which can provide supplementary information if a candidate is suitable or not for the foreign assignment.

The authors are aware of a number of limitations or shortcomings that might distort the conclusions and results presented in this study. First, the results can be biased due to the self-reporting survey method; the common method bias can be a problem and it is necessary to deal with it by, for example, implementing some social desirability items into the questionnaire. When assessing the foreign language, it is more accurate to use international tests such as TOEFL. Secondly, our sample size was not large enough so that the results could be generalized to the whole population as the G * power test showed (due to the fact of incomplete or otherwise erroneous answers as well). Although a frequent problem in many researches is the use of the so-called conventional sample which results in the worsened generalizability and applicability (in terms of validity) also to the population itself (Afsar et al., 2019), therefore, it is more than desirable (Peterson & Merunka, 2014) to carry out the further research on the non-conventional samples of university students and in areas which are more spread geographically. In the future, researches could address the issue of the relationship between cultural intelligence and bilingualism, which, to the best of our knowledge, has not been examined yet.

Conclusion

Our study brings some new insights into the relationship between the capability to function effectively in a culturally new environment and foreign language skills. This question has been examined relatively little and mainly in a non-European (Czech) context. Our analysis of the sample of 132 undergraduates studying mainly in the English program and coming from different

countries of the world have shown that CQ depends on the quality (the level of proficiency) rather than the quantity (the number) of foreign language skills. Our data confirmed that there was a positive relationship between the level of knowledge of the best foreign (non-native) language and CQ. On the contrary, on the basis of our data the relationship between language skills and gender has not been found.

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References

Adair, W. L., Hideg, I., & Spence, J. R. (2013). The Culturally Intelligent Team: The Impact of Team Cultural Intelligence and Cultural Heterogeneity on Team Shared Values. *Journal of Cross-Cultural Psychology*, 44(6), 941–962. <https://doi.org/10.1177/0022022113492894>.

Afsar, B., Shahjehan, A., Shah, S. I., & Wajid, A. (2019). The mediating role of transformational leadership in the relationship between cultural intelligence and employee voice behavior: A case of hotel employees. *International Journal of Intercultural Relations*, 69, 66–75. <https://doi.org/10.1016/j.ijintrel.2019.01.001>.

Ang, S., Rockstuhl, T., & Tan, M. L. (2015). Cultural intelligence and competencies. *International Encyclopedia of Social & Behavioral Sciences*, 433–439. <https://doi.org/10.1016/B978-0-08-097086-8.25050-2>.

Ang, S., & Van Dyne, L. (2015). Conceptualization of cultural intelligence: Definition, distinctiveness, and nomological network. In *Handbook of cultural intelligence* (pp. 21–33). Routledge.

Ang, S., Van Dyne, L., Koh, C., Ng, K. Y., Templer, K. J., Tay, C., & Chandrasekar, N. A. (2007). Cultural intelligence: Its measurement and effects on cultural judgment and decision making, cultural adaptation and task performance. *Management and Organization Review*, 3(3), 335–371. <https://doi-org.ezproxy.lib.cas.cz/10.1111/j.1740-8784.2007.00082.x>.

Barner-Rasmussen, W., & Björkman, I. (2007). Language fluency, socialization and inter-unit relationships in Chinese and Finnish subsidiaries. *Management and Organization Review*, 3(1), 105–128. <https://doi-org.ezproxy.lib.cas.cz/10.1111/j.1740-8784.2007.00060.x>.

Beyene, T. (2007). *Fluency as stigma: Implications of a language mandate in global work.* PhD Thesis, Stanford University.

Brannen, M. Y., Piekkari, R., & Tietze, S. (2017). The multifaceted role of language in international business: Unpacking the forms, functions and features of a critical challenge to MNC theory and performance. In *Language in international business* (pp. 139–162). Springer.

Browaeys, M.-J., & Price, R. (2015). *Understanding Cross-Cultural Management* 3rd Ed: Vol. Third edition. Pearson.

Che Rose, R., Sri Ramalu, S., Uli, J., & Kumar, N. (2010). Expatriate performance in international assignments: The role of cultural intelligence as dynamic intercultural competency. *International Journal of Business and Management*, 5(8), 76–85.

Cohen, J. (1988). *Statistical power analysis for the behaviors science* (2nd). New Jersey: Laurence Erlbaum Associates, Publishers, Hillsdale.

Cramer, T. (2018). The cultural awareness and cognitive cultural intelligence of Chinese undergraduate business students. *International Journal of Interdisciplinary Cultural Studies*, 13(4), 1–11. Scopus. <https://doi.org/10.18848/2327-008X/CGP/v13i04/1-11>.

Crowne, K. A. (2008). What leads to cultural intelligence?. *Business Horizons*, 51(5), 391–399. <https://doi.org/10.1016/j.bushor.2008.03.010>.

Dabić, M., González-Loureiro, M., & Harvey, M. (2015). Evolving research on expatriates: What is 'known' after four decades (1970–2012). *International Journal of Human Resource Management*, 26(3), 316–337. <https://doi.org/10.1080/09585192.2013.845238>.

Detterman, D. K., & Sternberg, R. J. (1986). *What is intelligence?: Contemporary viewpoints on its nature and definition.* Ablex.



Division, C. of E. C. for C. C. E. C. M. L. (2001). *Common European Framework of Reference for Languages: Learning, teaching, assessment*. Cambridge University Press.

Du-Babcock, B. (2018). Business communication research and theory development in Asia: Past, present, and future prospects. *Business Communication Research and Practice*, 1(1), 4–17. <https://doi.org/10.22682/bcrp.2018.1.1.4>.

Earley, P. C., & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Stanford University Press.

Earley, P. C., Ang, S., & Tan, J.-S. (2006). *CQ: Developing cultural intelligence at work*. Stanford University Press.

Elenkov, D. S., & Manev, I. M. (2009). Senior expatriate leadership's effects on innovation and the role of cultural intelligence. *Journal of World Business*, 44(4), 357–369.

Engle, R. L., & Crowne, K. A. (2014). The impact of international experience on cultural intelligence: An application of contact theory in a structured short-term programme. *Human Resource Development International*, 17(1), 30–46. <https://doi.org/10.1016/j.jwb.2008.11.001>.

Froese, F. J., Kim, K., & Eng, A. (2016). Language, Cultural Intelligence, and Inpatriate Turnover Intentions: Leveraging Values in Multinational Corporations through Inpatriates. *Management International Review*, 56(2), 283–301. <https://doi.org/10.1007/s11575-015-0272-5>.

Ghonsooly, B., Sharififar, M., Sistani, S. R., & Ghahari, S. (2013). Cultural Intelligence in Foreign Language Learning Contexts. *Cultus*, 47.

Groves, K. S., & Feyerherm, A. E. (2011). Leader Cultural Intelligence in Context: Testing the Moderating Effects of Team Cultural Diversity on Leader and Team Performance. *Group & Organization Management*, 36(5), 535–566. <https://doi.org/10.1177/1059601111415664>.

Harrison, N. (2012). Investigating the impact of personality and early life experiences on intercultural interaction in internationalised universities. *International Journal of Intercultural Relations*, 36(2), 224–237. <https://doi.org/10.1016/j.ijintrel.2011.03.007>.

Holt, K., & Seki, K. (2012). Global leadership: A developmental shift for everyone. *Industrial and Organizational Psychology*, 5(2), 196–215. <https://doi-org.ezproxy.lib.cas.cz/10.1111/j.1754-9434.2012.01431.x>.

Huff, K. C. (2013). Language, cultural intelligence and expatriate success. *Management Research Review: MRN*; 36(6), 596–612. Patrington. <http://dx.doi.org.ezproxy.lib.cas.cz/10.1108/01409171311325750>.

Imai, L., & Gelfand, M. J. (2010). The culturally intelligent negotiator: The impact of cultural intelligence (CQ) on negotiation sequences and outcomes. *Organizational Behavior and Human Decision Processes*. 112(2). New York. <http://dx.doi.org.ezproxy.lib.cas.cz/10.1016/j.obhdp.2010.02.001>

Jiang, M., Green, R. J., Henley, T. B., & Masten, W. G. (2009). Acculturation in Relation to the Acquisition of a Second Language. *Journal of Multilingual and Multicultural Development*, 30(6), 481–492. <https://doi.org/10.1080/01434630903147898>.

Johnson, J. P., Lenartowicz, T., & Apud, S. (2006). Cross-cultural competence in international business: Toward a definition and a model. *Journal of International Business Studies*, 37(4), 525–543. <https://doi.org/10.1057/palgrave.jibs.8400205>.



Kankaanranta, A., Karhunen, P., & Louhiala-Salminen, L. (2018). "English as corporate language" in the multilingual reality of multinational companies. *Multilingua*, 37(4), 331–351. <https://doi.org/10.1515/multi-2017-0077>.

Khodadady, E., & Ghahari, S. (2012). Exploring the relationship between foreign language proficiency and cultural intelligence. *International Journal of Language Learning and Applied Linguistics World*, 1(1), 22–31.

Kim, K., Kirkman, B. L., & Chen, G. (2008). Cultural intelligence and international assignment effectiveness. In *Handbook of Cultural Intelligence: Theory, Measurement, and Applications* (pp. 71–90), ed. S. Ang, L. Van Dyne. Routledge.

Komori-Glatz, M. (2018). Conceptualising English as a business lingua franca. *European Journal of International Management*, 12(1–2), 46–61. <http://dx.doi.org/10.1504/EJIM.2018.10009389>.

Kurpis, L. H., & Hunter, J. (2017). Developing Students' Cultural Intelligence Through an Experiential Learning Activity: A Cross-Cultural Consumer Behavior Interview. *Journal of Marketing Education*, 39(1), 30–46. <https://doi.org/10.1177/0273475316653337>.

Lauring, J. (2008). Rethinking social identity theory in international encounters: Language use as a negotiated object for identity making. *International Journal of Cross Cultural Management*, 8(3), 343–361. <https://doi.org/10.1177/1470595808096673>.

Lee, L.-Y., & Sukoco, B. M. (2010). The effects of cultural intelligence on expatriate performance: The moderating effects of international experience. *The International Journal of Human Resource Management*, 21(7), 963–981. <https://doi.org/10.1080/09585191003783397>.

Leung, K., Ang, S., & Tan, M. L. (2014). Intercultural competence. *The Annual Review of Organizational Psychology and Organizational Behavior*, 1(1), 489–519.

Malek, M., & Budhwar, P. (2012). Cultural intelligence as a predictor of expatriate adjustment and performance in Malaysia. *Journal of world business*, 48(2), 222–231. <https://doi.org/10.1016/j.jwb.2012.07.006>.

Marcum, J. (2017). *Language Proficiency and Cultural Intelligence in Distance English-Language Learning*. All Graduate Theses and Dissertations. 6691.

Mesiti, R. A. (2011). *Foreign language professors' reports of the teaching practices they deliberately use to develop students' cultural intelligence*. Ed.D., University of Hartford.

Moon, H. K., Choi, B. K., & Jung, J. S. (2012). Previous international experience, cross-cultural training, and expatriates' cross-cultural adjustment: Effects of cultural intelligence and goal orientation. *Human Resource Development Quarterly*, 23(3), 285–330. <https://doi.org/10.1002/hrdq.21131>.

Morrell, D. L., Ravlin, E. C., Ramsey, J. R., & Ward, A.-K. (2013). Past Experience, Cultural Intelligence, and Satisfaction With International Business Studies. *Journal of Teaching in International Business*, 24(1). New York. <https://doi.org/10.1080/08975930.2013.810064>.

Nekvapil, J., Dovalil, V., Sherman, T., Sloboda, M., & Vasiljev, I. (2008). LINEE: Sociolingvistický projekt 6. Rámcového programu EU: Jak funguje a jaké jsou zkušenosti s tzv. Network of excellence. *Jazykové Aktuality*, 45, 111–131.

Nekvapil, J., & Nekula, M. (2006). K jazykové situaci v nadnárodních podnicích pousobících v České republice. *Slovo a Slovesnost*, 67(2), 83–96.

Nickerson, C., & Planken, B. (2015). *Introducing Business English*. Routledge.

Paige, R. M. (2004). Instrumentation in intercultural training. *Handbook of Intercultural Training*, 3, 85–128.

Peterson, R. A., & Merunka, D. R. (2014). Convenience samples of college students and research reproducibility. *Journal of Business Research*, 67(5), 1035-1041. <http://dx.doi.org/10.1016/j.jbusres.2013.08.010>.

Presbitero, A. (2017). It's not all about language ability: Motivational cultural intelligence matters in call center performance. *The International Journal of Human Resource Management*, 28(11), 1547–1562. <https://doi.org/10.1080/09585192.2015.1128464>.

Průcha, J. (2010). *Interkulturní komunikace*. Grada Publishing as.

Rachmawaty, N., Wello, M. B., Akil, M., & Dollah, S. (2018). Do Cultural Intelligence and Language Learning Strategies Influence Students' English Language Proficiency?. *Journal of Language Teaching and Research*, 9(3), 655–663. London. <http://dx.doi.org.ezproxy.lib.cas.cz/10.17507/jltr.0903.27>.

Rafieyan, V., Golerazeghi, H., & Orang, M. (2015). Relationship between Cultural Intelligence and Pragmatic Comprehension. *Journal of Language Teaching and Research*, 6(3), 560–565. London. <http://dx.doi.org/10.17507/jltr.0603.11>

Rafieyan, V., Sharafi-Nejad, M., Khavari, Z., Damavand, A., & Eng, L. S. (2014). Relationship between Cultural Distance and Pragmatic Comprehension. *English Language Teaching*, 7(2), 103–109.

Remhof, S., Gunkel, M., & Schlaegel, C. (2014). Goodbye Germany! The influence of personality and cognitive factors on the intention to work abroad. *The International Journal of Human Resource Management*, 25(16), 2319–2343. <https://doi.org/10.1080/09585192.2014.884613>

Sanden, G. R. (2015). Corporate language policies—what are they. *Journal of Economics, Business and Management*, 3(11), 1097–1101. DOI: 10.7763/JOEBM.2015.V3.341.

Sargent, J., & Matthews, L. (1998). Expatriate reduction and Mariachi circles: Trends in MNC human-resource practices in Mexico. *International Studies of Management & Organization*, 28(2), 74–96. <https://doi.org/10.1080/00208825.1998.11656735>.

Schwartz, S. J., Benet-Martínez, V., Knight, G. P., Unger, J. B., Zamboanga, B. L., Des Rosiers, S. E., Stephens, D. P., Huang, S., & Szapocznik, J. (2014). Effects of language of assessment on the measurement of acculturation: Measurement equivalence and cultural frame switching. *Psychological Assessment*, 26(1), 100–114. <https://doi.org/10.1037/a0034717>.

Selmer, J. (2006). Language ability and adjustment: Western expatriates in China. *Thunderbird International Business Review*, 48(3), 347–368. DOI: 10.1002/tie.

Selmer, J., & Lauring, J. (2015). Host country language ability and expatriate adjustment: The moderating effect of language difficulty. *The International Journal of Human Resource Management*, 26(3), 401–420. <https://doi.org/10.1080/09585192.2011.561238>.

Sharma, R. R. (2019). Cultural Intelligence and Institutional Success: The Mediating Role of Relationship Quality. *Journal of International Management*, 25(3), 100665. <https://doi.org/10.1016/j.intman.2019.01.002>.

Soldatova, G., & Geer, M. (2013). “Glocal” Identity, Cultural Intelligence and Language Fluency. *Procedia - Social and Behavioral Sciences*, 86, 469–474. <https://doi.org/10.1016/j.sbspro.2013.08.599>.

Terauchi, H., Noguchi, J., & Tajino, A. (2019). *Towards a New Paradigm for English Language Teaching: English for Specific Purposes in Asia and Beyond*. Routledge.

Thomas, D. C., & Peterson, M. F. (2017). *Cross-cultural management: Essential concepts*. Sage Publications.

Triandis, H. C. (2006). Cultural intelligence in organizations. *Group & Organization Management*, 31(1), 20–26. <https://doi-org.ezproxy.lib.cas.cz/10.1177/1059601105275253>.

Urnaut, A. G. (2014). Education for Successful Intercultural Communication and Cultural Intelligence. *Journal of Economic and Social Development*, 1(1), 63–73, Varazdin.

Van Der Slik, F. W., Van Hout, R. W., & Schepens, J. J. (2015). The gender gap in second language acquisition: Gender differences in the acquisition of Dutch among immigrants from 88 countries with 49 mother tongues. *PLoS One*, 10(11), e0142056. doi: 10.1371/journal.pone.0142056.

Van Dyne, L., Ang, S., Ng, K. Y., Rockstuhl, T., Tan, M. L., & Koh, C. (2012). Sub-dimensions of the four factor model of cultural intelligence: Expanding the conceptualization and measurement of cultural intelligence. *Social and Personality Psychology Compass*, 6(4), 295–313. <https://doi-org.ezproxy.lib.cas.cz/10.1111/j.1751-9004.2012.00429.x>.

Vlajcic, D., Caputo, A., Marzi, G., & Dabic, M. (2019). Expatriates managers' cultural intelligence as promoter of knowledge transfer in multinational companies. *Journal of Business Research*, 94, 367–377. <https://doi.org/10.1016/j.jbusres.2018.01.033>.

Wang, L., Wang, K. T., Heppner, P. P., & Chuang, C.-C. (2017). Cross-National Cultural Competency Among Taiwanese International Students. *Journal of Diversity in Higher Education*, 10(3), 271–287. <https://doi.org/10.1037/dhe0000020>.

Welch, D. E., & Welch, L. S. (2008). The importance of language in international knowledge transfer. *Management International Review*, 48(3), 339–360. <https://doi-org.ezproxy.lib.cas.cz/10.1007/s11575-008-0019-7>.

Yitmen, I. (2013). Organizational Cultural Intelligence: A Competitive Capability for Strategic Alliances in the International Construction Industry. *Project Management Journal*, 44(4), 5–25. <https://doi.org/10.1002/pmj.21356>.