

# Article Developing Intercultural Efficiency: The Relationship between Cultural Intelligence and Self-Efficacy

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**Abstract:** Cultural intelligence measures an individual's ability to succeed in a culturally unknown environment. Self-efficacy expresses self-confidence in one's own ability to handle a situation. The two concepts are closely linked, as confirmed by a number of previous studies. Using the multivariate method PLS-SEM, the predictive effect of CQ on self-efficacy is investigated; compared to previous studies, the relationship causality is reversed. A sample of 190 university students was also tested for how this relationship is moderated by two categorical variables: work experience abroad and gender. The results showed that cultural intelligence is a predictor of intercultural self-efficacy in communication. Its impact on the endogenous variable (self-efficacy) is rather weak, but significantly strengthened by work experience abroad. Gender has no effect on this relationship.

**Keywords:** cultural intelligence; self-efficacy; work experience abroad; intercultural efficiency; CQ development; PLS-SEM

# 1. Introduction

Cultural intelligence (CQ) is the ability to effectively function in a culturally diverse environment and to succeed in such environment (Ang et al. 2007). CQ gives international companies and organizations a competitive advantage in international markets (Ang and Inkpen 2008; Groves and Feyerherm 2011). The competitive advantage is acquired specifically from managerial CQ, competitive CQ, and structural CQ (Ang and Inkpen 2008). The performance and strategy of companies are positively correlated with managers' CQ (Ang and Inkpen 2008). In addition, the CQ of leaders is also crucial for success on highly competitive global markets (Creque and Gooden 2011; Elenkov and Manev 2009; Groves and Feyerherm 2011; Livermore 2015). Although the CQ construct is conceived as an individualized product of intercultural abilities, it does not only apply to living individuals, as it can also be measured for a certain organization (Akgün et al. 2007; Moon 2010).

Cultural intelligence belongs to intangible resources and capabilities of a firm or an organization. It is hard to observe it and difficult (although not impossible) to quantify. It helps the firm to choose and implement its strategies. Cultural intelligence matches with a resource-based view: certain resources and capabilities specific to one firm are not shared by competitors (Peng 2017). An organization needs creative employees (whether ordinary or in management positions) with high CQ. Both quantities are related (Yunlu et al. 2017): a person with higher CQ will most likely also be creative. If a person with developed CQ (especially in its metacognitive and cognitive component) is also inquisitive, he or she will be even more creative. In addition, the competitive advantage of the organization is also increased by the successful transfer of knowledge (from headquarters to a foreign branch and vice versa). One of the factors that contributes to the success of this transfer is the cultural intelligence of managers (Vlajcic et al. 2019).

Our article provides an explanation of why cultural intelligence is an important factor in the competitiveness of companies on international markets and why it is advantageous for companies operating their activities in an intercultural environment to employ human



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**Copyright:** © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). resources with developed intercultural skills (measured by CQ). Supported by a number of previous research (Charoensukmongkol and Pandey 2020; Hu et al. 2018; MacNab and Worthley 2012), we assume that the success of individuals (as well as companies) on the international scene lies, among other things, in internal motivation and driving force, which help in overcoming obstacles, not giving up and remaining positive in the firm belief that the ultimate goal will be successfully achieved. This concept is operationalized using the self-efficacy variable (Bandura 1977), which can cover a wide range of areas and take many forms. In this study, we focus on specific self-efficacy: intercultural self-efficacy in communication.

It has been shown (Van Dyne et al. 2012) that self-efficacy is closely linked to the motivational component of CQ. In comparison with previous research, the causality of the relationship between the two variables is reversed in our study; we assume that cultural intelligence is a predictor of specific (intercultural) self-efficacy (H1). This may explain why individuals with a high CQ are more communicative and open to members of other cultures and nationalities, can better motivate them, create a pleasant atmosphere in which they feel relaxed and casual, prevent (or effectively resolve) conflicts of an intercultural nature, choose the right words and approach to properly influence, and recruit foreign workers for the organization's goals. There is also the interesting question of whether this relationship (between cultural intelligence and specific self-efficacy) depends on gender (H2). There are certain preconditions relevant to this question. For example, the findings corroborate the influential role in career choices of cultural sex-typing of occupational pursuits. Women generally judge themselves less efficacious for scientific occupations than do men. Similarly, women generally express a lower sense of efficacy for occupations requiring quantitative skills; they occupy mainly clerical, service, and sales jobs (Bandura 1999). Although there are many circumstances to consider, it is possible to assume that women will be more empathetic communicators than men. For example, it was discovered that in cultures lower in individualism, higher in ingroup collectivism practices, lower in assertiveness practices, and higher in harmony, women will more likely outperform men in (intercultural) negotiations (Shan et al. 2019).

In the case of university students, it can be assumed that they can already work abroad during their studies (e.g., work and travel) and it is also likely that they will work abroad more often than the non-university population. Therefore, we also examine whether the relationship between cultural intelligence and specific (intercultural) self-efficacy is strengthened (moderated) in the university population by work experience abroad (H3).

Our article extends existing research on this topic in the following points: (1) In relation to cultural intelligence, a specific self-efficacy construct focused on intercultural communication was used; (2) Cultural intelligence does not act as an independent variable, i.e., an output variable, but is examined as an antecedent of self-efficacy. In other words, the causality has been reversed when compared to previous research; our study tests the ability of the CQ variable to predict self-efficacy; (3) The influence of a new moderator (foreign work experience in combination with studies at a foreign university) is examined. The article is structured as follows: In Section 2, the concepts of cultural intelligence and self-efficacy are described and explained. Three hypotheses are introduced in Section 3. Based on previous research, the interrelationship between cultural intelligence and selfefficacy and its moderation by two variables (work experience from abroad and gender) is further explained. Section 4 gives details on how the data were collected, it demographically characterizes the sample of respondents and describes the used data analysis technique: PLS-SEM. Section 5 presents the results, which are then discussed in Section 6, including certain limitations to the findings due to the nature of the research design and recommendations for further research. The conclusion summarizes main points.

#### 2. Literature Review

# 2.1. Cultural Intelligence

CQ is defined (Ang and Van Dyne 2015; Earley and Ang 2003) as the ability to effectively function in a culturally diverse environment. Cultural diversity is characterized by differences in terms of nationality and cultural values; it also covers subcultures, professions, ages, occupations, and religions. CQ can be measured at the individual, team, or company level. Cultural intelligence is better conceptualized at the individual level (to a lesser extent also at the company level) than at the team level (Van Dyne et al. 2012). Systematic literature search of definitions of CQ and global style of thinking has been published by Andresen and Bergdolt (2017). The concept of CQ overlaps with (Bücker and Poutsma 2010) and complements (Earley et al. 2007) the concept of global mindset; both are necessary prerequisites for successful intercultural interactions within different sample groups: students and managers (Ang et al. 2007; Bücker et al. 2014). Intercultural competence includes four components: personal characteristics, cognitive knowledge and skills, potential for adaptive behavior, and motivation.

The CQ construct consists of four components: (1) metacognitive—this is a control of cognition, i.e., it concerns the processes that a person uses to acquire and understand a certain knowledge; (2) cognitive intelligence—knowledge is an important part of the intellect (Ackerman 1996); (3) motivational—the mental ability to direct (and maintain) energy aimed at a certain task (or situation), the ability to motivate is crucial for solving problems in the "real world" (Ceci 1990); and (4) the external manifestation of behavior, i.e., what people do rather than what they think (Detterman and Sternberg 1986). Metacognition, like cognition, is a mental ability that represents the cognitive functioning of an individual. Motivation is another ability manifested at the level of mental processes. In contrast, behavioral intelligence refers to the ability to express oneself verbally and non-verbally in some way. All of these components can interact with each other (Gooden et al. 2017; Yunlu and Clapp-Smith 2014).

Van Dyne et al. (2012) extended this four-factor model of cultural intelligence in their article with other sub-dimensions and proposed an extended (11-factor) latent CQ construct of the second order (Expanded Cultural Intelligence Scale—E-CQS). Van Dyne et al. (2012) created a 37-item tool to measure advanced cultural intelligence and tested it with statistical methods (with satisfactory results) on a sample of 286 respondents from more than 30 countries. The psychometric properties of this construct in the South African context were investigated (and confirmed) in a dissertation authored by Silva (2015). Although this tool for measuring cultural intelligence is not extremely popular in research (especially research looking for the relationship between CQ and other variables), there are exceptions; this measurement was used in a study by McClinton and Schaub (McClinton and Schaub 2017). Extended measurement of cultural intelligence is important especially for diagnostic determination of intercultural competencies. Thanks to a study by Van Dyne et al. (2012), the overall CQ construct was improved and refined: tools were developed to measure sub-dimensions of the four CQ factors (metacognitive, cognitive, behavioral, motivational component of CQ), making it possible to work on CQ self-development to be more successful in a culturally diverse environment.

The metacognitive dimension of CQ includes planning, awareness of the intercultural situation (in the sense of similarity with and difference from one's own culture) and reflective control of one's thinking and behavior. Planning is a certain predetermined strategy of contact with foreigners. It is a careful preparation and consideration of certain short-term or long-term goals of one's operation in a culturally new environment; it is also about anticipating certain measures and steps that must be taken to achieve success when dealing with foreigners. The plan relates to oneself, to a stranger and to a specific environment. An individual tries to see the world through the eyes of his or her culturally different counterpart (Van Dyne et al. 2012). A person approaches to foreigners with a certain plan that is part of a certain strategy. However, the person then (in direct contact with foreigners) needs to be aware of (or perceive in detail) this intercultural situation in real

time and how this interaction affects him or her and his or her counterpart. At this point, an individual with high metacognitive CQ is aware of his or her cultural differences and can refrain from judging intercultural interaction until he or she has enough information; he or she is also proactive and can see the situation from the counterpart's point of view. After the interaction, the individual with high CQ thinks about it, compares his or her original plan with the experience (reality) of the last intercultural contact, and adjusts his or her mental map if the reality differs from expectations based on the analytical-intuitive evaluation of this experience. This phase of metacognitive CQ is referred to as the control (evaluation phase).

The cognitive component of CQ refers to an individual's knowledge of cultural institutions, norms, practices, and conventions from different cultural backgrounds. Cultural knowledge is of two natures: objective and subjective. The first case involves observable and visible artefacts and cultural practices, i.e., knowledge of economics (capitalism vs. socialism), law (formal law vs. informal governance), political system (monarchy vs. democracy), traditional cultures (matriarchy vs. patriarchy), norms of social interaction (guanxi), religion, typical gender roles, socio-linguistic theory (including dialects and relevant vocabulary), nonverbal behavior (proximity, gesticulation, etc.), or communication standards (direct vs. indirect communication). Subjective cultural knowledge means the less visible (observable) psychology of culture: values, norms, beliefs, and basic assumptions from which a society draws its spiritual legacy (masculinity-femininity, individualism vs. collectivism, avoiding uncertainty, and power inequality in society). An individual with a strongly developed CQ component is able to apply various cultural categories and characteristics to specific countries (e.g., he or she knows that the Japanese communicate strongly based on context, Brazilians openly express their emotions, Indians have a strong respect for authorities, etc.). They are familiar with the differences within certain professional groups (diplomats, managers, teachers), or demographic groups (by age, sex, education).

Motivational CQ refers to an individual's ability to direct his or her attention and energy toward learning and functioning in situations that are characterized by cultural otherness. Motivational theories are used to form the motivational sub-dimension of CQ (such as expected value models, social cognitive theory, self-determination theory (Van Dyne et al. 2012), which are based on immediate (rather than permanent) differences between individuals or contextual variables beyond the individual's control. The three subconstructs of motivational CQ are internal interest, external interest, and self-confidence in their ability to adapt. A person is internally motivated, i.e., he has an inner interest, if he or she evaluates a certain culturally diverse situation on his or her own or for himself or herself, because it gives him or her a feeling of inner satisfaction. This is based on the novelty of intercultural interactions or the pleasure of working with people from different cultures. Internal interest does not depend on others or the situation. External interest is defined as the pursuit (effort to achieve) of tangible personal benefit from cultural experiences (e.g., better job prospects through this experience, higher reputation, promotion, higher responsibility). The third sub-construct of motivational CQ concerns self-confidence in performing a certain task (activity) in an intercultural context. The individual feels able to adapt to the new cultural environment and deal with the stress this situation brings. This sub-construct is also associated with confidence in the ability to successfully interact with locals and co-workers who come from other cultures. An important concept connected to the motivational component of CQ is the concept of self-efficacy.

Behavioral CQ refers to an individual's ability to adapt a wide repertoire of verbal and nonverbal expressions in interaction with people from different cultures. Thanks to behavioral CQ, people can control and regulate their social behavior in intercultural intercourse so that there is minimal erroneous perception and interpretation of their message by the receptor. Three categories of communicative behavior have been identified (Van Dyne et al. 2012): (a) types and extent of verbal behavior; (b) types and extent of nonverbal behavior; (c) specific speech acts (words and phrases used to express a particular message). The means of communication used in one cultural environment may not be appropriate in another. Therefore, people have to flexibly adapt their expressions depending on the cultural environment in which they find themselves, in order to avoid cultural embarrassment and faux pas. Manifestations of verbal behavior are flexibility in the use of accent, tone of voice, and melody; it is also manifested in speed and volume of speech and in the style of expression (formality vs. informality, warmth, enthusiasm). Another feature of this sub-dimension is working with pauses and silence. The nonverbal sub-dimension expresses the intercultural flexibility of communication in gestures, facial expressions, and body language. Within this sub-dimension, a person with a high behavioral CQ is able to adapt his or her facial expression and gesticulation, depending on the specific intercultural situation, as some cultures are expressively neutral while others are expressive. Members of some cultures prefer to maintain a closer distance (standing, sitting) while other are more distant; this also applies to eye and physical contact. Take, for example, greetings: in some cultures, people greet one another by shaking hands, while in others, bowing, nodding, or kissing is more popular. Other authors (Livermore 2015; McRae et al. 2016) describe a four-factor model of cultural intelligence (see Figure 1) similarly, but in other words.

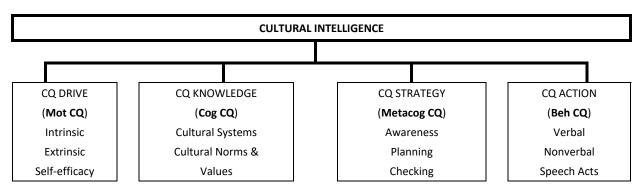


Figure 1. Four-dimensional model of cultural intelligence. Source: Livermore (2015).

Of course, the conceptualization of the CQ construct from Ang and Van Dyne (2015) is not the only one, although it is the most used. Earley and Ang (2003) conceptualized CQ factors with the aim of their synergy and influence on various investigated outcomes; one study (Chua and Ng 2017) examined the interactive effects of CQ factors. Rockstuhl and Van Dyne (2018) complemented this approach and did not examine (like many other researchers) CQ factors in isolation in the hope that this approach would provide a more complete picture of the effects of the four CQ factors.

Sometimes the CQ construct was examined in individual components, other times all components were aggregated, and researchers tried to understand CQ as a whole. Ramsey and Lorenz (Ramsey and Lorenz 2016) stated the following reasons regarding this procedure: (a) the four components show a high correlation with each other, which can cause (or lead to) undesirable multicollinearity; (b) there is no agreement between researchers on the importance and strength of each dimension. In any case, it can be stated that there is no clear agreement among researchers on the conceptualization of CQ, as summarized in the following table (Table 1).

In response to this disunity, Rockstuhl and Van Dyne (Rockstuhl and Van Dyne 2018) tested in their study a two-factor model of CQ, which consists of a generally conceived latent CQ variable and specific CQ factors. Items in this type of model are modeled as a function of both general and specific factors. In other words, in the model tested by Rocstuhl and Van Dyne, there are five factors, one general and four specifics, to explain the covariance between a set of CQ items. Their approach makes sense because, for example, individuals with a higher motivational CQ can learn more about a foreign culture through their interest in that culture and increase their cognitive CQ. Conversely, if one knows a lot about a culture, one's interest in that culture may also increase.

CQ Model	Study (Author)	
Single-factor	Adair et al. (2015)	
Four correlated factors	Presbitero (2016)	
Combination/division into two factors	Bucker et al. (2015)	
Single isolated CQ factor (metacognitive)	Chua et al. (2012)	
Source: Rockstuhl and Van Dyne (2018).		

Table 1. CQ conceptualization.

#### 2.2. Self-Efficacy

The author of the self-efficacy concept is the Canadian-American psychologist Albert Bandura (Bandura 1977). The concept expresses self-confidence in one's own ability, selfrealization, belief in the ability to plan and act in a way necessary to achieve a certain goal, to manage a situation or task in the broadest sense. Self-efficacy as an important attribute of motivational CQ relates to three areas: (1) the ability to cope (deal) with the challenges of the international environment; (2) the question of motivation; and (3) setting goals (Barakat et al. 2015). Individuals who score well in the self-efficacy indicator are ready to deal with obstacles. They are internally motivated. That might be the reason why they are not afraid (and directly looking for) international opportunities, which are a valuable source of experience for them. They do not look for an immediate reward, they do not doubt that the experience gained will ultimately pay off. Their actions are not by external impulses. They know how to set realistic goals, so they are successful in their actions. They proactively look for an effective way to establish contact with their surroundings, which makes them internally satisfied and helps them achieve their goals.

Definitions of the concept of self-efficacy usually refer (MacNab and Worthley 2012) to Bandur's Social Learning Theory and argue that in terms of work performance, it is a "judgment of one's capability to accomplish a certain level of performance", or "the conviction one can engage in behavior that will produce the desired outcome". This concept is based on self-efficacy theory (Bandura 1977) and helps explain why people's behavior can vary greatly even when they have similar knowledge and skills. According to this theory, the main determinants of change in human behavior are the expectation of efficacy in achieving a certain goal or output. This means that the individual is convinced that his or her activity will lead to the desired result in the expected quality. In other words, (general) self-efficacy is a belief in one's own ability and competence; it is a strong predictor of motivation, emotions, and behavior in all areas of human activity; it improves the self-regulating and self-control mechanisms of the individual with consequent higher performance efficiency (Charoensukmongkol and Pandey 2020). It leads to better intercultural adaptation and more appropriate behavior in unfamiliar intercultural situations. It manifests itself, for example, in the selection of life professional careers, in the preparation for them, and the achievement of work successes (Bandura 1999).

Self-efficacy is the main internal force that drives individuals to manage intercultural uncertainties and risks (Hu et al. 2018). The individual believes that he or she can effectively cope with the task that lies ahead, i.e., that the task will be completed with a positive outcome (Charoensukmongkol and Pandey 2020).

Higher self-efficacy scores are reflected in better self-regulation or satisfaction and well-being (Nguyen et al. 2018). Peterson et al. admit (Peterson et al. 2011) that self-efficacy in two different areas can be intertwined (related), i.e., that self-efficacy exists in the broadest sense, in a certain general level. In this study, we focus on self-efficacy in intercultural communication, which concerns individuals living temporarily in a foreign (culturally different) environment.

#### 3. Hypothesis

# 3.1. Cultural Intelligence and Self-Efficacy

MacNab and Worthley (2012) investigated in a sample of more than 370 managers and student management the relationships between the characteristics of managers (i.e., general self-efficacy, international travel experience, work experience) and the development of cultural intelligence in the field of metacognitive, motivational, and behavioral factors. They found that general self-efficacy is an important predictor of the ability to effectively function in a culturally foreign environment as measured by cultural intelligence. Research has shown that general self-efficacy is of great importance for the development of CQ (Earley and Peterson 2004) and outputs associated with intercultural skills training (MacNab 2012). In addition, a strong positive correlation was found between motivational CQ and self-efficacy (Ng and Earley 2006). Individuals achieving low levels of self-efficacy in social contacts in an unfamiliar environment will tend to avoid these situations. As a result, they are less (or not at all) adapted to the new (intercultural) context in which they find themselves.

Cultural intelligence and self-efficacy have many features in common or similar, but there are differences as well. For example, the concept of cultural intelligence stands above a particular culture but is characterized by the ability to be successful in a culturally new, unfamiliar environment; self-efficacy is directly related to a specific context (e.g., to intercultural communication as in the study by Peterson et al. 2011). Self-efficacy and cultural intelligence are related to several similar variables: academic achievement (Collins et al. 2016; Mills et al. 2007), communication confidence (Dwyer and Fus 2002; Kurpis and Hunter 2017), intercultural adaptation (Harrison et al. 1996; Mehra and Tung 2017), or intercultural adaptation as a result of a study stay abroad (Nguyen et al. 2018). Self-efficacy and cultural intelligence are influenced by the same variables, e.g., access to (or use of) social networks (Hu et al. 2018). In addition, a sample of 282 sellers from Thailand who worked at international trade fairs in Japan, India, and Vietnam (Charoensukmongkol and Pandey 2020) showed that the cultural intelligence of sellers targeting foreign clients and the quality of intercultural sales presentations is partially mediated by (sales-related) self-efficacy.

A certain affinity between the two concepts can also be seen in the definition of cultural intelligence as "the ability to effectively function in a culturally diverse environment" (Ang and Van Dyne 2015; Earley and Ang 2003), because "a self-efficacious intercultural communicator may navigate more efficiently and confidently in numerous unfamiliar situations" (Peterson et al. 2011). Research shows (Bandura 1999) that intercultural competence training positively affects an individual's self-efficacy. In this context (the development of intercultural skills), the relationship between cultural intelligence and self-efficacy (specific or general) is evident, as shown in the study (Lawrence 2011; Rehg et al. 2012). It has been found that intercultural training has a positive correlation between cultural intelligence and specific self-efficacy. This knowledge is useful in managerial practice: increasing specific self-efficacy on a task to be performed in an intercultural environment can lead to the development of CQ and subsequent improvement in intercultural performance. Cultural intelligence develops along with self-efficacy in connection with study abroad, as shown by a comparison of two groups of respondents: monocultural and multicultural. In other words, a study stay abroad seems to be more important and beneficial for monocultural students than multicultural students in terms of CQ development and self-efficacy (Nguyen et al. 2018). It can be stated that cultural intelligence exerts a positive impact on the formation of self-efficacy (Hu et al. 2018).

Self-efficacy is not only related to the overall CQ, but the relationship between the two variables is apparent in throughout the whole construct and its structure, i.e., there is a positive relationship between self-efficacy and the individual CQ components: metacognitive, cognitive, behavioral, and motivational. Individuals with high self-efficacy are likely to have strong self-control and perseverance, be able to make constant efforts to achieve their goals, and make the necessary readjustment of their mental models to this

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end, which is related to the metacognitive component of CQ (Brislin et al. 2006; Triandis 2006). They are motivated to change the status quo of a certain intercultural setting; they proactively seek opportunities to gain new knowledge about other cultures and are flexible in interacting with members guided by different cultural values and norms. Thanks to self-efficacy, they are driven to increase the cognitive component of CQ (Ang et al. 2007). In addition, individuals with high self-efficacy tend to set challenging goals and are intrinsically motivated to persevere until these goals are achieved; thanks to concentrated attention and energy, they can effectively deal with various situations of a cultural nature, which is positively reflected in the development of motivational CQ (Van Dyne et al. 2012). Due to the "correct" mindset, inner motivation, widespread cultural knowledge, and frequent interactions with people from culturally different countries, individuals with high self-efficacy are able to use appropriate verbal and nonverbal means depending on the current culturally conditioned situation, thereby showing that they have a relatively well-developed behavioral component of CQ (Earley and Ang 2003).

Therefore, we assume

**Hypothesis 1 (H1).** There is a positive direct relationship between cultural intelligence and intercultural self-efficacy.

#### 3.2. Moderation Effects of Gender and Intercultural (Work) Experience Abroad

CQ depends on gender. This fact was stated in their modified model of cultural intelligence by Bucker et al. (2015). However, it is not clear whether men or women have greater intercultural competence. The results are contradictory in this area (Mahasneh et al. 2019), as shown in Table 2. No difference in CQ by gender was found in the sample of students in Saudi Arabia either (AL-Dossary 2016). Another study can be added to this inconsistency of results (Khodadady and Ghahari 2011), in which Iranian female university students were found to have higher scores in the metacognitive component of CQ than male students. In addition, in a number of studies (Jiang et al. 2018; Jyoti and Kour 2017) examining the relationship of CQ to other variables, researchers usually control for the gender variable. Therefore, we propose

**Hypothesis 2 (H2).** *The relationship between cultural intelligence and intercultural self-efficacy depends on gender.* 

Statistical Significance	Study	
YES (in favor of men)	Azizi et al. (2015); Báez (2013); Brancu et al. (2016); Keavanloo et al. (2013)	
YES (in favor of women)	Bucker et al. (2015)	
NO	Al-Jarrah (2016); Al-Momani and Atoum (2016); Engle and Nehrt (2012); Ward and Fischer (2008)	

Table 2. CQ by gender.

Source: Mahasneh et al. (2019).

It has been shown that CQ can be developed over time through classical education, i.e., via university courses (Ang et al. 2007; Earley and Peterson 2004; Eisenberg et al. 2013; Rehg et al. 2012), which are excellent especially for the development of the cognitive component of CQ or training in intercultural skills (Ng et al. 2012; Raver and Van Dyne 2017; Triandis 2006). In the first case, the training of intercultural skills can be distinguished according to whether it concerns the knowledge of only one culture (or cultural sphere) (Rehg et al. 2012) or more cultures (Reichard et al. 2015). In the second case, this goal is achieved, among other things, by the experience gained from intercultural contacts (Rehg et al. 2012). One study stated, among other things, that in a culturally diverse environment, people are more aware of different cultural variations and behave relatively sensitively in cultural aspects

(Alkhyeli and Van Ewijk 2018). There is a particular development of the metacognitive and behavioral components of CQ. However, the increase in intercultural competences (measured by CQ) is not just a random, immediate and "fleeting" phenomenon: the increase in CQ lasts for at least 6 months, as one study has shown (Erez et al. 2013).

One group of researchers involved in the development of CQ (B. R. MacNab and Worthley 2012; K. Y. Ng et al. 2009; Shannon and Begley 2008) argues that experimental training methods in the form of direct intercultural experience (Kim and Van Dyne 2012; MacNab and Worthley 2012) are a remarkably effective tool for the development of CQ (Ng et al. 2009; Rosenblatt et al. 2013). The form of this approach to the development of CQ was also addressed. For example, it was found that a short-term study trip with intercultural elements strengthened all components of CQ except the behavioral component (Wood and Peters 2014); a development of the overall CQ of the respondents was also caused by a two-week study trip abroad in another study (Rustambekov and Mohan 2017). In principle, different methods stimulate different components of CQ: metacognitive CQ is developed through interculturally focused courses (Eisenberg et al. 2013), simulation games in the classroom, intercultural skills training and lectures, which, however, do not focus only on individual cultures (Earley and Peterson 2004; Reichard et al. 2015), then experiential pedagogy (B. R. MacNab and Worthley 2012), intercultural contact (living abroad) (Kim and Van Dyne 2012), or mentoring asylum seekers (Young et al. 2018); behavioral CQ can be developed by a combination of experiential methods and intercultural contact (Kim and Van Dyne 2012; B. R. MacNab and Worthley 2012), university lectures focused on a certain culture (Rehg et al. 2012), simulation games (but not aimed at only one culture) (Reichard et al. 2015); individuals with poor motivational CQ can develop this component if they cooperate (learn) with those who have this component highly developed (Peng et al. 2015).

However, the opinion on the development of CQ is far from unequivocal and there are differences between researchers in this respect. Blaco (Blasco 2009) claims that a universal and truly effective CQ development technique is still to be found. In addition, two studies (Fischer 2011; Roux et al. 2018) failed to demonstrate the positive effect of the adopted method on the development of CQ. In the first of them, the author attributed this failure to the difficulties the students had with understanding the assigned exercises (simulation game, a game focused on modifying behavior). The second study (Roux et al. 2018) focused on the development of CQ was conceived as a 15-week course of intercultural communication for Japanese students (n = 14), which consisted of traditional (short) lectures, group experiential activities, multicultural workshops, online quizzes, including subsequent feedback and online discussion with students from partner foreign universities. The development of CQ was analyzed by pre-test and post-test of the respondents' achieved score. The result of the Wilcoxon signed-rank test was not statistically significant, which the authors attributed to the small size of the research set. However, the qualitative statements of the course participants show that they have increased their intercultural skills and the course has been successful in this respect.

Different methods of CQ development (lectures—teaching is led by a teacher who passes on knowledge about other cultures to students; reading—students read independently about different cultures; students learn on their own—they learn from each other what they know about other cultures; study stays and trips abroad—direct experience with foreign culture) brings various results in terms of their effectiveness. While various techniques aimed at developing cultural intelligence and implemented in the classroom lead to the strengthening of the cognitive and metacognitive component of CQ (expanding knowledge about multiple cultures), direct learning through practice (study trip abroad) will bring a broader knowledge of only one culture. However, in addition to the cognitive and metacognitive component of CQ, the other two—motivational and behavioral—will also be strengthened (McCrea and Yin 2012).

Even then, however, the situation is by no means clear. Not every trip (or stay) abroad can bring the desired results; everything needs to be planned very carefully and thoughtfully (Solomon and Steyn 2017). In addition, not every CQ development technique

may be appropriate for and applicable to everyone. Different approaches can suit and benefit different types of persons (Raver and Van Dyne 2017).

However, researchers in the field of CQ development are likely to agree on the fact that classical school teaching is complementary to practical experience (i.e., direct contact with the new cultural environment); in this respect, both approaches contribute to the overall development of CQ. In this regard, Azevedo and Shane (Azevedo and Shane 2019) designed an educational module combining traditional and experimental methods with focus on the development of all CQ components. The effectiveness of this training course was verified by a longitudinal pilot study on a sample of MBA students at an American university and HR employees from a Canadian company. It was confirmed that the course not only increased the overall CQ score, but also improved mental resilience (e.g., against burnout) and innovative work behavior of research participants.

It can be stated that the variability of the methods and techniques used to develop CQ, i.e., the diversity of international experience, the combination of different approaches, will clearly have a positive effect on the development of overall CQ. Therefore, we assume that students will benefit from an international stay if they not only study abroad, but also work there.

**Hypothesis 3 (H3).** *The relationship between cultural intelligence and intercultural self-efficacy depends on work experience abroad.* 

Figure 2 shows a conceptual (research) model. The simple self-efficacy model has the two main conceptual/theoretical components: (1) the target constructs of interest—namely, self-efficacy (SE, dependent variable)—and (2) one self-efficacy dimension: cultural intelligence (CQ, independent variable), which represents an explored determinant of the target construct. This relationship is moderated by the two dichotomous moderators: working experience abroad and gender. Both constructs (the determinant and the target ones) are measured by multiple items in a reflective mode.

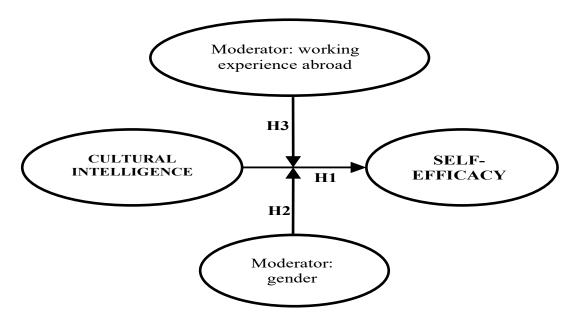


Figure 2. Conceptual model. Source: own creation.

# 4. Materials and Methods

#### 4.1. Sample and Data Collection

The data on the basis of which our hypotheses are tested were obtained from an online questionnaire. It was completed by 220 respondents, university students from two universities: one private in the Czech Republic (University of Finance and Administration

in Prague) and one public in Russia (State University of Management in Moscow). As the questionnaire was distributed in English, the requirement to participate in the research was a good knowledge of English; this was largely guaranteed by the fact that the respondents studied in an English study program or declared a high level of proficiency in English. The students from private universities can slightly differ from students studying at public ones. Private universities are usually more practically oriented. Entrance exam is further usually easier, or it totally absents. Our sample so includes different types of students what contributes to its representatives. For various reasons (missing data, "non-participating respondents" who answered questions in a stereotypical and monotone manner), a total of 190 cases were analyzed. The questionnaire was completed by 123 (64.74%) female students and 67 (35.26%) male students. Of the respondents, 156 (82.10%) were aged 18–25, specifically 64 (33.68%) aged 18–20, 77 (40.53%) aged 21–23, and 15 (7.89%) aged 24–25. It can be seen from the age structure that these were mostly undergraduate students. Respondents were from 25 countries. Most respondents were Czech (36.32%), Russian (24.74%), Ukrainian (8.95%), and Kazakh (7.89%). These were students with a relatively extensive international experience. Fifty (26.32%) students spent more than one year abroad (either for work or study), 21 (11.05%) students more than 2 years, 44 (23.16%) students more than 3 years, 19 (10%) students more than 4 years. The research also involved 22 students within the Erasmus study program. From the point of view of the research conducted in this study, it is important to divide the respondents according to whether they have work experience from abroad or not. Eighty-four (44.21%) students had work experience from abroad, 106 (55.79%) students did not. Based on the chosen criterion, (very) approximately equal (in size) groups of respondents are compared. The Chi-Square test for goodness of fit showed that there is no statistically significant difference between the two groups, i.e., those with and without work experience abroad,  $\chi^2(1, n = 190) = 2.55, p > 0.05$ . For the second examined variable GENDER, the division into groups of men and women is uneven  $\chi^2(1, n = 190) = 16.51$ , p < 0.05. As we already mentioned, the questionnaire was completed by 123 (64.74%) female students and 67 (35.26%) male students. In principle, researchers have two non-parametric approaches at their dispose if they intend to compare two groups, using PLS-SEM multigroup analysis: the permutation test and the PLS-MGA approach. Although Hair et al. (2017) recommend using the permutation test that has particularly advantageous statistical properties, it requires the groups to be of similar size. Since this condition had not been met for our study, it was decided to use the PLS-MGA approach that compared each bootstrap estimate of one group with all other bootstrap estimates of the same parameter in the other group.

#### 4.2. Measures

CQ was measured using the 9-item Mini-Cultural Intelligence Scale (Mini-CQS) developed by Ang and Van Dyne (2015). The Mini-CQS gives a holistic measure of CQ on the four dimensions: metacognitive, cognitive, motivational, and behavioral CQ. Participants expressed the degree to which they agreed with each statement based on a seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Through an extensive validation process in other CQ studies, Mini-CQS has previously demonstrated good reliability and generalizability across multiple student samples (Van Dyne et al. 2012). Overall, the scale reliability alpha coefficient of the Mini-CQS exceeded the standard cut-off value of 0.70 in previous research (Eisenberg et al. 2013; Lee et al. 2018). Cronbach's alpha for this scale was 0.77 in this study.

Self-efficacy in communication was measured using an adapted questionnaire (Peterson et al. 2011). Fifteen items with a loading factor greater than 0.7 were selected. Examples of items: "How well can you inspire others to gain new insight when you communicate with them?" or "How well can you think possible outcomes through before you speak?" (1 = not very well, 5 = very well). Cronbach's alpha for this scale was 0.734 in this study.

Morrell et al. (2013) recommended in their study to control for the social desirability variable to determine if respondents were "improving" their answers to make them look

more likable. To measure social desirability, a 10-item measurement of impression management was used (Steenkamp et al. 2010; Rosenblatt et al. 2013). Impressions management assesses the extent to which respondents systematically and consciously overestimate socially desirable behaviors and underestimate socially undesirable behaviors such as "I never cover up my mistakes". To maintain a reasonable ratio of file size—a 10-item parameter was assigned to two latent variables; the minimum requirement of two indicators per construct was met (Rosenblatt et al. 2013). Measurement of social desirability was included in the questionnaire survey also in a study by American researchers (Delpechitre and Baker 2017) and several observations had to be eliminated due to the high value of social desirability. Based on the recommendations of Haira et al. (Hair et al. 2016) and established criteria for construct reliability and validity after deleting several items, Cronbach's alpha for this scale was 0.641 in this study.

Moderators WE (work experience abroad) and gender were measured using dichotomous variables (WE\_no = 0, WE\_yes = 1; women = 0, men = 1). Thus, the respondents were divided into two monitored and compared groups.

# 4.3. Model Estimations

Data analysis is performed using the PLS-SEM multivariate method. The goal of this technique is to predict the target construct. Specifically, it is an attempt to maximize the explained variance (R<sup>2</sup>) of the dependent variable, minimize the residual variance of the endogenous variable in any regression analysis of the model, and evaluate the applicability of the data using the measurement model (Hair et al. 2011). The structural model can be complex, the sample size small, the distribution of data is not expected to be normal (this is not a necessary condition), the data can be either nominal, ordinal or interval; it is possible to use only 1, 2 indicators (items from the questionnaire) per construct, but the model will run well with a larger number of indicators (unlike CB-SEM, which runs much worse when processing a 50-item questionnaire). PLS-SEM represents a preferred alternative to formative constructs, but this is not the case in this study, where the constructs are modelled reflectively.

PLS-SEM is a second-generation technique that focuses on the predictive ability of a model explaining the variance of a dependent variable (Richter et al. 2016). The PLS-SEM technique is useful for testing several dependent and independent latent constructs, i.e., one of its advantages is the possibility of analyzing complex phenomena (Mathwick et al. 2007). This technique helps researchers better understand observed phenomena and facts; it allows for abstract concepts to be decomposed into more measurable components. There are also other reasons why this technique has been used frequently by researchers lately, such as the following: it is a robust technique for modelling causal relationships; this technique seeks to maximize the variance of the dependent construct; PLS-SEM is a suitable method in the early phase of research (i.e., for formulating a certain theory), when previously verified (and valid) measurements of selected variables are used (Hernández-Perlines et al. 2016); in addition, this technique offers more flexibility (than SEM) due to the minimal demands on variable measurement, sample size, and residue distribution; PLS-SEM also provides a more accurate estimate of moderating effects than regression analysis; last but not least, it allows for a high degree of statistical power to be achieved by analyzing a relatively small sample, which is also our case (n = 190 respondents); it is not necessary for the data to be normally distributed (Gabel-Shemueli et al. 2019; Puyod and Charoensukmongkol 2019; Vlajcic et al. 2019).

Hypotheses H2 and H3 are tested by multi-group analysis (PLS-MGA), which allows to test whether pre-defined data groups—(1) work experience abroad\_YES vs. work experience abroad\_NO; (2) female vs. male—have significant differences in their groupspecific parameter estimates (e.g., outer loadings and path coefficients). SmartPLS provides outcomes of three different approaches that are based on bootstrapping results from every group. PLS-MGA is a non-parametric significance test for the difference of group-specific results that builds on PLS-SEM bootstrapping results. At the same time the results of parametric test and Welch–Satterthwait test are reported. The former is a parametric significance test for the difference of group-specific PLS-SEM results that assumes equal variance across groups; the latter is a parametric significance test for the difference of group-specific PLS-SEM results that assumes unequal variance across groups (Hair et al. 2017).

#### 5. Results

#### 5.1. Data Examination and Common Method Variance

Our data file had 50 missing values configured "null" as placeholder for missing data in SmartPLS. Since the number of missing values in our data set per indicator was relatively small (i.e., less than 5% missing per indicator), mean value replacement was applied to these data as recommended by Hair et al. (2016). Since the two principal constructs (determinant and target ones) were measured on a Likert scale that was pre-designed to a specific number of scale points, there is no justification for removing values within the scale (an outlier should only be removed if there is an evidence that its entry was error of some kind). Moreover, non-normality of data regarding skewness and kurtosis is not an issue. The kurtosis and skewness values of the indicators are within the -1 and +1acceptable range. The only exceptions are the indicators CQ1 and SE15 that exhibit a slight degree of non-normality. These indicators were removed.

Common method variance (CMV) is problematic in research based on data collection through questionnaires filled out by the same respondents, at the same time and often by self-assessment (Conway and Lance 2010). As a result of CMV, there is an erroneous internal consistency, i.e., an obvious correlation between variables having essentially the same reason (Chang et al. 2010). Therefore, it is important to check of the individual variables (and questionnaire items) have been measured properly. Harman's single factor test was performed in the SPSS program. Using the "Principal axis factoring" method, it was found that the individual latent factors (unrotated) are less than 50 (specifically 26.47%) in the indicator of the cumulative % of extraction sums of squared loadings, which means that CMV does not constitute a problem for using the SEM method (Podsakoff and Organ 1986).

In addition, to avoid common method variance, an additional marker variable (Social Desirability Scale composed of 10 items: SD1-SD10) or measured latent marker was also used. The scale was composed of 10 items put into the questionnaire and completely unrelated with the research variable. This approach can find a CMV in data if there is any CMV. It is assumed by using this method that the point marker on independent and dependent variable hopefully does not change the beta coefficients too much. The values of  $\beta$ —coefficients (R<sup>2</sup>) for the self-efficacy construct were: 0.251 (for "without marker variable") and 0.259 (for "with marker variable"). Since the value of R<sup>2</sup> did not increase by more than 10% after the addition of the measured marker variable (specifically it increased by 3.19%), CMV is not a problem in our case.

### 5.2. Measurement Model

The simple self-efficacy model has two latent variables with reflective measurement models. In this case, outer loadings the estimates for the relationships between the reflective latent variables (CQ and SE) and their retained indicators are above the threshold valued of 0.70 except for the following indicators: CQ5 (outer loading: 0.641), CQ9 (outer loading: 0.636), SE1 (outer loading: 0.698), SE7 (outer loading: 0.698). A common rule of thumb is that the standardized outer loadings should be 0.708 or higher (Hair et al. 2017). The item removal was carefully examined in terms of its effects on the composite reliability, as well as on the content validity of the construct. Indicators with outer loadings between 0.40 and 0.70 were gradually (from the smallest ones) removed from the scale to attain an increase in the composite reliability (or the average variance extracted) as recommended (Hair et al. 2017). Specifically, all indicators with very low outer loadings (below 0.40) were eliminated from the constructs, indicators with weaker outer loadings were retained on the basis of their contribution to content validity. In our case, the following indicators, CQ5 (outer loading: 0.641), CQ9 (outer loading: 0.636), SE1 (outer loading: 0.698), SE7 (outer loading: 0.698), SE

0.698), were retained. Other indicators with lower outer loadings (CQ1-CQ2, CQ4, SE3-4, SE8-15) were removed from the scales only when deleting these indicators had led to an increase in the composite reliability (CR) or the average variance extracted (AVE) above the suggested threshold value, i.e., greater than 0.7 for CR and greater than 0.5 for AVE (see Table 3). The values of outer loadings suggest a relatively good indicator reliability. The specific values of CQ (Cronbach's alpha = 0.812, AVE = 0.513, CR = 0.863, Rho\_A = 0.828) and of SE (Cronbach's alpha = 0.760, AVE = 0.509, CR = 0.838, Rho\_A = 0.761). Both construct measures are above the 0.70 threshold for Cronbach's alpha, composite reliabilities, and Rho\_A, which indicates a satisfactory internal consistency reliability and validity of the measured constructs. Convergent validity assessment is based on the AVE values. The AVE values of CQ (0.513) and SE (0.509) are well above the required minimum level of 0.50. Thus, the measures of both reflective constructs have satisfactory levels of convergent validity.

Construct	Items	Outer Loadings	VIF (Inner)	
	CQ3: I know the cultural values and religious beliefs of other cultures.	0.729	1.567	
	<i>CQ5</i> : I know the rules (e.g., vocabulary, grammar) of other languages.	0.641	1.366	
CQ	<i>CQ6</i> : I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.	0.802	1.703	
	<i>CQ7</i> : I check the accuracy of my cultural knowledge as I interact with people from different cultures.	0.752	1.880	
	<i>CQ8</i> : I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.	0.723	1.683	
	<i>CQ</i> 9: I change my non-verbal behavior when a cross-cultural situation requires it.	0.636	1.607	
Self-efficacy	<i>SE1</i> : How well can you inspire others to gain new insight when you communicate with them?	0.698	1.326	
	<i>SE5</i> : When in a face to face conversation, how well can you gauge what another person wants you to communicate?	0.723	1.600	
	<i>SE6</i> : How well can you recognize subtle shades of meaning in an interaction?	0.732	1.507	
	<i>SE7</i> : How well can you communicate with people from different cultures within your own country?	0.693	1.356	
	<i>SE10</i> : How well can you communicate in impromptu situations?	0.722	1.413	

Table 3. Measurement model and VIF (multicollinearity). Source: own research.

The discriminant validity was assessed on the base of the two criteria: the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio (HTMT). According to the Fornell–Larcker criterion, the square root of the AVE of each construct should be higher than the construct's highest correlation with any other construct in the model. The square roots of the AVEs for the reflective constructs CQ (0.716) and SE (0.714) are both higher than the correlation between the two constructs (0.501) in the path model. HTMT is even more reliable criterion than AVE for the assessment of the discriminant validity. The HTMT

value (0.595) is clearly lower than the more conservative threshold value of 0.85, which indicates that both constructs are valid measures of unique concepts (Hair et al. 2016).

The model was further examined for collinearity. A measure of collinearity is the variance inflation factor (VIF). A VIF value of 5 and higher respectively indicate a potential collinearity problem (Hair et al. 2016), which is not the case of this study, as Table 3 shows.

The bootstrap samples (5.000) were used to estimate path model. The estimates of the coefficients form a bootstrap distribution, which can be viewed as an approximation of the sampling distribution. The values in Table 4 reports  $\beta$ -coefficients, t-values for the three set hypotheses, the effect size  $f^2$  and predictive relevance  $Q^2$ . Since the t-values are greater than critical t-values for a two-tailed test at different significance levels (\*\*\* significance level = 0.01, \*\* significance level = 0.05), all research hypotheses are confirmed. The  $R^2$  value for the endogenous construct, i.e., self-efficacy (=0.265) can be described as week (Hair et al. 2016). The effect size  $f^2$  allows assessing an exogenous construct 's contribution to an endogenous latent variable 's  $R^2$  value;  $f^2$  values of 0.02, 0.15, and 0.35 indicate an exogenous construct 's small, medium, or large effect, respectively on an endogenous construct (Hair et al. 2016). As can be seen in Table 4, the contribution of the exogenous variable (CQ) to the endogenous latent variable (self-efficacy) is large for all tested hypotheses. As for the predictive relevance, the resulting  $Q^2$  values are larger than 0, which indicates that the exogenous construct (CQ) has predictive relevance for the endogenous construct (self-efficacy) under consideration (Hair et al. 2016).

Hyp.	Rel.	Std Beta	Std Error	t-Value	f <sup>2</sup>	Q <sup>2</sup>
H1	CQ -> Self-efficacy (complete)	0.516	0.049	10.221 ***	0.335	0.115
H2 —	CQ -> Self-efficacy (men)	0.562	0.067	7.756 ***	0.370	0.114
	CQ -> Self-efficacy (women)	0.431	0.134	2.746 ***	0.367	0.123
Н3 —	CQ -> Self-efficacy (WE_YES)	0.716	0.210	2.920 ***	0.612	0.153
	CQ -> Self-efficacy (WE_NO)	0.297	0.099	2.226 **	0.220	0.071

Table 4. Direct Relationships for Hypothesis testing and Multigroup analysis (MGA-PLS).

Notes: \*\*\* p < 0.001, \*\* p < 0.001. R<sup>2</sup> Adjusted (Self-efficacy = 0.265). Effect size impact indicator are according to Cohen (Cohen 1988), f<sup>2</sup> values: 0.35 (large), 0.15 (medium), and 0.02 (small). Q<sup>2</sup> (Self-efficacy 0.115). Source: own research.

Assessing our model fit, i.e., how well a hypothesized model structure fits the empirical data, root mean square residual covariances (RMStheta) for our data equals 0.182; because this value is higher than a (conservative) threshold value for RMStheta of 0.12, this indicates a lack of fit (Henseler et al. 2014). Nevertheless, the standardized root mean square residual (SRMR) is lower (=0.092) than 0.1 (Henseler et al. 2014; Hu and Bentler 1998) which is generally considered a good fit. NFI (normed fit index) is ranging between the values of 0 and 1. For our data and model, NFI equals 0.777. The closer NFI is to 1, the better fit between data and model. The acceptable values are those greater than 0.9; in this respect, model fit is not bad but it could have been even better.

Table 5 shows the results of multigroup analysis that helps to answer the question whether path coefficients based on different samples (set by the hypotheses H2 and H3) are significantly different. The results are the same for both tests (Parametric and Welch-Satterthwait) that assume equal, resp. unequal population variances. The difference between the groups is statistically significant for the H3 (working experience abroad\_YES vs. working experience abroad\_NO), but not for the H2 (female vs. male).

RELATIONSHIP	TEST	Path Coefficients	t-Value	<i>p</i> -Value
CQ -> Self-efficacy (diff Men vs Women)	Parametric	0.001	0.015	0.988
	Welch- Satterthwait	0.001	0.016	0.988
CQ -> Self-efficacy (diff YES_WE vs. NO_WE)	Parametric	0.192	2.342	0.020
	Welch- Satterthwait	0.192	2.342	0.020

Table 5. Multigroup analysis (MGA) results.

Source: own research.

H1 predicted a positive relation between cultural intelligence (CQ) and self-efficacy. The results supported a positive relationship, which was also statistically significant ( $\beta = 0.516$ ; p < 0.01). Thus, H1 was supported. This relationship is moderately strengthened within a group of male respondents ( $\beta = 0.562$ ; p < 0.01) and mildly weakened within a group of female respondents ( $\beta = 0.431$ ; p < 0.01). Nevertheless, this group difference is not statistically significant as Table 5 shows. Thus, the hypothesis H2 is not supported by our data. On the other side, the relationship between cultural intelligence and self-efficacy is considerably strengthened within those who declared to have a working experience abroad ( $\beta = 0.716$ ; p < 0.01) compared to those who have not such an experience ( $\beta = 0.297$ ; p < 0.01). This difference was found to be statistically significant. Thus, the hypothesis H3 was supported.

#### 6. Discussion

The results of our study are largely compatible with previous research (Earley and Peterson 2004; MacNab and Worthley 2012) pointing to the relationship between selfefficacy and cultural intelligence. It has been stated that self-efficacy is an important attribute of motivational CQ (Van Dyne et al. 2012). In contrast to previous studies, we have also shown that cultural intelligence can predict the motivation of individuals to communicate with foreigners (from other cultural backgrounds). Individuals with high cultural intelligence show a higher tolerance for otherness; they take it as a source of knowledge and an opportunity to learn something new. They are able to approach foreigners in a more relaxed and casual manner, gain their trust and communicate with them in a way that is not unpleasant or incomprehensible to them. They can better tune in to their wave of perception; they also choose a communicative approach that encourages them to be more open and to share their ideas, thoughts, or experiences. This can be of benefit to, for example, multinational organizations or companies with nationally mixed work teams, because managers and leaders with high CQ can support voice behavior in their subordinates and employees of the organization. It is a form of optional behavior when employees, based on their experience, regularly, proactively, and constructively submit to the organization's management (or their superiors) proposals and recommendations (or also concerns) to improve the organization (Afsar et al. 2019; Jiang et al. 2018; Ng et al. 2019).

It can be assumed that people with high CQ (regardless of gender, as confirmed by hypothesis H2) are likely to be successful communicators or negotiators in international negotiations (whether business, political, or other), and that they will actively seek and manage communication with people whose mental thinking is rooted in other cultural values and norms. The found relationship between cultural intelligence and self-efficacy will be even stronger if it is combined with previous work experience (e.g., when students during their studies abroad gain not only academic knowledge from the international environment, but also practical, work experience). Students should keep this fact in mind and seek to gain practical experience from abroad during their studies (e.g., in various job mobility programs) in order to improve their future employability on the global labor market. The diversity of international experience is important for the development

of intercultural competences. This knowledge is also important in terms of designing university curricula and syllabi of courses focused on international trade and management across cultures.

The obtained results must always be evaluated in connection with the setting of the research design. There may be some bias due to the size of the sample or the self-assessment method. Although the common method bias is not a problem for our data (in addition, this data bias was addressed by the inclusion of an additional social desirability scale variable), we can still recommend that future research be based on data collected from multiple measurement methods (e.g., self-evaluation and evaluation of others—managers, superiors, etc.). Another problem may be caused by the fact that this is a cross-sectional study. A longitudinal study could further support the results of the presented research and confirm the causal effects of the examined model with greater authority.

Future research could address these shortcomings. In addition, instead of the abbreviated version, the 20-item CQ scale (CQS), which is most used in research, can be used to measure cultural intelligence (Ang et al. 2007), or the general self-efficacy may be measured (MacNab and Worthley 2012). In our study, self-efficacy was examined as a dependent (output) variable, but other researchers could focus on its explanatory role (self-efficacy as a mediator) of the effect of cultural intelligence on other variables such as life satisfaction, adaptability, and adaptation or work performance. It is also possible to involve other moderators in the study of the relationship between CQ and self-efficacy, such as ethnocentrism, culture shock, or the cultural distance between the host culture and respondent's culture.

# 7. Conclusions

This article deals with the relationship between cultural intelligence and specific selfefficacy (in intercultural communication). Both variables are important for the success or competitiveness of organizations in an environment characterized by certain intercultural elements and characteristics (e.g., in leading multicultural and international teams within an organization, dealing with foreign partners, employing foreigners, etc.). Our study hypothesized that self-efficacy affects cultural intelligence. The data sample on which we examined the relationship supports our hypothesis. However, there was no statistically significant difference between men and women. On the contrary, it has been shown that the relationship between the two variables will be even stronger if it is moderated by the work experience abroad variable. We are, of course, aware that the conclusions presented here apply to the sample we examined and may be different for other data samples. For instance, students studying in universities different from our research sample could answer the questionnaire differently, which would certainly affect the findings. However, our results support the conclusions of other authors (see above) and thus contribute to a closer understanding of the relationships examined here.

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