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## CULTURAL INTELLIGENCE AND ADJUSTMENT IN THE CULTURAL DIVERSE CONTEXTS: THE ROLE OF SATISFACTION WITH LIFE AND INTERCULTURAL COMPETENCE

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**ABSTRACT.** Cultural intelligence (CQ) contributes to the wellbeing and satisfaction of individuals who are living abroad or meet members of other cultures and as such it influences the professional efficiency and competitiveness of organizations interacting with cross-cultural stakeholders. The paper investigates the impact of the individual factors (metacognitive, cognitive, motivational, and behavioral) of CQ on the adjustment of foreigners. The adjustment mechanism is explained in association with the individual CQ factors, using satisfaction with life as the mediator. The results of a PLS-SEM analysis on a sample of 191 foreign students studying at Czech universities have shown that all CQ factors, except for the cognitive one, are important in the process of adjusting to new intercultural (cross-cultural) situations. Our research further reveals that the effect of motivational CQ on satisfaction with life and adjustment is amplified by intercultural competencies and preparation. An individual who has spent a long time abroad in the past, has come into frequent contact with foreigners, knows the foreign language of the country they are staying in or has good linguistic skills will be more satisfied in a new country and will adjust more easily.

**JEL Classification:** D02,  
O17, P31

**Keywords:** cultural intelligence, academic adjustment, satisfaction with life, intercultural experience, PLS-SEM, the Czech universities 2020, Chinese college students

### Introduction

It has been well illustrated that human capital is one of the most important and decisive factors of whether a company is successful not only in the home market, but also abroad (Belas et al., 2020). Cultural intelligence (CQ), defined as the ability to function effectively in a culturally diverse environment (Earley & Ang, 2003), is able to predict psychological, behavioral and performance outputs. A high CQ manifests in a whole range of positive outcomes: it increases the efficiency of both individuals and teams, assists global managers and leaders in making better decisions (Ang et al., 2007) and increases work flexibility in a culturally diverse environment (Van Dyne et al., 2015). CQ also points to the

better ability of students studying at foreign universities (Iskhakova, 2018) or of foreign workers (Huff et al., 2014) to adapt or adjust to a new cultural environment. The ability to get used to (adapt to) a new personal life abroad is reflected in the work results of individuals and has a significant influence on whether an organization is successful when expanding abroad (Jonasson et al., 2017). Developed CQ is important if an individual is to be effective in a culturally diverse environment, because it can lead to a relatively quick natural fusion with the new environment. As such, the question arises as to how best one can prepare for a foreign (professional, academic) stay, both what an individual can do and what guidelines HR officers can follow when sending employees to work abroad (business trips, expatriate assignments).

Even though the influence of overall CQ on the adjustment (ADJ) of individuals living abroad (i.e., the influence it has on their efficiency) has been well established in the literature, there is still a lot of room to investigate the relationship between intercultural adjustment and the individual components of CQ, which is of relevance to the aforementioned questions. Moreover, contradictory conclusions have been reached on this matter to date. No consensus has been found as to whether cultural intelligence (and which of its constituent components) correlates with adaptation to a work environment (work adjustment) (Firth et al., 2014; Kaleramna et al., 2019). According to one study (Moon, Choi, & Jung, 2012), this relationship pertains to metacognitive (MC), motivational (MOT) and behavioral (BEH) CQ, while according to another (Guðmundsdóttir, 2015) this relationship only applies to motivational and behavioral CQ or to metacognitive and motivational CQ. Yet another study (Le et al., 2018) has also indicated that cognitive (COG) CQ influences adjustment. The existing research has also failed to address the question of why cultural intelligence has a positive influence on the adjustment of foreigners to a culturally heterogeneous environment. Adding further to the gap in CQ literature, existing studies examining the outcomes of CQ have been limited to the assessment of cross-cultural adjustment, job performance, and intention to complete the assignment. Our paper does not merely expand the existing knowledge in the area of cultural intelligence and intercultural adjustment by providing new conclusions on the relationship between the individual components of CQ and adjustment, but it also helps to understand the mechanism that explains this relationship. As far as we are aware, no empirical study has yet shown which variable (mediator) is concealed behind the relationship between the CQ factors and adjustment. Nevertheless, a number of pieces of earlier research have indicated that one possible explanation for the positive correlation between cultural intelligence, or the components thereof, and adjustment is the mediator of satisfaction with life (SAT). The feeling of mental wellbeing or satisfaction with life is an output of cultural intelligence in situations marked by cultural diversity; this relationship is explained using a certain variable such as e.g. adjustment (Hajdu & Hajdu, 2016; Mehra & Tung, 2017). At the same time, it also applies that individuals with a higher CQ experience greater wellbeing, adapt more easily and are more satisfied in an unknown cultural environment (Sousa & Gonçalves, 2017). Previous research (Cao et al., 2016; Robledo-Ardila et al., 2016) suggests that it can also be anticipated that satisfaction with life is not the only variable that explains the relationship between CQ (and its components) and adjustment, but that other contextual variables also affect it: i.e. the experience acquired in association with any previous foreign stays, the frequency of contact with foreigners, the level of mastery over the language of the host country and overall linguistic ability.

The text is organized as follows: The individual constructs (CQ, ADJ and SAT) are presented and described based on literature review in the first chapter. The second chapter formulates based on the previous research our hypothesis and describes the sample and the data that test them. The third chapter introduces our model and its results. The fourth chapter

discusses our results in comparison with other studies, their application in practice and their limitations. Conclusion summarizes the main points.

## 1. Literature review

The concept of cultural intelligence was introduced to the literature by Earley and Ang (2003). It was defined as a person's capability to adapt effectively to new cultural contexts. The concept has its basis in interactional theories of intelligence. These theories define intelligence as an interaction between the individual and their context (Liao & Thomas, 2020). Earley and Ang (2003) defined three CQ factors - cognitive (specific knowledge that people gain about a new culture), motivational (the propensity to act on a cognitive facet and persevere in acquiring knowledge) and behavioral (the capability to enact a desired or intended action). Ang and Van Dyne (2015) distinguished the cognitive and metacognitive components of CQ; a 4-factor CQ model was conceptualized. Subsequently, indicators of these four primary factors were developed (Van Dyne et al., 2012), ie metacognitive component of CQ (planning, awareness, control of intercultural interactions), cognitive component of CQ (general cultural knowledge, contextually conditioned), motivational CQ (internal motivation, external motivation), behavioral CQ (verbal behavior, nonverbal behavior, speech). Using meta-analytical techniques, Rockstuhl and Van Dyne (2018) have shown that each of these four primary components of CQ provides both holistic and unique information about an individual's effectiveness in intercultural relationships. According to their paper the best model of cultural intelligence is the model combining five factors: the latent variable CQ and four specific factors CQ.

CQ depends, among other things, on intercultural adjustment (Akhil & Liu, 2019) and satisfaction with life (Sousa & Gonçalves, 2017). The notion of adjustment as an important outcome of cross-cultural interactions has a long history (Liao & Thomas, 2020). Intercultural adjustment is usually defined as a "level of psychological comfort and a feeling of familiarity that an individual has in relation to their new cultural environment" (Templer et al., 2006). Foreigners who are able to adjust to a new cultural environment are usually more open to the cultural stimuli of the host country and are able to add new methods of behavior, norms and rules to their repertoire of cultural knowledge (Zhang and Oczkowski, 2016).

Adjustment is a comprehensive, multi-layered concept. It consists of three dimensions (Guðmundsdóttir, 2015): a) general adjustment, i.e. adjustment to the culture of the host country and the living conditions of the local populace, b) interaction adjustment, i.e. the problem-free establishment of interpersonal relations with the members of the host country (culture) and c) work or academic adjustment, i.e. fusion with the culture of an organization, the work styles or the requirements in the local organisation. The three-dimensional model confirmed by a number of studies (Fitzpatrick, 2017) takes into account the situational element of adjustment or the various types of obstacles and difficulties that an individual abroad must face and deal with. Given that cultural dissimilarity is a central characteristic of the entire process (including interpersonal relations), it is possible to speak of cultural adjustment associated with cultural intelligence (Guðmundsdóttir, 2015).

Satisfaction with life expresses an attitude and positive emotional state that reflects the affective response, a reaction or a personal evaluation of a certain experience or event which the individual perceives as being fruitful and successful (Ramsey & Lorenz, 2016; Sousa & Gonçalves, 2017). Success at work brings professional satisfaction. Academic satisfaction is defined in a somewhat different way (Ramsey & Lorenz, 2016): pleasure and delight in a certain academic experience. This is generally associated with the fulfilment of academic goals or tasks. Professional and academic satisfaction overlap to a certain extent; the effect of the emotional states is, however, very similar regardless of the environment (no matter

whether professional or academic). Professional or academic satisfaction leads to overall satisfaction (with life) and wellbeing (Ramsey & Lorenz, 2016). Nevertheless, both types of satisfaction are conditional upon a wide range of factors such as the personality type, the approach to learning, the preferred techniques when fulfilling set goals, self-efficacy, support from the environs or self-development.

## 2. Methodological approach

### 2.1. Hypothesis

It has been ascertained (Akhil & Liu, 2019) that all the components of CQ, except for the behavioral component which only has a limiting influence, are positively associated with all forms of adjustment. During new (intercultural) interactions, individuals that have a developed metacognitive component to their CQ are better at noting unknown verbal and non-verbal cues and are able to realize that these means of expression differ from their formerly received assumptions and expectations; they then adjust their mental map to the new situation as a consequence of this. These individuals (international students, workers, or tourists) are better able to understand the cues of a foreign environment, to interpret them and to conduct themselves in accordance with them. They know how to use their new processed experiences to improve their interpersonal relations with members of the local culture. Improved interpersonal relationships may then also lead to a simpler process of adjustment and adaptation in the host country. From the point of view of adjusting to new (intercultural) situations, a developed metacognitive CQ is a highly valuable trait for the services sector in a diverse cultural environment, because it not only enables individuals to notice and recognize certain cultural peculiarities and differences in their customers, which are not typical ways of behaving in the individuals' own culture, but to also adjust their behavior and the form of their offered services to the given situation (Lorenz et al., 2017). **H1a:** Metacognitive CQ positively correlates with adjustment.

Individuals with a developed cognitive component to their CQ have a wide repertoire of knowledge about foreign cultures and societies. As such, they can more successfully come to terms with any uncertainty that a new environment brings. Research has also shown (Bernardo & Presbitero, 2018) that the alternation of work in various foreign countries requires a certain cognitive flexibility, because it is necessary to establish cognitive processes and a work style in compliance with the requirements of the different cultural environments. People who are subjected to the influence of diverse cultures and are able to internalize different types of cultural knowledge can utilize this, because they are usually more creative when resolving complex problems. However, an overly close connection with one's own culture can lead to the refusal to get to know any new cultures, i.e., to a certain cognitive rigidity which must essentially result in stereotypization and prejudices towards foreign cultures. An individual either creates flexible or rigid thinking based on various intercultural experiences; in this regard, cognitive functions are associated with adaptive functioning within the intercultural and it applies that cognitive CQ positively correlates with adjustment. **H1b:** Cognitive CQ positively correlates with adjustment.

The motivational component of CQ is highly important for the successful adaptation process (Zhang et al., 2017). Previous research (Moon, Choi, & Jung, 2012) has ascertained that motivational CQ mediates adjustment in a cross-cultural environment more strongly than cognitive and behavioral CQ. If the motivational component of CQ has not been sufficiently developed in the CQ structure, adjustment will not occur. Motivation is the fundamental prerequisite for successful intercultural interactions. Motivational CQ is a prerequisite for

cognitive CQ to a certain extent. Motivational CQ means that individuals do not stop looking for necessary and useful information about the country of their interest (as described by cognitive CQ). This enables these individuals to have effective interactions with local people and to suitably adjust to the cultural specifics of the country where they are temporarily living. It is also possible to infer the indirect influence of motivational CQ on adjustment: linguistic abilities which enable foreigners to better understand their new culture are associated with adjustment. It has also been demonstrated that linguistic knowledge has an impact on the motivational component of CQ (Presbitero, 2017). **H1c:** Motivational CQ positively correlates with adjustment.

The behavioral component of CQ contributes to easier adaptation, because a person with a strong behavioral component to their CQ will most probably be able to conduct themselves appropriately within the given cultural environment thanks to their wide repertoire of verbal and non-verbal abilities (such as, for example, the selection of culturally appropriate words, tones of voice, gestures, facial expressions and body language). A person with a high behavioral CQ is able to masterfully emulate the observed behavior of members of another culture. This imitation is a certain type of cognitive strategy and it brings with it a whole range of advantages in social situations and may simplify interactions and therefore also adjustment or adaptation (Zhang et al., 2017). A high behavioral CQ means that individuals are more flexible in interactions of an intercultural type (Ang & Van Dyne, 2015).

**H1d:** Behavioral CQ positively correlates with adjustment.

CQ enables individuals to better adapt to a different cultural environment; it equips them with the necessary tools to cope better with any negative phenomena such as culture shock, stress or anxiety. That is why these individuals experience greater wellbeing in an unknown cultural environment, they find it easier to adjust and adapt there and they are more satisfied with life (Sousa & Gonçalves, 2017). A person with a higher CQ finds it easier to establish more permanent contacts with the local community, to become acquainted with the locals and to make close friends there, because they are more open to new experiences and are more communicative. Such a person will feel at home there, because the perception of cultural differences does not invoke in them feelings of unease, being uprooted, misunderstanding and foreignness as is the case in individuals with a less developed CQ. Cultural heterogeneity will not constitute an immediate factor that changes the individual's behavior (not only in their internal monologue, but also in their external means of expression), because they are able to easily adjust to new conditions. An unknown environment does not represent a reason for them to feel unhappy or dissatisfied with life (Yoon et al., 2012). There is a positive correlation between the variables of well-being and adjustment (Yoo et al., 2006).

**H2:** Satisfaction with life explains (mediates) the relationship between the individual components of CQ (i.e. a) metacognitive, b) cognitive, c) motivational and d) behavioral) and adjustment.

Formerly acquired experiences of an intercultural nature assist foreign workers to adjust and perform better at work abroad (either in general or during the placement of the employee at a foreign branch of a company), because they raise the workers' self-confidence (Jyoti & Kour, 2017): these individuals have a firm foundation to build on, they know that they have already successfully dealt with an unknown situation in the past; they are full of optimism and self-confidence that they will be able to resolve any potential problems and to deal with them. They know what they can expect and their worries or anxious states (which are natural when one finds oneself in an unknown and foreign environment) are suppressed and reduced by their past experiences. Individuals with a higher CQ are more at ease and satisfied in new places. Better adaptation (professional, social and in regular everyday life) to a new cultural environment is assisted by knowledge of the language of the country where the

individual is based or the individual can draw on experience received from a similar former work position. Jyoti and Kour (2017) have demonstrated that previous professional experience from a given region strengthens the positive relationship between CQ and intercultural adaptation. This relationship manifest itself even more strongly, if the person knows the language of the country (region) they are active in. This comes together and manifests itself in such a person's better work results. It can be stated that former experience abroad supports the development of intercultural competencies. A person becomes more culturally competent, i.e. better prepared for successful behavior and conduct in situations with elements of intercultural novelty and otherness, thanks to more frequent and intensive previous international stays. It can be assumed that individuals who have spent longer periods of time abroad (either professionally or academically) in the past will be able to draw on these experiences more than individuals who have not yet had any such experiences.

**H3:** Intercultural competencies reinforce the indirect relationship between cultural intelligence and adjustment which is mediated by satisfaction with life.

Generally: our study assumes that the relationship between cultural intelligence and intercultural adjustment is changed by a third variable; thus, it the cause-effect relationship between CQ (an endogenous construct) and intercultural adjustment (an exogenous construct) is not affected directly, without any systematic influences of other variables. It is assumed that a third variable or a mediator variable (i.e., satisfaction with life) intervenes between the two variables CQ and academic adjustment, or, in other words, a change in the exogenous construct results in a change of the mediator variable, which, in turn, changes the endogenous construct. It is also supposed that the value of the indirect effect (the relationship between cultural intelligence and satisfaction with life) is conditional on the value of the moderator variable (=intercultural competence); a so-called moderated mediation (or conditional indirect effect) is occurring. In other words, the mechanism linking an exogenous construct (adjustment) to an endogenous construct (cultural intelligence) through a mediator (life satisfaction) is a function of another variable (Hair Jr et al., 2016). Figure 1 describes the theoretical model that our study is based on.

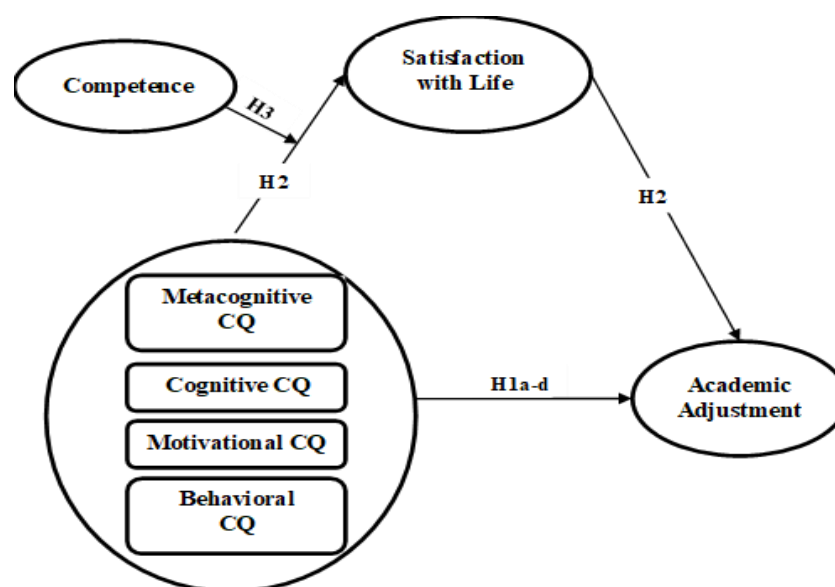


Figure 1. Conceptual framework  
Source: *own research*

## **2.2. Sample and data collection**

The hypotheses were tested by a on-line questionnaire. It was created in English. The link to the survey was sent out by university mail or distributed via chat on certain platforms (such as MS Teams, for example) used for online teaching at some universities. The target group of respondents consisted of international university students. The research took place at a number of Czech universities (both private and public): University of Finance and Administration, Metropolitan University Prague, University of Economics (Prague), Charles University, Czech Technical University in Prague, Czech University of Life Sciences and others. The survey was completed by 191 respondents: 107 (56 % of the total) female students and 84 (44.8 %) male students. The majority of the respondents, 125 (65.4 %), were aged 20 to 24. Out of all the students, 57 (29.8 %) declared an education lower than a bachelor's degree, while 75 declared a bachelor's education (39.3 %), 52 a master's/MBA education (27.2 %) and 7 a PhD (3.7 %). The survey was completed by students from the following countries: China, Russia, Ukraine, Kazakhstan, Germany, Spain and others. The answers from any respondents who stated their nationality as Czech were eliminated from the data analysis, only students who declared that they come from (was born in) countries other than the Czech Republic were included to the survey. After removing any incomplete (or otherwise incorrect) responses, a total of 154 responses were analyzed. Following many previous researches (Presbitero, 2018; Iskhatova, 2018) and the recommendations given by Hair et al. (2016) this sample size was found to be sufficiently representative and large to provide reliable and valid results.

## **3. Conducting research and results**

### **3.1. Measures**

In order to ensure the content validity and the face validity, existing valid measures that are well-known from the literature were used (Luu, 2017). A self-evaluation **Cultural Intelligence Scale** (CQS), which measures the effectiveness of a person in situations of cultural diversity using a seven-point Likert scale (Ang et al., 2007; Gozzoli & Gazzaroli, 2018; Kaleramna, Saharan, & Singh, 2019), was used. This involves a reflective second-order construct (Thomas et al., 2015) consisting of four factors (components, dimensions): metacognitive, cognitive, motivational and behavioral which constitute first-order reflective constructs (Costers et al., 2019). A number of studies (Ang et al., 2007) have confirmed that Cronbach's alpha for CQS is high and acceptable (Starčević et al., 2017). The 4-factor structure of the CQ construct and the discriminant validity have also been demonstrated (Ang et al., 2007). A high CQ score points to a better understanding of new cultures and local habits which manifests itself in effective and appropriate behavior and leads to adjustment to an unknown environment. Examples of the entries on the CQ scale include "I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me" and "I enjoy living in cultures that are unfamiliar to me". The score for the individual CQ components was dealt with in line with the recommendations of some authors (Starčević et al., 2017) and their opinion of the greater predictive ability to measure CQ. Cronbach's alpha achieved a totally satisfying value for all four CQ components in our study (see Table 1).

**Academic Adjustment** was measured using a 5-point scale by means of one of the most frequently used research scales that has demonstrated a high degree of reliability (Black & Stephens, 1989). The used measurement consists of three dimensions (general, interactive or social and professional or academic) comprising 14 entries. This study adapted the third

dimension to the university environment (Chao, Takeuchi & Farh, 2017), but, for example, Sharma and Hussain (2019) fully omitted this dimension from the research that they conducted among university students. The respondents were asked to indicate how adjusted or unadjusted they were to some cultural aspects during their exchanges in the host country (the Czech Republic) using a 7-point Likert scale (1 = not at all adjusted to 7=very well adjusted). Examples of the entries include “Customs and practices” (General Adjustment), “Social gatherings” (Interaction Adjustment) and “Academic requirements” (Academic Adjustment). As Table 1 shows, two entries were omitted from the measurement; Cronbach’s alpha is very high, which indicates a good internal consistency in the measurements.

**Satisfaction with life** was measured using the English version of the Satisfaction with Life Scale (Diener et al., 1985). This measurement consists of five entries. Their general opinion of their own lives was measured on a seven-point Likert scale. The measurement focuses more on cognitive than affective attitudes towards one’s own life. A number of studies (Sharma & Hussain, 2019; Wang et al., 2015) have demonstrated the good internal consistency of the one-dimensional measurement. Examples of the entries contained in the survey include “The conditions of my life are excellent” and “If I could live my life over, I would change almost nothing”. The measurement demonstrated a high positive correlation with the measurement of internal well-being and a strongly negative correlation with the measurement of depression, neuroticism and anxiety, which testifies in favor of the validity of this measurement.

**Intercultural competencies** (experience, preparedness) were measured using four entries selected from previous research on similar topics (Lee & Sukoco, 2010; Thomas et al., 2015). The students were asked to state “how long they had been living/studying/working in the Czech Republic”. They were also asked to assess the frequency of their contact with the local citizenry (Czechs) (1=seldom, 2=occasionally, 3=often, 4=all the time) and to assess their ability to communicate in the local language (Czech) and in English (1=not at all, 2=low, 3=moderate, 4=excellent). For example, Ng, Van Dyne, & Ang (2019) inspected the level of English in their study; previous studies had indicated that a poor level of language skills was a source of anxiety and could lead to an employee refraining from communicating.

As Table 1 shows, the conservative Cronbach’s alpha admittedly does not reach the required minimum value of 0.7 (Hair Jr et al., 2016) for all variables, but the requirement for internal consistency has been met in another indicator, i.e. composite reliability. Other variables that could have influenced the researched relationships were checked on the basis of previous research. This specifically involved education, because education can lead to further opening up of the mind and interest in finding out more about other people and cultures thanks to continuing education. It has been demonstrated that education correlates with cultural intelligence (Alon et al., 2018). In addition, the researchers in a number of previous studies (Le et al., 2018; Vlajcic et al., 2019) also checked gender (0=female, 1=male) and age. Earlier research into the adjustment mechanism in an intercultural environment has found that factors such as age, education and language skills impact upon intercultural effectiveness and job involvement (Chen, 2015). In addition, previous international experience and time spent abroad also influence the character of the individual and therefore also their ability to adjust to a local environment (Guðmundsdóttir, 2015).

### **3.2. Model estimation**

Partial least squares (PLS) path modeling

being conceived as a composite-based alternative to factor-based structural equation modelling (SEM), was chosen to estimate the coefficients of the system of structural equations using the least squares method. It provides some advantages suitable for this study



compared to other ordinary squares methods: it works well when there is multicollinearity or when data is missing; moreover, the solutions obtained are just as reliable as with the covariance-based technique and with fewer constraints, basically in data distribution and sample size. PLS path modelling is widely used not only in management research but also in virtually all social sciences disciplines because PLS path modelling has an advantage over SEM in terms of its indeterminate nature when there are many parameters to estimate for the project's sample, or in other words, when the theoretical model is too complex. PLS resolves this problem by creating latent variables as the weighted sum of the corresponding manifest variables, which is of great value because each latent variable tends to reflect how they are perceived.

The systematic assessment of the theoretical reflective model took place in two steps using the SmartPLS 3.3.2 program: 1) the measurement model and 2) the structural model. The internal consistency, i.e. Cronbach's alpha ( $\alpha$ ), the composite reliability (CR), the convergent validity, i.e. the reliability of the indicators (outer loadings), the average variance extracted (AVE), the discriminant validity, i.e. the Fornell-Lacker criterion, the cross loadings and the heterotrait-monotrait ratio were investigated in the first step. Cronbach's alpha and CR are indicators of the reliability of the internal consistency. Cronbach's alpha measures the reliability of the indicators; the more indicators, the higher it is. It expresses the extent to which all the entries in the survey are positively associated. At the beginning of the research,  $\alpha = 0.7$  is considered to constitute an acceptable boundary, but  $\alpha$  should reach a higher value later on, for example 0.8 or 0.9 (Hair Jr et al., 2016). Composite reliability (CR) measures the reliability of a set of indicators and expresses the internal consistency of the model. An acceptable CR value is  $> 0.7$ . CR is more accurate than  $\alpha$  and it is therefore more commonly recommended for use (Hair Jr et al., 2016). Convergent validity expresses the degree to which the measurement positively correlates with alternative scales measuring the same construct. This validity is ascertained by means of two indicators, specifically the outer loadings of the indicators (criterion: loadings  $> 0.708$ ). The AVE value falls within the range of 0 to 1 and it should exceed the boundary of 0.5 which indicates the achievement of adequate convergent validity (Fornell & Larcker, 1981). Discriminant validity expresses the extent to which the construct truly differs from another construct, i.e. that it is unique. The Fornell-Lacker criterion and the HTMT are used to ascertain the discriminant validity. There are two views of an assessment using HTMT. Firstly, the HTMT must be higher than 0.85 (Kline, 2011) or 0.90 (Gold et al., 2001). The model is lacking a discriminant model, if the HTMT at a 95% confidence interval includes 1 (Gold et al., 2001). In other words, the HTMT should be lower than 0.90 at a 95% confidence interval in order to achieve discriminant validity. The lower the HTMT value, the better (the respondents are not confused by any entries or ambivalence in the latent variables, i.e. the latent variables are sufficiently different from one another).

The assessment of the results of the structural model enables the designation of the model's ability to predict one or more target constructs. The results of the structural model are assessed according to the following steps: 1. collinearity, 2. path coefficients, 3. the coefficient of determination (the value  $R^2$ ), 4. the size of the effect of  $f^2$ , 5. blindfolding and  $Q^2$  predicative relevance, 6. The size of the effect of  $q^2$ :

- Collinearity occurs, if two indicators correlate to one another very closely. Collinearities between latent variables are assessed using the so-called **Variance Inflated Factor** (just like when assessing the formative model of measurement). The outer limit for the assessment of this indicator is as follows: if  $VIF \geq 5$ , the model has a potential problem with collinearity or if  $VIF \geq 3$  this may also designate a certain problem with collinearity.
- A Path Coefficient (PC) is a coefficient that connects the individual constructs in the structural model. It represents the anticipated relationship or the strength of the

relationship. These coefficients range between -1 and +1. A PC approaching +1 means a strong positive (predicative) relationship between the constructs (and vice versa for negative values). The closer the estimated coefficient comes to zero, the weaker the relationship. Very low values close to 0 usually mean that the relationship is not statistically significant. The significance of the path coefficients is ascertained in PLS-SEM using bootstrapping methods.

- The coefficient of determination ( $R^2$ ) indicates the dispersion of an endogenous variable explained by an exogenous variable. The values of  $R^2$  range from 0 to 1; the higher the value, the more precise the model's predicative ability. The value 0.75 expresses a large amount of predicative precision, the value 0.50 expresses slight (indistinct) predicative precision of the model and the value 0.25 expresses weak predicative ability.

- Cohen's criteria (Cohen, 1988) are often used to assess the values of  $f^2$ , i.e., the size of the effect of the exogenous construct on the endogenous: 0.02 represents a small effect, 0.15 a medium effect and 0.35 a large effect of the exogenous latent variable. This variable does not have any effect on the endogenous latent variable, if it is lower than 0.02.

- The model's predictive power is measured by the value  $Q^2$  which is acquired in the blindfolding process. A  $Q^2$  greater than 0 means that the model has predictive relevance for a certain endogenous construct. On the contrary, a value equal to zero and negative values point to insufficient predicative relevance in the model. Specifically,  $Q^2 = 0.02, 0.15$  and  $0.35$  expresses a small, medium and large predictive precision in the model.

- The size of the effect of  $q^2$  enables the assessment of how the exogenous latent variable contributes to the  $Q^2$  value of the endogenous latent variable. It is analogous to the size of the effect of  $f^2$  in many ways.

### 3.3. Results

The evaluation process was begun by assessing the quality of the reflective measurement model. Table 1 reports the measurement model results that show the reliability and validity of the measures used to represent each construct. It provides an evaluation on how accurate (i.e., reliable) the measures are and their convergent and discriminant validity.

The following PLS-SEM calculations results were examined using the study's PLS path model: outer loadings, composite reliability, Cronbach's alpha, average variance extracted (AVE) and discriminant validity. The outer loadings of the reflective constructs Metacognitive CQ, Cognitive CQ, Motivational CQ, Behavioural CQ, ADJ, SAT, COMP are well above the threshold value of 0.70 (Hair Jr et al., 2016), which suggests sufficient levels of indicator reliability. Indicator *SWLS4* (outer loadings: 0.733) has the smallest indicator reliability with a value of 0.537 ( $0.798^2$ ), while indicator *SWLS3* (outer loading: 0.898) has the highest indicator reliability, with a value of 0.806 ( $0.898^2$ ). As can be seen in Table 1, all composite reliability values exceed the threshold (i.e., 0.70).

All examined reflective constructs have high levels of internal consistency reliability. All Cronbach's alpha except for the construct of COM are above the 0.70 threshold. Convergent validity assessment (based on the AVE values) of all reflective constructs is demonstrated by the AVE values of all constructs being well above the required minimum level of 0.50.

Table 1. Measurement model results and VIF

LATENT VARIABLE	INDICATORS	Loadings	Indicator reliability	AVE	Composite Reability	Cronbach's Alpha	Discriminant validity	Multicollinearity
		>0.70	>0.50	>0.50	0.60-0.90	0.60-0.90	HTMT (in CI not 0 incl.)	VIF < 5 (or 3)
Academic Adjustment	GEN1	0.757	0.573					2.255
	INT1	0.768	0.590					2.116
	INT2	0.800	0.640					3.059
	INT3	0.823	0.677					4.044
	INT4	0.817	0.667	0.628	0.938	0.926	YES	3.129
	ACA1	0.817	0.667					3.618
	ACA2	0.812	0.659					3.921
	ACA3	0.773	0.600					3.654
Metacognitive CQ	ACA4	0.760	0.578					3.196
	MC1	0.828	0.686					2.117
	MC2	0.791	0.626	0.694	0.901	0.853	YES	1.677
	MC3	0.879	0.773					2.315
Cognitive CQ	MC4	0.832	0.692					1.882
	COG1	0.785	0.616					1.921
	COG2	0.821	0.674					2.057
	COG3	0.844	0.712	0.657	0.920	0.895	YES	2.756
	COG4	0.846	0.716					2.507
	COG5	0.752	0.566					1.926
Motivational CQ	COG6	0.810	0.656					2.142
	MOT1	0.820	0.672					2.146
	MOT2	0.875	0.766					3.041
	MOT3	0.885	0.783	0.724	0.929	0.905	YES	3.230
	MOT4	0.820	0.672					1.988
Behavioural CQ	MOT5	0.853	0.728					2.464
	BEH1	0.807	0.651					2.159
	BEH2	0.771	0.594					1.922
	BEH3	0.843	0.711	0.657	0.905	0.869	YES	2.252
	BEH4	0.831	0.691					2.125
Satisfaction with life	BEH5	0.797	0.635					1.883
	SWLS1	0.829	0.687					2.158
	SWLS2	0.878	0.771					2.845
	SWLS3	0.898	0.806	0.710	0.924	0.897	YES	3.206
	SWLS4	0.867	0.752					2.756
Compe-tence	SWLS5	0.733	0.537					1.849
	COM1	0.779	0.607					1.446
	COM2	0.767	0.588	0.598	0.817	0.670	YES	1.173
	COM3	0.774	0.599					1.497

Source: own research

Table 2. Discriminant validity (Fornell-Larcker criterion, HTMT, values of the confidence interval)

	1	2	3	4	5	6	7
Academic Adjustment	<b>0.792</b>						
Behavioural CQ	<b>0.683</b> 0.754 [0.635; 0.850]	<b>0.810</b>					
Cognitive CQ	<b>0.482</b> 0.523 [0.361; 0.671]	<b>0.478</b> 0.539 [0.361; 0.705]	<b>0.810</b>				
Competence	<b>0.461</b> 0.575 [0.413; 0.724]	<b>0.316</b> 0.407 [0.246; 0.597]	<b>0.385</b> 0.487 [0.325; 0.647]	<b>0.773</b>			
Life Satisfaction	<b>0.732</b> 0.793 [0.701; 0.871]	<b>0.584</b> 0.653 [0.511; 0.774]	<b>0.385</b> 0.425 [0.237; 0.607]	<b>0.444</b> 0.558 [0.377; 0.729]	<b>0.843</b>		
Metacognitive CQ	<b>0.604</b> 0.671 [0.532; 0.787]	<b>0.552</b> 0.640 [0.474; 0.785]	<b>0.499</b> 0.568 [0.416; 0.705]	<b>0.299</b> 0.391 [0.239; 0.568]	<b>0.454</b> 0.502 [0.343; 0.644]	<b>0.833</b>	
Motivational CQ	<b>0.770</b> 0.838 [0.749; 0.905]	<b>0.599</b> 0.672 [0.515; 0.806]	<b>0.452</b> 0.500 [0.339; 0.645]	<b>0.546</b> 0.694 [0.544; 0.823]	<b>0.605</b> 0.657 [0.513; 0.775]	<b>0.587</b> 0.660 [0.518; 0.786]	<b>0.851</b>

Source: own research

Table 2 reports the results of the discriminant validity, using the Fornell-Larcker criterion and 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, which is accomplished as can be seen in Table 2, which shows the results of the Fornell-Larcker criterion assessment with the square root of the reflective construct's AVE on the diagonal (in bold) and the correlations between the constructs in the off-diagonal position (i.e., the first number in each field). The second number in Table 2 shows a more reliable (than Fornell-Larcker's) criterion of the discriminant validity, HTMT. As can be seen, using 0.85 as the relevant threshold level, all HTMT values are clearly lower. It was also tested whether the HTMT values are significantly different from 1. The confidence intervals (the values between the parentheses in the Table 2) were obtained by running the bootstrap confidence. The numbers in parentheses show the lower and upper bounds of the 95% (bias-corrected and accelerated) confidence interval. As can be seen, neither of the confidence intervals includes the value 1. The discriminant validity criteria have been met.

The assessment of the results of the structural model took place in the following steps: 1. collinearity (see Table 1), 2. path coefficients, 3. The coefficient of determination (the value of  $R^2$ ), 4. The size of the effect of  $f^2$ , 5. blindfolding and the predicative relevance  $Q^2$  and 6. The size of the effect of  $q^2$ . As can be seen in Table 1, all values are below the threshold of 5 (Hair Jr et al., 2016). Therefore, collinearity among the predictor constructs is not a critical issue in the structural model. PLS-SEM aims at maximising the  $R^2$  values of the endogenous latent variable(s) in the path model. In general,  $R^2$  values of 0.75, 0.50 or 0.25 for the endogenous construct can be described as respectively substantial, moderate, and weak. Following the rules of thumb for  $R^2$  (Hair Jr et al., 2016), the  $R^2$  value of ADJ (0.743) can be considered substantial, whereas SAT (0.468) is slightly moderate. The effect size  $f^2$  allows

an exogenous construct's contribution to an endogenous latent variable's  $R^2$  to be assessed. Only motivational CQ and Satisfaction with Life have a moderate medium effect size of 0.259 and 0.236 respectively on Academic Adjustment. Then, the blindfolding procedure was run to assess the predictive relevance of the path model. The  $Q^2$  values of both endogenous constructs (ADJ, SAT) are considerably above zero (more precisely, ADJ = 0.458, SAT = 0.314). These results provide clear support for the model's predictive relevance regarding the endogenous latent variables. The  $q^2$  effect sizes were computed manually; the  $Q_{included}^2$  and  $Q_{excluded}^2$  values were needed. The  $q^2$  effect size of a selected construct and its relationship to an endogenous construct in the structural model use the same critical values for assessment used for the  $f^2$  effect size evaluation (Hair Jr et al., 2016). The results show rather a weak predictive power for the following relationship: MotCQ on ADJ (0.076), MotCQ on SAT (0.034), BehCQ on SAT (0.052), SAT on ADJ (0.070).

Table 3. Hypotheses testing: bootstrapping results

HYP	Relationship	$\beta$	(STDEV)	T Statistics	P-Values	2.5%	97.5%
1a	Metacognitive CQ -> Academic Adjustment	0.115	0.056	1.985**	0.047	0.003	0.224
1b	Cognitive CQ -> Academic Adjustment	0.045	0.057	0.754	0.451	-0.071	0.152
1c	Motivational CQ -> Academic Adjustment	0.372	0.069	5.459***	0.000	0.235	0.503
1d	Behavioural CQ -> Academic Adjustment	0.184	0.071	2.581**	0.010	0.042	0.319
	Metacognitive CQ -> Life Satisfaction	0.062	0.071	0.828	0.408	-0.085	0.196
	Cognitive CQ -> Life Satisfaction	0.013	0.082	0.091	0.927	-0.146	0.168
	Motivational CQ -> Life Satisfaction	0.314	0.099	3.292***	0.001	0.134	0.515
	Behavioural CQ -> Life Satisfaction	0.319	0.088	3.616***	0.000	0.126	0.478
	Life Satisfaction -> Academic Adjustment	0.329	0.064	5.174***	0.000	0.206	0.454
2a	Metacognitive CQ -> Life Satisfaction -> Academic Adjustment	0.020	0.024	0.816	0.414	-0.028	0.067
2b	Cognitive CQ -> Life Satisfaction -> Academic Adjustment	0.004	0.028	0.089	0.929	-0.052	0.061
2c	Motivational CQ -> Life Satisfaction -> Academic Adjustment	0.104	0.041	2.619***	0.009	0.042	0.205
2d	Behavioural CQ -> Life Satisfaction -> Academic Adjustment	0.105	0.037	2.873***	0.004	0.043	0.188
	Competence -> Life Satisfaction	0.171	0.082	2.004**	0.045	0.002	0.321
3a	Metacognitive CQ*Competence -> Life Satisfaction	0.060	0.047	1.172	0.241	-0.028	0.156
3b	Cognitive CQ*Competence -> Life Satisfaction	-0.024	0.069	0.418	0.676	-0.175	0.094
3c	Motivational CQ*Competence -> Life Satisfaction	0.099	0.046	2.120**	0.034	0.009	0.191
3d	Behavioural CQ*Competence -> Life Satisfaction	-0.016	0.058	0.405	0.686	-0.138	0.90

Notes: \*\*\* ( $p < 0.01$ ); \*\* ( $p < 0.05$ ); (M) Sample Mean; (STDEV) Standard deviation; 2.5%, resp. 95% (the lower and upper bounds of the confidence interval for the corresponding relationship)  
Source: own research

The results from the PLS regression analysis are shown in Table 3. The standardised path coefficients, t-values and p-values are reported, and the findings are presented as follows. Hypothesis H1 predicted a positive relation between the particular components of CQ (MC, Cog, Mot and Beh) and academic adjustment. The results supported the hypothesis except for the Cog CQ, which was also statistically significant: ( $\beta = 0.115$ ;  $p < 0.05$ ) for MC CQ, ( $\beta = 0.372$ ;  $p < 0.01$ ) for Mot CQ and ( $\beta = 0.184$ ;  $p < 0.05$ ). Thus, H1 was supported partially. H2 predicted that the relationship between the specific components of CQ and academic

adjustment is mediated by satisfaction with life. The statistically significant results supported the H2 only partially, for Mot CQ ( $\beta = 0.104$ ;  $p < 0.01$ ) and for Beh CQ ( $\beta = 0.105$ ;  $p < 0.01$ ).

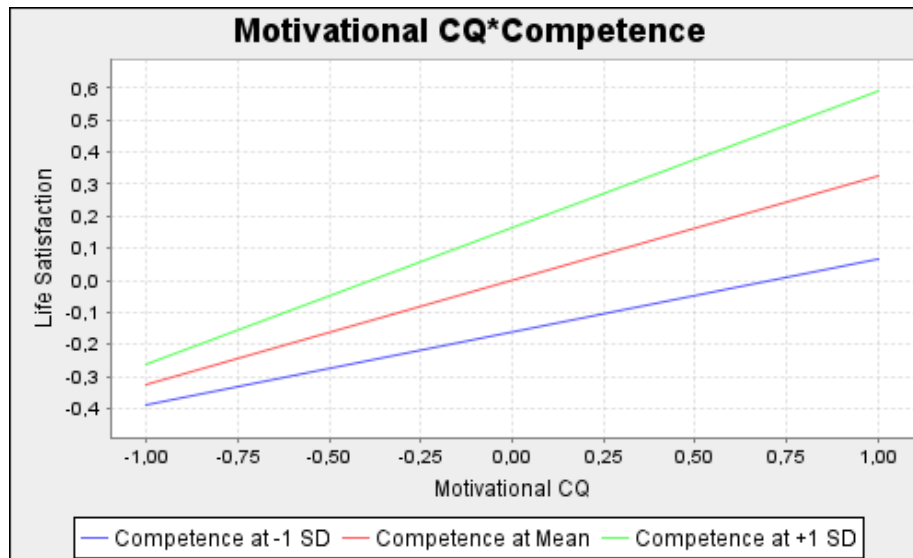


Figure 2. Simple Slope Plot in SmartPLS

Source: *own research*

H3 predicted that the relationship between the specific components of CQ and the mediator of satisfaction with life (SAT) is positively moderated by intercultural competence. The results supported hypothesis H3 partially, only for Mot CQ ( $\beta = 0.099$ ;  $p < 0.05$ ). As for the size of the moderating effect, the interaction term had a positive effect on SAT (0.098), whereas the simple effect of Mot CQ on SAT was 0.326. Jointly, these results suggest that the relationship between Mot CQ and SAT is 0.326 for an average level of (intercultural) competence. For higher levels of (intercultural) competence, the relationship increases by the size of the interaction term (i.e.,  $0.326 + 0.098 = 0.424$ ). In contrast, for lower levels of (intercultural) experience), the relationship between CQ and SAT becomes  $0.326 - 0.098 = 0.228$ . The simple slope plot (see Figure 2) supports the meaning of the positive interaction term: higher (intercultural) competence levels entail a stronger relationship between Mot CQ and SAT, while lower levels of (intercultural) competence levels lead to a weaker relationship between CQ and SAT. Overall, the obtained results provide clear support that intercultural competence exerts a significant (CI = 95%) and positive effect on the relationship between motivational cultural intelligence and satisfaction with life. The higher the level of intercultural competence (experience), the stronger the relationship between motivational cultural intelligence and life satisfaction.

#### 4. Discussion

The results of this study are supported by a wide range of previous research: CQ significantly influences intercultural adjustment (Ang et al., 2007; Huff, Song, & Gresch, 2014; Jyoti & Kour, 2015; Zhang & Oczkowski, 2016). It essentially applies that culturally intelligent individuals are better placed to deal with any states of anxiety and uncertainty which could arise from a foreign (unknown) environment; they are subsequently able to adjust more easily to new situations and they will be able to function there more effectively. Our findings are also in line with another fundamental study (Guðmundsdóttir, 2015) which investigated the influence of the individual components of CQ on adjustment (general, social

and professional) on a sample of foreign workers from European countries working in the USA. The study's author reached the conclusion that metacognitive and motivational CQ positively correlate with all types of adjustment and that cognitive CQ did not have any effect in this regard. The only difference in significance was found for behavioral CQ which may be important particularly in an academic environment, because students (young people) in particular need to feel a sense of belonging to their peers and generally have a more strongly developed need to be accepted by their environs or not to diverge from the norm and the general values of a group of young people. For this reason, they can more willingly adopt their classmates' method of behavior and will try not to be different through their behavior and to fit in better with the collective. Even though motivational CQ is not associated with general intercultural adjustment in association with nationality, gender or age (Ang et al., 2007), this need not apply to behavioral CQ for the aforementioned reasons: not only motivational CQ may influence the adjustment to a heterogeneous cultural environment, as this may also apply to behavioral CQ depending on the environment in question (academic vs. professional) (Ang et al., 2007).

Our study has shown that behavioral and motivational CQ contribute to the life satisfaction of foreigners living in an intercultural environment, because people with a higher CQ (and these two components thereof in particular) are better able to tune in to any fine differences and/or changes in a culturally different environment, to adapt quickly, to behave commensurately to the situation and to avoid (or reduce) any intercultural conflicts/misunderstandings; they are also capable of relatively easily developing positive relationships with locals and foreigners (Wang et al., 2015) which leads to general (life) satisfaction. The results of our study fit very well with the so-called spillover theory, which explains the transfer of life wellbeing (satisfaction) to functioning at work or at school. According to this theory, individuals (students or workers) transfer their emotions, attitudes, moods, skills and behavior from work to their private (family) life and vice versa. That is why the overall life satisfaction experienced in one area can also be reflected in another and lead to better adaptation (adjustment).

It has been further shown that individuals with developed CQ (and its components) do not experience the transition from one cultural environment to another overly dramatically, they feel good and are satisfied in various countries regardless of their cultural designation and characteristics. They are essentially immune (insensitive) to cultural diversity. This factor does not represent a limiting factor for them, because they are able to adjust to cultural change relatively well and flexibly; their life satisfaction is not significantly affected, if they come into contact with foreigners whose cultural background is different to theirs. They will also be more satisfied, if they have good language skills (they are able to speak either the national language of the country they are staying in or English at a good level).

The best way for an individual to prepare for a stay abroad is by learning foreign languages (including the language of the future destination). However, any efforts to acquire the maximum number of different types of information (historical-cultural and social) about the country of their future stay, i.e. that thing that an individual has most under their control, paradoxically does not make a person more satisfied in a foreign country. A certain motivation (Rockstuhl & Van Dyne, 2018) which precedes everything else (for example, a more detailed acquaintance with the customs, cultural values and norms of the country) is much more important in this regard. This motivation is often formed throughout life and it is given by a certain love of travel, a desire to get to know languages and culture of the given country, one's familial ties to the given country, consideration for the origins of a life partner and other influences. Behavioral CQ is an important prerequisite for the life satisfaction of students (or young people) in a foreign environment, because the need "to not be different in any way" and to emulate one's peers is firmly rooted mainly in young people, whose

distinctive personality is still forming. Behavioral CQ therefore plays a more significant role in the academic environment than the professional one.

This study provides an explanation for why the members of different cultures adjust better, if they live abroad and come into contact with people from other cultures. These findings can be of practical significance for personnel officers and HRM when recruiting new employees (for other details see e.g. Kotaskova & Rozsa, 2018), because individuals with a higher CQ will be of greater benefit, especially for companies that are active internationally (operate abroad, have dealings with international partners or employ foreigners). Individuals with a higher CQ are usually more efficient, communicative, creative, less conflictive and generally more satisfied in this environment which may be positively reflected in their turnover rate. Personnel officers could use tests or appropriate questions (focusing on CQ) during interviews to ascertain whether job applicants in international companies have the right stuff to successfully function in an intercultural environment.

The question of satisfaction (or adaptability) has been investigated using a sample of foreigners studying at Czech universities. Nevertheless, it can justifiably anticipated that the conclusions reached in this population will also be applicable to employees (workers) who are foreigners. On the one hand, foreigners studying at Czech universities often work during their studies (as we can infer from the interviews with a number of students from which the respondents for this research were recruited), so any academic adjustment will probably also apply to professional adjustment. In addition, this research made use of an adapted version of the survey (Black & Stephens, 1989) which is regularly used to research work adaptability and it practically only differs in the third dimension pertaining to professional or academic adjustment. Even though the results submitted by this study will most probably not significantly differ from those acquired from a work environment, it will also be necessary to investigate the relationships proposed in this study on a population of expatriates. Given that satisfaction with life abroad depends on the individual phases of culture shock which every foreigner passes through sooner or later when living in a different culture and the individual's relationship to the new culture, further research could focus on investigating the indirect relationship between CQ and adjustment using the modifiers of culture shock, ethnocentrism or cultural identity.

The limitations of this study lie in the fact that it involves a cross-sectional study where the analyzed data has been collected at a certain moment in time. Given the used research design, it is not possible to determine the causality of the investigated relationships. Even though the size of the sample is sufficient on the basis of a recommendation (Hair Jr et al., 2016, p. 26) and the used PLS-SEM statistical technique also provides credible results for smaller samples, it still applies that the bigger the sample, the more accurate the conclusions will be. For these reasons, a longitudinal study with a bigger sample could further support the submitted results. Another problem with our study could involve any hidden inaccurate (or invalid) responses by jokesters or answers by “unengaged” respondents. Given that the data has been collected from a sole source of information (informants), there may be common method bias. It is therefore recommended that future research should be realized not only using the self-evaluation method, but so that it also contains several methods of measurement (such as observation, or reports from managers–teachers, colleagues–classmates).

## Conclusion

Cultural diversity represents an important situational (or contextual) factor which determines work efficiency and the ability to deal with intercultural (cross-cultural) novelty to a significant extent. The ability to effectively function and succeed in an environment determined by cultural differentness has been operationalized and measured in this study



using the 4-factor construct of cultural intelligence. It has been found that three components of CQ (metacognitive, motivational and behavioral) play an important role in the adjustment of foreign students not only from the point of view of their adaptation to a different teaching style during lessons and education than that used in their countries, but also their ability to get on with and understand (not only linguistically) the local people and to accept their customs, values and lifestyle. Motivational CQ has the greatest effect in this regard. This study has helped us understand why cultural intelligence an important predictor of intercultural adjustment is: life satisfaction explains the indirect relationship between CQ and adjustment. Specifically, the mediation of this relationship (via the construct of satisfaction with life) functions for both motivational and behavioral CQ. In addition, this study has also confirmed another finding: the better developed an individual's motivational CQ and the greater an individual's language skills (if the individual knows the language of the host country in addition to English), the more satisfied said individual will be in a foreign country (that is marked with cultural diversity).

The evidence of the indirect influence of psychological needs satisfaction on the relationship between CQ and work engagement proves that psychological needs satisfaction has a major contribution in the promotion of a positive workplace attitude, like work engagement. Future researchers are encouraged to further study the generalization of the present research findings to other types of international employees.

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### References

- Akhal, K., & Liu, S. (2019). Cultural intelligence effects on expatriates' adjustment and turnover intentions in Mainland China. *Management Research Review*, 42(7), 818–836. <https://doi.org/10.1108/MRR-04-2018-0157>.
- Alon, I., Boulanger, M., Elston, J. A., Galanaki, E., Martínez de Ibarreta, C., Meyers, J., Muñoz-Ferrer, M., & Vélez-Calle, A. (2018). Business Cultural Intelligence Quotient: A Five-Country Study. *Thunderbird International Business Review*, 60(3), 237–250. <http://dx.doi.org/10.1002/tie.21826>.
- Ang, S., & Van Dyne, L. (2015). Conceptualization of cultural intelligence: Definition, distinctiveness, and nomological network. In S. Ang, & L. Van Dyne (Eds.), *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. <http://dx.doi.org/10.1111/j.1740-8784.2007.00082.x>.
- Belas, J., Amoah, J., Petráková, Z., Ključnikava, Y., & Bilan, Y. (2020). Selected factors of SMEs management in the service sector. *Journal of Tourism and Services*, 21(11), 129–146. doi:10.29036/jots.v11i21.215.
- Bernardo, A. B. I., & Presbitero, A. (2018). Cognitive flexibility and cultural intelligence: Exploring the cognitive aspects of effective functioning in culturally diverse contexts.

- International Journal of Intercultural Relations*, 66, 12–21. <https://doi.org/10.1016/j.ijintrel.2018.06.001>.
- Black, J. S., & Stephens, G. K. (1989). The influence of the spouse on American expatriate adjustment and intent to stay in Pacific Rim overseas assignments. *Journal of Management*, 15(4), 529–544.
- Cao, C., Zhu, C., & Meng, Q. (2016). A Survey of the Influencing Factors for International Academic Mobility of Chinese University Students. *Higher Education Quarterly*, 70(2), 200–220. <http://dx.doi.org/10.1111/hequ.12084>.
- Chao, M. M., Takeuchi, R., & Farh, J.-L. (2017). Enhancing Cultural Intelligence: The Roles of Implicit Culture Beliefs and Adjustment. *Personnel Psychology*, 70(1), 257–292. <http://dx.doi.org/10.1111/peps.12142>.
- Chen, A. S. (2015). CQ at work and the impact of intercultural training: An empirical test among foreign laborers. *International Journal of Intercultural Relations*, 47, 101–112. <http://dx.doi.org/10.1016/j.ijintrel.2015.03.029>.
- Cohen, J. (1988). *Statistical power analysis for the behaviors science*. (2nd ed). Laurence Erlbaum Associates, Publishers, Hillsdale.
- Costers, A., Vaerenbergh, Y. V., & Van den Broeck, A. (2019). *How to boost frontline employee service recovery performance: The role of cultural intelligence*. Service Business. <http://dx.doi.org/10.1007/s11628-019-00396-3>.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The Satisfaction With Life Scale. *Journal of Personality Assessment*, 49(1), 71–75. [http://dx.doi.org/10.1207/s15327752jpa4901\\_13](http://dx.doi.org/10.1207/s15327752jpa4901_13).
- Earley, P. Christopher, & Ang, S. (2003). *Cultural intelligence: Individual interactions across cultures*. Stanford University Press.
- Firth, B. M., Chen, G., Kirkman, B. L., & Kim, K. (2014). Newcomers abroad: Expatriate adaptation during early phases of international assignments. *Academy of Management Journal*, 57(1), 280–300. <http://dx.doi.org/10.5465/amj.2011.0574>.
- Fitzpatrick, F. (2017). Taking the “culture” out of “culture shock”—a critical review of literature on cross-cultural adjustment in international relocation. *Critical Perspectives on International Business*, 13(4), 278–296. <http://dx.doi.org/10.1108/cpoib-01-2017-0008>.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185–214. <http://dx.doi.org/10.1080/07421222.2001.11045669>.
- Gozzoli, C., & Gazzaroli, D. (2018). The Cultural Intelligence Scale (CQS): A Contribution to the Italian Validation. *Frontiers in Psychology*, 9, 1183. <http://dx.doi.org/10.3389/fpsyg.2018.01183>.
- Guðmundsdóttir, S. (2015). Nordic expatriates in the US: The relationship between cultural intelligence and adjustment. *International Journal of Intercultural Relations*, 47, 175–186. <http://dx.doi.org/10.1016/j.ijintrel.2015.05.001>.
- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hajdu, G., & Hajdu, T. (2016). The impact of culture on well-being: Evidence from a natural experiment. *Journal of Happiness Studies*, 17(3), 1089–1110. <http://dx.doi.org/10.1007/s10902-015-9633-9>.
- Huff, K. C., Song, P., & Gresch, E. B. (2014). Cultural intelligence, personality, and cross-cultural adjustment: A study of expatriates in Japan. *International Journal of Intercultural Relations*, 38, 151–157. <https://doi.org/10.1016/j.ijintrel.2013.08.005>

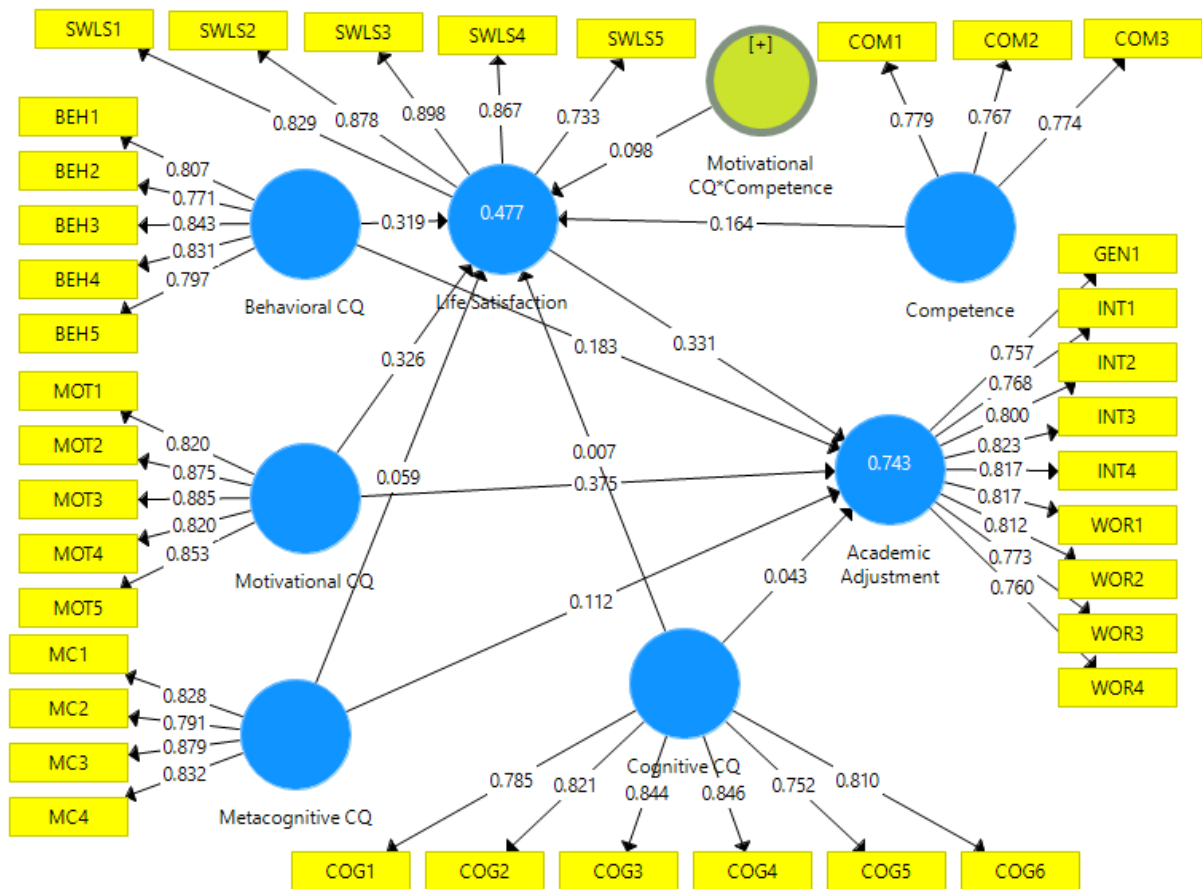
- Iskhakova, M. (2018). Does Cross-cultural Competence Matter when Going Global: Cultural Intelligence and Its Impact on Performance of International Students in Australia. *Journal of Intercultural Communication Research*, 47(2), 121–140. Scopus. <https://doi.org/10.1080/17475759.2018.1437463>.
- Jonasson, C., Luring, J., Selmer, J., & Trembath, J.-L. (2017). Job resources and demands for expatriate academics: Linking teacher-student relations, intercultural adjustment, and job satisfaction. *Journal of Global Mobility*, 5(1), 5–21. <http://dx.doi.org/10.1108/JGM-05-2016-0015>.
- Jyoti, J., & Kour, S. (2015). Assessing the cultural intelligence and task performance equation: Mediating role of cultural adjustment. *Cross Cultural Management: An International Journal*, 22(2), 236–258. <https://doi.org/10.1108/CCM-04-2013-0072>.
- Jyoti, J., & Kour, S. (2017). Cultural intelligence and job performance: An empirical investigation of moderating and mediating variables. *International Journal of Cross Cultural Management*, 17(3), 305–326. <http://dx.doi.org.ezproxy.lib.cas.cz/10.1177/1470595817718001>.
- Kaleramna, N., Saharan, T., & Singh, U. (2019). Cultural Intelligence Stimulating Professional Adjustment. *Journal of Economics and Economic Education Research*, 20(1), 1–7.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling*. Guilford Press.
- Kotaskova, A., & Rozsa, Z. (2018). The impact of selected factors on the quality of business environment assessment in the Czech Republic and the Slovak Republic. *International Journal of Entrepreneurial Knowledge*, 6(2), 71-80. doi: 10.2478/IJEK-2018-0015.
- Le, H., Zhou, J., & Nielsen, I. (2018). Cognitive Cultural Intelligence and Life Satisfaction of Migrant Workers: The Roles of Career Engagement and Social Injustice. *Social Indicators Research*, 139(1), 237–257. <http://dx.doi.org/10.1007/s11205-016-1393-3>.
- 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>.
- Liao, Y., & Thomas, D. C. (2020). *Cultural Intelligence in the World of Work*. Springer.
- Lorenz, M. P., Ramsey, J. R., Tariq, A., & Morrell, D. L. (2017). Service excellence in the light of cultural diversity: The impact of metacognitive cultural intelligence. *Journal of Service Theory and Practice*, 27(2), 475–495. <http://dx.doi.org/10.1108/JSTP-02-2016-0044>.
- Luu, T. (2017). Cultural intelligence and state suspicion: Attachment styles as moderators. *Corporate Communications: An International Journal*, 22(1), 113–132. <http://dx.doi.org/10.1108/CCIJ-06-2015-0032>.
- Mehra, N., & Tung, N. S. (2017). Role of Adjustment as a Mediator Variable between Cultural Intelligence and Well-Being. *Journal of the Indian Academy of Applied Psychology*, 43(2), 286–295.
- 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>.
- Ng, K.-Y., Van Dyne, L., & Ang, S. (2019). Speaking out and speaking up in multicultural settings: A two-study examination of cultural intelligence and voice behavior. *Organizational Behavior and Human Decision Processes*, 151, 150–159. <https://doi.org/10.1016/j.obhdp.2018.10.005>.

- 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>.
- Presbitero, A. (2018). Extraversion, openness to experience, and global career intention: the mediating role of cultural intelligence. *Journal of Employment Counseling*, 55(3), 104–114. <https://doi.org/10.1002/joec.12090>.
- Ramsey, J. R., & Lorenz, M. P. (2016). Exploring the Impact of Cross-Cultural Management Education on Cultural Intelligence, Student Satisfaction, and Commitment. *Academy of Management Learning & Education*, 15(1). <http://dx.doi.org/10.5465/amle.2014.0124>.
- Robledo-Ardila, C., Aguilar-Barrientos, S., & Román-Calderón, J. P. (2016). Education-Related Factors in Cultural Intelligence Development: A Colombian Study. *Journal of Teaching in International Business*, 27(1), 41–58. <http://dx.doi.org/10.1080/08975930.2016.1172541>.
- Rockstuhl, T., & Van Dyne, L. (2018). A bi-factor theory of the four-factor model of cultural intelligence: Meta-analysis and theoretical extensions. *Organizational Behavior & Human Decision Processes*, 148, 124–144. <https://doi.org/10.1016/j.obhdp.2018.07.005>.
- Sharma, N., & Hussain, D. (2019). Role of Cultural Intelligence in Acculturation: Explorations on a Physiognomic Minority Diaspora in India. *Journal of Intercultural Communication Research*, 48(3), 274–291. <https://doi.org/10.1080/17475759.2019.1616603>.
- Sousa, C., & Gonçalves, G. (2017). Expatriates and Non-Expatriates: Effects of Cultural Intelligence and Multicultural Personality on Passion for Work and Satisfaction With Life. *Psychological Thought*, 10(1), 90–108. <http://dx.doi.org/10.5964/psyct.v10i1.197>.
- Starčević, J., Petrović, D., & Komnenić, D. (2017). Validation of the cultural intelligence scale on a Serbian sample. *Primenjena Psihologija*, 10(2), 165–184. <http://dx.doi.org/10.19090/pp.2017.2.165-184>.
- Templer, K. J., Tay, C., & Chandrasekar, N. A. (2006). Motivational cultural intelligence, realistic job preview, realistic living conditions preview, and cross-cultural adjustment. *Group & Organization Management*, 31(1), 154–173. <http://dx.doi.org/10.1177/1059601105275293>.
- Thomas, D. C., Liao, Y., Aycan, Z., Cerdin, J., Pekerti, A. A., Ravlin, E. C., Stahl, G. K., Lazarova, M. B., Fock, H., Arli, D., Moeller, M., Okimoto, T. G., & Van De Vijver, F. (2015). Cultural intelligence: A theory-based, short form measure. *Journal of International Business Studies; Basingstoke*, 46(9), 1099–1118. <http://dx.doi.org/10.1057/jibs.2014.67>.
- Van Dyne, L., Ang, S., & Koh, C. (2015). Development and validation of the CQS: The cultural intelligence scale. In S. Ang, & L. Van Dyne (Eds.), *Handbook of cultural intelligence* (pp. 34–56). Routledge.
- Van Dyne, L., Ang, S., Ng, K. Y., Rockstuhl, T., Tan, M. L., & Koh, C. (2012). Sub-dimensions of the fourfactor model of cultural intelligence: Expanding the conceptualization and measurement of cultural intelligence. *Social and Personality Psychology Compass*, 6(4), 295–313. <https://doi.org/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, K. T., Heppner, P. P., Wang, L., & Zhu, F. (2015). Cultural intelligence trajectories in new international students: Implications for the development of cross-cultural

- competence. *International Perspectives in Psychology: Research, Practice, Consultation*, 4(1), 51-65. <http://dx.doi.org/10.1037/ipp0000027>.
- Yoo, S. H., Matsumoto, D., & LeRoux, J. A. (2006). The influence of emotion recognition and emotion regulation on intercultural adjustment. *International Journal of Intercultural Relations*, 30, 345–363. <http://dx.doi.org/10.1016/j.ijintrel.2005.08.006>.
- Yoon, E., Jung, K. R., Lee, R. M., & Felix-Mora, M. (2012). Validation of Social Connectedness in Mainstream Society and the Ethnic Community Scales. *Cultural Diversity and Ethnic Minority Psychology*, 18(1), 64-73. <http://dx.doi.org/10.1037/a0026600>.
- Zhang, Y., & Oczkowski, E. (2016). Exploring the potential effects of expatriate adjustment direction. *Cross Cultural & Strategic Management*, 23(1), 158–183. <https://doi.org/10.1108/CCSM-05-2015-0062>.
- Zhang, Y., Wei, X., & Zhou, W. (2017). An asymmetric cross-cultural perspective on the mediating role of conflict management styles in expatriation. *International Journal of Conflict Management*, 28(5), 592–616. <http://dx.doi.org/10.1108/IJCMA-06-2016-0052>.

**Appendix**

The results of PLSAlgorithm (Path coefficients, Outer loadings,  $R^2$ )



Note: the results in this Figure can be slightly different from the results presented in the main body of text when rerunning the bootstrap (PLS algorithm) procedure. The reason is that bootstrapping builds on randomly drawn bootstrap samples, which will differ every time the procedure is run.

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### Cultural Intelligence (CQS) (Ang et al., 2007)

Read each statement and select the response that best describes your capabilities. Select the answer that BEST describes you AS YOU REALLY ARE (1=strongly disagree; 7=strongly agree)

---

#### Metacognitive CQ:

---

**MC1** I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.

---

**MC2** I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.

---

**MC3** I am conscious of the cultural knowledge I apply to cross-cultural interactions.

---

**MC4** I check the accuracy of my cultural knowledge as I interact with people from different cultures.

---

#### Cognitive CQ:

---

**COG1** I know the legal and economic systems of other cultures.

---

**COG2** I know the rules (e.g., vocabulary, grammar) of other languages.

---

**COG3** I know the cultural values and religious beliefs of other cultures.

---

**COG4** I know the marriage systems of other cultures.

---

**COG5** I know the arts and crafts of other cultures.

---

**COG6** I know the rules for expressing non-verbal behaviors in other cultures.

---

#### Motivational CQ:

---

**MOT1** I enjoy interacting with people from different cultures.

---

**MOT2** I am confident that I can socialize with locals in a culture that is unfamiliar to me.

---

**MOT3** I am sure I can deal with the stresses of adjusting to a culture that is new to me.

---

**MOT4** I enjoy living in cultures that are unfamiliar to me.

---

**MOT5** I am confident that I can get accustomed to the shopping conditions in a different culture.

---

#### Behavioral CQ:

---

**BEH1** I change my verbal behavior (e.g., accent, tone) when a cross-cultural interaction requires it.

---

**BEH2** I use pause and silence differently to suit different cross-cultural situations.

---

**BEH3** I vary the rate of my speaking when a cross-cultural situation requires it.

---

**BEH4** I change my non-verbal behavior when a cross-cultural situation requires it.

---

**BEH5** I alter my facial expressions when a cross-cultural interaction requires it.

---

### SATISFACTION WITH LIFE SCALE (Diener et al., 1985)

Students/workers were asked to indicate on a 7-point Likert scale to which extent they agree (or disagree) with the following statements:

---

SWLS1 In most ways my life is close to ideal.

---

SWLS2 The conditions of my life are excellent.

---

SWLS3 I am satisfied with my life.

---

SWLS4 So far, I have gotten the important things I want in life.

---

SWLS5 If I could live my life over, I would change almost nothing.

**CROSS-CULTURAL ADJUSTMENT MEASURE**(Chao et al., 2017)

*Instruction.* Using the following scale, indicate how unadjusted or adjusted you are to the following aspects during your exchange in this host country (1 = *not at all adjusted* to 7 = *very well adjusted*). Indicate your degree of adjustment to

---

<b>General Adjustment</b>	
GEN1	Living conditions in general
GEN2	Values and beliefs
GEN3	Customs and practices
<b>Interaction Adjustment</b>	
INT1	Interacting with people in academic activities
INT2	Interacting with people in nonacademic activities
INT3	Interpersonal relationships
INT4	Social gatherings
<b>Academic adjustment</b>	
WOR1	Your schoolwork
WOR2	The academic requirements

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