## The Impact of Intercultural Communication on Cultural Intelligence

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### ABSTRACT

Multicultural relations have become a characteristic feature of global economic and social reality. The ever-increasing mobility of the workforce has led to a significant growth in its organisational heterogeneity. Understanding the climate induced by the ethnic diversity of the workforce and the way that performance can be improved at organisational level, have become management priorities in a multicultural environment as these elements are indicators of success. This study aims to highlight the relationships between the level of intercultural communication (IC) and cultural intelligence (CQ) at the individual level. The sociological survey, based on a questionnaire, was the basic element in obtaining primary information. The questionnaire was administered to a sample of 367 people working in multinational companies in Romania. The results were processed by econometric methods using SPSS software. The study highlights the direct and positive links between levels of intercultural communication (IC) and cultural intelligence (CQ) at the individual level. The results of the study are only valid at the national level. In order to increase the relevance of the results, we consider it necessary to extend the sample by including more people. By conducting this study, we highlight the importance of having a high level of IC, a level that induces a significant increase in CQ value at the individual level, and also a high willingness to perform in a multicultural organisation. This study is a first at the national level because the links between IC and CQ levels have not been the subject of an experimental analysis before.

**KEYWORDS:** *cultural intelligence; intercultural communication; interpersonal relations in multicultural organisations.* 

## **JEL CLASSIFICATION:** *M54*

## **1. INTRODUCTION**

In the current context dominated economically, socially and politically by multinational companies, organisational management has been confronted with major new challenges, having to find viable solutions to optimise the interpersonal relationships that arise between people coming from cultures with distinct traits and often with different skills and levels of training. Differences in gender, age, academic and vocational experience, ideology, race, and belief interfere strongly in a multicultural environment, often constituting additional elements in increasing the complexity of interpersonal relationships within a multicultural organisation. Cultural differences are a major challenge for those involved in the business world, as they have to constantly adapt not only to the actual realities of other cultures in terms of political, economic, and legislative issues, but also to overcome invisible barriers in a culture they do not know in depth (Thomas & Inkson, 2009).

The changes that have occurred in the evolution of the global economy over the last decades have led to profound changes at the organisational level, both in terms of reconfiguring the

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structure of the organisation and of work itself. Multinationals were the first to try to adapt to this new socio-economic environment, and with an international strategic development perspective, they have significantly changed their approach to human resources issues.

Such situations often arise for people with low levels of intercultural competence due to a lack of knowledge of cultural differences and, not least, an inability to change the way they communicate, think, and act in a multicultural environment. A high level of intercultural communication can make a major contribution to improving interpersonal relations in multicultural organisations (Holtbrügge et al., 2015; Malek & Budhwar, 2013).

A low level of intercultural communication can cause confusion due to misinterpretation of a statement, a situation, and therefore deep misunderstanding in interpersonal relationships, with negative consequences on individual and organisational performance (Ang et al., 2006).

The workforce in most multinational companies (MNCs) is a conglomerate of cultures, reflecting the growing number of non-native workers participating in organisational activities. In practice, there is a continuing internationalisation and outsourcing of both unskilled and skilled or highly skilled jobs, resulting in the ongoing need to interact with people from diverse cultures (Sloan et al., 2003).

# 2. LITERATURE REVIEW

The complexity of intellectual competencies required to perform in a multicultural environment at the individual level has led to the definition of a new type of intelligence - cultural intelligence (CQ), a concept that assesses an individual's ability to effectively manage their development in diverse cultural environments (Earley & Ang, 2003). This concept was developed to measure, assess, and predict cross-cultural performance at both the individual and organisational levels. By measuring and assessing cultural intelligence, relevant information is obtained about the ability of personal behaviour to adapt to the demands and needs of relationships that arise in culturally diverse situations. With the introduction of the CQ concept, there is a shift from the analysis of cultural differences to a new stage that focuses on how an individual should act in situations determined by cultural differences. The CQ has evolved from a theoretical conceptual approach to a practical approach.

Cultural intelligence (CQ) is a specific form of intelligence focused on the ability to adapt personal behaviour to the demands and needs of relationships that arise in culturally diverse situations.

The emergence of the concept of cultural intelligence (CQ) was a remarkable step forward in the field of management, filling the gap in the study of human behaviour in multicultural contexts. The use of CQ enables the identification and quantification of cognitive, motivational, and behavioural elements that directly contribute to individual performance in a multicultural environment. At the same time, CQ allows the development of a set of elements (principles, rules, etc.) that create the conditions for the achievement of quality interpersonal relationships between people from different cultural backgrounds. At the same time, a high level of CQ creates the prerequisites for adapting and shaping a person's behaviour according to the situational circumstances created by contact with people from different cultural backgrounds. Cultural intelligence is a multidimensional construct with four factors:

- 1. Metacognitive CQ (MCQ) refers to the promotion of self-regulated mental processes, processes through which the person carries out continuous monitoring, processing, and evaluation of information, which leads to awareness of problems arising in a multicultural context (Ang & Van Dyne, 2008). Based on the knowledge acquired, the person has the ability to revise the initial assumptions and create new strategies that allow him to cope with new situations in real time. Practically, the metacognitive component of cultural intelligence plays a decisive role in the enhancement of one's own multicultural experience (Van Dyne et al., 2012), allowing the individual to develop a heuristic development of social interactions in multicultural contexts (Brinol & DeMarree, 2012). In this situation, the role of metacognition becomes essential, because a high level of awareness, planning, and verification of one's own behaviour according to the specific behaviour of the interlocutor must be ensured (Van Dyne et al., 2010).
- 2. Cognitive CQ (CCQ) expresses the level of personal knowledge in the economic, legal and social fields, sociolinguistic, and interpersonal knowledge of the norms, values, practices and traditions of other cultures gained through education and personal experiences, contributing to an understanding of the differences and similarities between one's own culture and other cultures. Cognitive CQ stimulates interest in other cultures, seeking explanations for differences between one's own culture and other cultural environment, the cognitive component of CQ allows shaping how a person thinks and behaves because it focuses on the cultural system as a whole.
- 3. Motivational CQ (MOTCQ) is defined by the desire to know and understand in depth a new, unfamiliar cultural environment, to respond to the challenges of impacting with other cultures. Motivational CQ reflects a person's interest in understanding the specific features of other cultures and is instrumental in increasing personal confidence in the level of cross-cultural relationships that can be dealt with (Ang et al., 2007). If a person is not confident that he or she can cope in a multicultural setting, the chances of succeeding in such a context are extremely low (Van Dyne et al., 2010).
- 4. Behavioural CQ (BCQ) defines personal coping skills to specific elements verbal (words, tone) and non-verbal (gestures, facial expressions, and body language) behaviours from other cultures. Voice inflections must be appropriate to the content of the message being conveyed so that the ideas being conveyed are correctly received by the interlocutor, increasing the effectiveness of the dialogue. The cognitive and motivational ability to learn culturally specific behaviours are necessary but not sufficient conditions to be effective in a multicultural environment. The ability to know when and how to use the knowledge acquired is essential. The existence of a high level of the behavioural component of CQ can lead to a quick response appropriate to the multicultural context (Ang et al., 2007; Kim et al., 2008).

Intercultural communication refers to the transfer of information between people from different cultures and is a symbolic, interpretive, transactional, and contextual process in which people from different cultures create shared meanings (meanings and values). Intercultural communication is influenced by cultural differences and refers to the effects on communication behaviour when different cultures interact together. It can therefore be defined as communication that takes place in multicultural spaces (Sorrells, 2020).

The quality of intercultural communication is, in my opinion, a key predictor of cultural intelligence and, therefore, of individual performance in a multicultural environment. Communication, the act of transferring information from one person to another, can be an

extremely complicated process at the multicultural level due to language barriers, perceptual barriers, cultural impact, and non-verbal communication, elements specific to each culture. In this context, the choice of the optimal communication channel, encoding by the sender, and decoding of the message by the receiver in a way that ensures clarity of information is vital.

Often, low levels of intercultural communication are due to the peculiarities that define different native languages, depending on a particular context and/or circumstances, which can directly and negatively influence CQ levels at the individual level (Tenzer et al., 2014).

The language barrier is the main obstacle to effective communication. Although English has now established itself as an international language in business, in multicultural organisations most employees do not have a high level of proficiency in an international language, which can lead to real negative problems with a direct impact on the organisation's work (Nekvapil & Sherman, 2018).

The inability to overcome communication barriers in a multicultural context is a real hindrance to developing high levels of CQ, which can create serious problems in achieving individual performance in a multicultural environment.

Studies dedicated to the analysis of communication in multicultural organisations prove direct and positive links between communication quality, CQ, and individual and organisational performance. The quality of communication is a key determinant of the level of trust between members of the multicultural organisation, with trust between members being the trigger for positive relationships that can provide the framework for performance.

Non-verbal communication also plays an important role in intercultural communication. It plays an important role in any situation, often in addition to the verbal content transmitted orally. People from different cultures have different styles of non-verbal communication. This type of communication is done through physical gestures, tone, touch, and expressions, without using words. The impact and reliability of quality nonverbal communication can play an important role in raising the level of CQ because it often has a greater impact than the spoken word, if conditioned by proper interpretation and the ability to place it effectively within a broader intercultural communication framework that includes other channels (Dumbravă & Koronka, 2009).

Individuals who have a significant openness to communicating positively with people from other cultures can contribute significantly to creating a balanced organisational culture conducive to performance in multicultural organisations. By striving to understand other cultures and at the same time respecting their specific elements, members of multicultural organisations with high levels of CQ create the necessary conditions for effective communication and a positive organisational atmosphere, which can contribute to the achievement of performance and goals at both the individual and organisational levels (Ahmadian & Amirpour, 2018).

The social effects of communication skills at the individual and group level should not be ignored. A low level of communication skills is a major barrier to personal development, with consequences for both interpersonal and group relationships. In multicultural organisations, a low level of IC leads to an individual's lack of ability to communicate with colleagues from other cultural backgrounds, which can result in exclusion from the group, which can have a negative impact on the individual's professional position, financial stability, and even social position.

## **3. RESEARCH**

The present study aims to demonstrate direct and positive relationships between the level of intercultural communication, cultural intelligence factors and the level of CQ possessed by a person working in a multicultural society.

In this context, the following working hypotheses were formulated:

H1. Intercultural communication has a direct and positive impact on CQ factors (metacognitive CQ, cognitive CQ, motivational CQ, and behavioural CQ).

H2. The CQ factors influence CQ levels with high intensity.

## **3.1 Research methodology**

In this study, quantitative research elements were used, analysing the data provided by the target group using statistical and econometric methods, in order to validate or invalidate the hypotheses. The analysis carried out in the applied research uses data obtained by conducting a socio-economic questionnaire survey with closed questions.

The questionnaire survey was conducted on the Internet (online). The target group consisted of 500 people working in multinational companies (HP, Adecco, GiGroup, Deloitte, Michelin, WNS Romania, PORR Construct, NetRoadShow, IBM, Lidl, HERZ Armaturen, Sport Vision, Pharmalink, Ipsos, Vectra Logistics, etc.), in fields such as IT, construction, human resources recruitment, consulting, trade, pharmaceuticals. Of these, 367 people responded.

Two questionnaires were used in the survey, one to determine the level of IC and the second to obtain information on CQ and its factors. The questionnaire for measuring CQ (Cultural Intelligence Scale - CQS) used in the survey was processed and adapted from Ang et al. (2007).

Respondents were asked to tick the options they thought were closest to the truth. Each response option, relating to the CQ factors as well as intercultural communication skills, was given a score using the following scale: 1 - Strongly disagree; 2 - Partially disagree; 3 -Neither agree nor disagree; 4 - Partially agree; 5 - Strongly agree.

Data collection was done by uploading the questionnaires to the Google Drive platform. The database was collected using this platform, which also facilitated the online distribution of the questionnaire. Due to the use of the Google Drive platform for the questionnaire submission, possible errors that could occur due to the lack of answers to certain questions were excluded by the existing options in the program, as each respondent was obliged to provide answers to all the items in the questionnaire. The collected data was imported into the statistical software.

Data processing was carried out with the SPSS (Statistical Package for the Social Sciences) program, which is one of the most widely used programs for processing statistical data in socio-economic studies. The SPSS program is distinguished by its rigorous structure and ease of use. The version used in our study is SPSS 12.4.

## **3.2 Testing hypotheses**

In order to test hypothesis H1 stated above, we applied the Pearson linear correlation test, given that metacognitive CQ, cognitive CQ, behavioural CQ, and motivational CQ are dependent variables and IC, the independent variable (predictor). The regression used is as follows:

Metacognitive CQ = a + b\*IC, Cognitive CQ = a + b\*IC, Motivational CQ = a + b\*IC, Behavioural CQ = a + b\*IC, where: Metacognitive CQ, Cognitive CQ, Motivational CQ and Behavioural CQ = dependent variables; IC=intercultural communication, independent variable; a = free term or origin of regression line; b=coefficient *of intercultural communication variable*.

In order to assess the degree of association between the predictor intercultural communication and the dependent variables metacognitive CQ, cognitive CQ, motivational CQ and behavioural CQ, we used linear correlation, indicating the degree to which each of the dependent variables are dependent on the independent variable, showing the strength of association between the two variables for each model chosen for analysis. In the analysis, we also considered Pearson correlation analysis, the correlation coefficient describing the strength and meaning of the relationship between the variables under analysis (Isaic-Maniu et al., 1998).

# a) Analysis of the relationship between intercultural communication and metacognitive CQ

In Table 1, a direct and positive correlation can be observed between the two variables analysed, between IC and metacognitive CQ there is a positive correlation and a small degree of association (r=.281). According to the correlation, there is a direct proportionality between CQ and IC. Considering the data obtained as a result of the analysis carried out by means of Pearson correlation, we observe that when the value of intercultural communication increases, the level of metacognitive CQ of people working in multicultural environment will also increase.

		MCQ	Intercultural
		MCQ	<b>Communication (IC)</b>
MCQ	Pearson Correlation	1	0.281**
	Sig. (2-tailed)		0.000
	Sum of Squares and Cross-	154.593	23.307
	products		
	Covariance	0.422	0.064
	Ν	367	367
Intercultural Communication	Pearson Correlation	0.281**	1
(IC)	Sig. (2-tailed)	0.000	
	Sum of Squares and Cross-	23.307	44.655
	products		
	Covariance	0.064	0.122
	Ν	367	367
**Correlation is significant at the (	0.01 level (2-tailed)		

 Table 1. Pearson correlation between metacognitive CQ and IC predictor

Source: SPSS data processing

The coefficient of determination  $(R^2)$  has a value of 7.9% (Table 2). Despite the fact that its value is relatively small, we take it into account for our analysis as the model is valid and 7.9% of the variation in the dependency (metacognitive CQ) is explained by the model.

According to the ANOVA test (Table 3), Sig. <.05, which denotes that the regression model fits the data and is suitable for the analysis on the kept group.

Mode	el Summar	.App									
				Std.							
Mo del R	R	Adjusted R Square	Error	R				Cir. E	Durbin-		
	Square		of the	Square	F Change	df1	df2	Sig. F	Watson		
		-	-	Estimate	Change	-			Change		
1	0.281ª	0.079	0.076	0.624675	0.079	31.175	1	365	0.000	1.745	
a. Predictors: (Constant), Intercultural Communication (IC)											
b. Dependent Variable: MET CQ											

 Table 2. R and R Square values in the case of the dependent metacognitive CQ variable

 Model Summary<sup>b</sup>

#### Table 3. ANOVA regression analysis in the case of metacognitive CQ

ANOVA <sup>a</sup>											
	Model	Sum of Squares	df	Mean Square	F	Sig.					
1	Regression	12.165	1	12.165	31.175	0.000 <sup>b</sup>					
	Residual	142.428	365	0.390							
	Total	154.593	366								
a. Dependent Variable: MET CQ											
b. Predic	tors: (Constant), I	ntercultural Commun	ication (IC)								

Source: SPSS data processing

Table 4 shows the B and Beta coefficients, where B is the regression coefficient and indicates the values of a dependent variable associated with the values of the independent variable. The sign of the Beta coefficient (+ or -) indicates the dependence between the two variables, metacognitive CQ and intercultural communication. The t-coefficient, together with the standardised B-coefficient, indicates the significance of the predictor (IC).

The results of the analysis express in natural units how much the metacognitive CQ variable changes, on average, when the IC predictor increases or decreases by one natural unit. From the analyses it is observed that intercultural communication has a significant contribution in determining metacognitive CQ. At the same time, the metacognitive CQ level can be significantly modified in a positive direction by 0.522 units in the case of an increase by one unit of the IC level.

 Table 4. Values of B, Beta, t and Tolerance coefficients in the case of the dependent metacognitive CQ variable

			dardised icients	Standardised Coefficients			95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		_	Std.	_			Lower	Upper	Zero-		-		
	Model	В	Error	Beta	t	Sig.	Bound	Bound	order	Partial	Part	Tolerance	VIF
1	(Constant)	2.554	0.298		8.582	0.000	1.969	3.139					
	Intercultural Communication (IC)	0.522	0.093	0.281	5.583	0.000	0.338	0.706	0.281	0.281	0.281	1.000	1.000
a. Dependent Variable:MET CQ													

Source: SPSS data processing

Figure 1 shows the Point Cloud Chart plotting the probabilities of the observed dependence values. According to the observed data, the errors are distributed around the first bisector, which indicates that the model estimates the dependent variable CQ well, and there are no significant differences between the observed and predicted data.

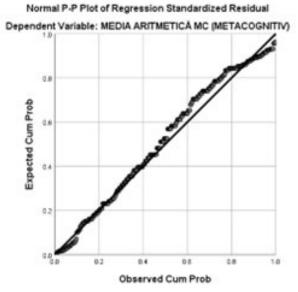


Figure 1. Point Cloud Chart for the metacognitive CQ case Source: SPSS data processing

#### b) Analysis of the relationship between intercultural communication and cognitive CQ

In Table 5, it can be seen that there is a direct and positive correlation between the two variables analysed. Between IC and cognitive CQ, there is a positive correlation and a small degree of association (r=.250). According to the correlation, there is a direct proportionality between CQ and IC. Considering the data obtained from the Pearson correlation analysis, we observe that when the value of intercultural communication increases, the level of cognitive CQ of people working in a multicultural environment will also increase.

		Intercultural
	CCQ	Communication (IC)
Pearson Correlation	1	0.250**
Sig. (2-tailed)		0.000
Sum of Squares and Cross-products	253.893	26.617
Covariance	0.694	0.073
N	367	367
Pearson Correlation	0.250**	1
Sig. (2-tailed)	0.000	
Sum of Squares and Cross-products	26.617	44.655
Covariance	0.073	0.122
Ν	367	367
	Sig. (2-tailed)Sum of Squares and Cross-productsCovarianceNPearson CorrelationSig. (2-tailed)Sum of Squares and Cross-productsCovariance	Pearson Correlation1Sig. (2-tailed)253.893Sum of Squares and Cross-products253.893Covariance0.694N367Pearson Correlation0.250**Sig. (2-tailed)0.000Sum of Squares and Cross-products26.617Covariance0.073

 Table 5. Pearson correlation between cognitive CQ and IC predictor

Source: SPSS data processing

The coefficient of determination  $(R^2)$  has a value of 6.2% (Table 6). Despite the fact that its value is relatively small, we take it into account for our analysis as the model is valid and 6.2% of the variation in dependence (cognitive CQ) is explained by the model.

				Std. Error	Change Statistics						
Model	R	R Square	Adjusted R Square	of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	Durbin- Watson	
1	0.250 <sup>a</sup>	0.062	0.060	0.8075455	0.062	24.329	1	365	0.000	2.078	
a. Predictors: (Constant), Intercultural Communication (IC)											
b. Dependent Variable: COG											

 Table 6. R and R Square values in the case of cognitive CQ

Form now, we will present only the results of the analysis, because the analysis is me accordingly to point a). So, according to the ANOVA test, in this case, Sig. <.05, which denotes that the regression model fits the data and is suitable for the analysis on the kept group.

B, the regression coefficient, indicates the values of a dependent variable associated with the values of the independent variable. The sign of the Beta coefficient (+ or -), indicates the dependence between the two variables, cognitive CQ and intercultural communication. The t-coefficient together with the standardised B-coefficient indicates the significance of the predictor (IC).

The results of the analysis express in natural units, how much the cognitive CQ variable changes, on average, when increasing or decreasing by one natural unit of IC. From the analyses, it is observed that cross-cultural communication has a significant contribution in determining cognitive CQ. At the same time, the level of cognitive CQ can be significantly modified, in a positive direction, by 0.596 units in the case of an increase of one unit in the IC level.

According to the Point Cloud Chart, the errors are distributed around the first bisector, indicating that the model estimates the dependent variable cognitive CQ well, and there are no significant differences between the observed and predicted data.

# c) Analysis of the relationship between intercultural communication and motivational CQ

In Table 7, it can be seen that there is a direct and positive correlation between the two variables analysed, with a positive correlation between motivational CQ and IC and a small degree of association (r = .194). According to the correlation, there is a direct proportionality between motivational CQ and IC. Taking into account the data obtained from the Pearson correlation analysis, we observe that when the value of intercultural communication increases, the level of motivational CQ of people working in multicultural environments will also increase.

			Intercultural
		MOT CQ	Communication (IC)
MOT CQ	Pearson Correlation	1	0.194**
	Sig. (2-tailed)		0.000
	Sum of Squares and Cross-products	158.082	16.289
	Covariance	0.432	0.045
	Ν	367	367
Intercultural	Pearson Correlation	0.194**	1
Communication (IC)	Sig. (2-tailed)	0.000	
	Sum of Squares and Cross-products	16.289	44.655

Table 7. Pearson correlation between motivational CQ and IC predictor

		MOT CQ	Intercultural Communication (IC)
	Covariance	0.045	0.122
	Ν	367	367
**Correlation is signifi	cant at the 0.01 level (2-tailed)	•	•

The coefficient of determination  $(R^2)$  has a value of 3.8% (Table 8). Despite the fact that its value is relatively small, we take it into account for our analysis as the model is valid and 3.8% of the variation of the dependency (motivational CQ) is explained by the model.

### Table 8. R and R Square values in the case of motivational CQ

						Change	e Statis	tics				
				Std. Error	R							
		R	Adjusted	of the	Square	F			Sig. F	Durbin-		
Model	R	Square	R Square	Estimate	Change	Change	df1	df2	Change	Watson		
1	0.194ª	0.038	0.035	0.64561	0.038	14.255	1	365	0.000	1.699		
a. Predictors: (Constant), Intercultural Communication (IC)												
b. Dependent Variable: MOT												

Source: SPSS data processing

Also, according to the ANOVA test, Sig. <.05, which denotes that the regression model fits the data and is suitable for the analysis on the kept group.

The results of the analysis express in natural units how much the motivational CQ variable changes, on average, when the predictor included in the model increases or decreases by one natural unit. Regarding the coefficients, the analyses show that the intercultural communication makes a significant contribution to determining motivational CQ. At the same time, the motivational CQ level can be significantly modified in a positive direction by 0.365 units in case of an increase by one unit of the IC level.

Also, in this case, according to the Point Cloud Chart, the errors are distributed around the first bisector, indicating that the model estimates the dependent variable metacognitive CQ well, and there are no significant differences between observed and predicted data.

# d) Analysis of the relationship between intercultural communication and behavioural CQ

In Table 9, it can be seen that there is a direct and positive correlation between the two variables analysed, with a positive correlation between IC and behavioural CQ and a medium degree of association (r = .305). According to the correlation, there is a direct proportionality between behavioural CQ and IC. Considering the data obtained as a result of the Pearson correlation analysis, we observe that when the value of intercultural communication increases, the behavioural CQ level of people working in a multicultural environment will also increase.

Iubie		tween benaviourar ex and re predictor						
			Intercultural					
		BEH CQ	Communication (IC)					
BEH CQ	Pearson Correlation	1	0.305**					
	Sig. (2-tailed)		0.000					
	Sum of Squares and	226.276	30.688					
	Cross-products							
	Covariance	0.618	0.084					
	N	367	367					

Table 9. Pearson correlation between behavioural CQ and IC predictor

					Intercultural
			BEH CQ		Communication (IC)
Intercultural	Communication	Pearson Correlation		0.305**	1
(IC)		Sig. (2-tailed)		0.000	
		Sum of Squares and		30.688	44.655
		Cross-products			
		Covariance		0.084	0.122
		Ν		367	367
**Correlation	is significant at th	e 0.01 level (2-tailed)			•

The coefficient of determination  $(R^2)$  has a value of 9.3% (Table 10). Despite the fact that its value is relatively small, we take it into account for our analysis as the model is valid and 9.3% of the variation in dependence (behavioural CQ) is explained by the model.

Table 1	0. R and	R Sq	luare v	alues	in the	e case (	of b	oehaviou	ural C	Q	

					Change Statistics					
				Std. Error	R					
		R	Adjusted	of the	Square	F			Sig. F	Durbin-
Model	R	Square	R Square	Estimate	Change	Change	df1	df2	Change	Watson
1	0.305 <sup>a</sup>	0.093	0.091	0.7497	0.093	37.516	1	365	0.000	1.839
a. Predictors: (Constant), Intercultural Communication (IC)										
b. Dependent Variable: BEH										

Source: SPSS data processing

From now on, we will present only the results of the analysis. So, according to the ANOVA test, Sig. <.05, which denotes that the regression model fits the data and is suitable for the analysis of the target group. The results of the analysis express in natural units how much the behavioural CQ variable changes, on average, when the predictor included in the model increases or decreases by one natural unit. From the analyses, it can be seen that cross-cultural communication has a significant contribution to determining behavioural CQ. At the same time, the behavioural CQ level can be significantly modified, in a positive direction, by 0.687 units in the case of an increase by one unit of the IC level.

According to the Point Cloud Chart, the errors are distributed around the first bisector, indicating that the model estimates the dependent variable metacognitive CQ well, and there are no significant differences between observed and predicted data.

In order to test hypothesis H2 stated above, we applied the Pearson linear correlation test, given that metacognitive CQ, cognitive CQ, behavioural CQ and motivational CQ are independent variables and CQ the dependent variable. The regression used is as follows: CQ = a+b\*MetacognitiveQC+c\*CognitiveQC+d\*MotivationalQC+e\*BehaviouralQC, where: CQ = cultural intelligence; metacognitive CQ, cognitive CQ, motivational CQ, and behavioural CQ = predictors; IC = intercultural communication; a = free term or origin of the regression line; b, c, d, e = coefficients of the variables metacognitive CQ, cognitive CQ, motivational CQ, motivational CQ, motivational CQ.

In order to assess the degree of association between the factors metacognitive CQ, cognitive CQ, motivational CQ and behavioural CQ and the dependent variable CQ, we used linear correlation, indicating the degree to which CQ is dependent on the independent variables, showing the strength of association between the two categories of variables. As in point I), we also considered Pearson correlation analysis in the present analysis.

In Table 11, it can be seen that there is a direct and positive correlation between the independent variables and the dependent variable (CQ), between them there is a positive correlation and high degrees of association (r = .712, r = .706, r = 730, r = 743). According to the correlation, there is a direct proportionality between CQ and its predictors. Considering the data obtained as a result of the Pearson correlation analysis, we observe that when the value of one of the predictors increases, the QC level of people working in a multicultural environment will also increase.

The coefficient of determination  $(R^2)$ , has the value 93.3%, the model is valid (Table 12). 93.3% of the variation in dependence (CQ) is explained by the model, and the data can be generalised.

		CQ	BEH	MOT CQ	COG CQ	META CQ		
CQ	Pearson Correlation	1	0.712**	0.706**	0.730**	0.743**		
	Sig. (2-tailed)		0.000	0.000	0.000	0.000		
	Sum of Squares and Cross-	120.601	117.67	97.454	127.693	101.428		
	products		2					
	Covariance	0.330	0.322	0.266	0.349	0.277		
	Ν	367	367	367	367	367		
BEH	Pearson Correlation	0.712**	1	0.382**	0.298**	0.430**		
CQ	Sig. (2-tailed)	0.000		0.000	0.000	0.000		
	Sum of Squares and Cross-	117.672	226.27	72.308	71.486	80.473		
	products		6					
	Covariance	0.322	0.618	0.198	0.195	0.220		
	Ν	367	367	367	367	367		
MOT CQ	Pearson Correlation	0.706**	0.382**	1	0.440**	0.477**		
	Sig. (2-tailed)	0.000	0.000		0.000	0.000		
	Sum of Squares and Cross-	97.454	72.308	158.082	88.170	74.626		
	products							
	Covariance	0.266	0.198	0.432	0.241	0.204		
	Ν	367	367	367	367	367		
COG	Pearson Correlation	0.730**	0.298**	0.440**	1	0.477**		
CQ	Sig. (2-tailed)	0.000	0.000	0.000		0.000		
	Sum of Squares and Cross-	127.693	71.486	88.170	253.893	94.433		
	products							
	Covariance	0.349	0.195	0.241	0.694	0.258		
	Ν	367	367	367	367	367		
META	Pearson Correlation	0.743**	0.430**	0.477**	0.477**	1		
CQ	Sig. (2-tailed)	0.000	0.000	0.000	0.000			
	Sum of Squares and Cross-	101.428	80.473	74.626	94.433	154.593		
	products							
	Covariance	0.277	0.220	0.204	0.258	0.422		
	Ν	367	367	367	367	367		
**Correlation is significant at the 0.01 level (2-tailed)								

Source: SPSS data processing

#### Table 12. R and R Square values in the case of CQ and its factors

Model	R	R Square	Adjusted R Square	Std.						
				Error of	R E			Sig E	Durbin-	
				the	Square	1 Change	df1	df2	Sig. F Change	Watson
				Estimate	Change					
1	0.966ª	0.933	0.932	0.14918	0.933	1264.18	4	362	0.000	2.021
a. Predictors: (Constant), MC, BEH, COG, MOT										
b. Dependent Variable: CQ										

Source: SPSS data processing

As we did earlier, we will also present from now on only the results of the analysis. So, according to the ANOVA test, Sig. <.05, which denotes that the regression model fits the data and is suitable for the analysis of the target group. The results of the analysis express in natural units how much the CQ variable changes, on average, when the factors included in the model increase or decrease by one natural unit. From the analyses, it can be seen that the CQ factors have a significant contribution on the level of CQ. At the same time, the level of CQ can be significantly modified in a positive direction. For example, when one of the independent variables of the model changes, if the other variables remain constant, the CQ will change by 0.279 units for behavioural CQ, 0.233 for motivational CQ, 0.253 for cognitive CQ and 0.244 for metacognitive CQ increase by one unit in the IC level.

The regression model does not present multicoliniarity and, according to the Point Cloud Chart, the errors are distributed around the first bisector, indicating that the model estimates the dependent variable metacognitive CQ well, and there are no significant differences between observed and predicted data.

## 4. CONCLUSIONS

Following the validation of hypotheses H1 and H2, in the following, we present the main conclusions:

Intercultural communication directly and positively influences cultural intelligence factors. The relatively high level of intercultural communication allows for the efficient transfer of information within the group, which can positively influence both the performance of work tasks and the increase of trust between group members, elements that directly influence individual performance in the context under analysis.

The strongest influence of intercultural communication (IC) on CQ factors is manifested in behavioural CQ. This result demonstrates a superior ability of group members to effectively use intercultural communication to develop their individual capacity to adapt quickly behaviorally in a multicultural setting, both in terms of verbal and nonverbal behaviours. Transmitting and receiving ideas correctly and quickly in a multicultural setting creates the prerequisites for individual performance.

IC also reaches a high level in relation to cognitive CQ. At the level of the analysed sample, the effect of the high value of cognitive CQ allows group members to exchange quality information in terms of their knowledge (notions, ideas, information) about differences between cultures in the economic, legal, sociolinguistic, and interpersonal fields.

The relationship between IC and metacognitive CQ demonstrates the ability of group members to draw on their own intercultural knowledge, which can only be acquired through ongoing communication with people from other cultures.

In terms of the relationship between IC and motivational CQ the level achieved demonstrates the relatively lower influence of IC on the individual's ability to direct his or her attention and energy to obtain the necessary knowledge (learning) to enable him or her to perform in a multicultural environment. Motivational skills provide active control of emotions, cognition, and behaviour which facilitates the achievement of goals in a cross-cultural context. Control is extremely important because intercultural interactions are full of obstacles that can generate uncertainty and anxiety. The results of our study confirm the positive relationship between intercultural communication ability and individual-level CQ, highlighting that regardless of the level of knowledge of a person in a multicultural context, intercultural communication plays the main role. IC level is directly related to individual performance because without effective communication the results achieved in a multicultural context fall far below the individual's actual possibilities to perform (Mishra et al., 2014; Mikkelson et al., 2015; Nurun Nabi et al., 2017) The impact of IC level on individual performance is amplified in a multicultural context due to the complexity of interpersonal relationships (Byram, 2020; Samovar et al., 2016).

The four CQ factors have a high influence on affect, with the highest increase in behavioural CQ (0.687), followed by cognitive CQ (0.596), metacognitive CQ (0.522) and motivational CQ (0.365). There are positive correlations and high degrees of association between the four factors and CQ. The results are generalisable and the positive change in each factor leads to relatively significant increases in the CQ.

The validation of the hypotheses of the present study confirms the results of previous studies on the relationship between IC and CQ, studies which demonstrate that at the individual level the ability to communicate effectively in a multicultural environment leads to a significant increase in CQ levels. Thus, language ability has been directly and positively related to CQ (Harrison, 2012), individuals who have the ability to adapt quickly to the intercultural context due to positive communication quality have a high level of CQ (Adair et al., 2016), a high level of intercultural communication is directly and positively related to CQ and its factors metacognitive CQ, cognitive CQ, motivational CQ and behavioural CQ (Yeke & Semerciöz, 2016).

# **5. PRACTICAL IMPORTANCE OF THE STUDY**

Inclusion of IC assessment among the selection criteria for new employees in multinational companies, as the IC level can provide a range of information about an individual's ability to adapt in a multicultural environment. The direct and positive influence of IC on CQ factors can highlight a number of individual attributes that lead to a high level of CQ (e.g., intellectual openness, empathy, flexibility, tolerance, positive attitude towards traits specific to another culture, etc.).

Use of criteria for appraisals, promotions, and financial rewards that distinctly/explicitly include elements that are defined in terms of the level of the relationship between IC and individual CQ.

The development of medium- and long-term strategies aimed at increasing the IC level of staff of multinational companies according to future destinations. In this way, the organisation can gain a significant competitive advantage right from the moment of entering a foreign market.

# 6. LIMITS AND FUTURE RESEARCH DIRECTIONS

Major efforts have been made to ensure the objectivity, reliability, and validity of the results. However, as with most experimental studies, this study also contains a number of limitations, which we present below. A first limitation relates to self-reported data collection. By doing so, there is a risk of bias in the assessment of results, including self-generated validity. In order to minimise the problem of method bias, we have taken some precautions. In line with Podsakoff et al. (2003), we wrote an introductory letter, stressing that responses are treated anonymously, that there are no right or wrong answers, and that respondents are asked to answer the questions as honestly as possible, which is a prerequisite for the results to be in line with reality.

Another important limitation is that the sample analysed is relatively small. A significant increase in the number of respondents may lead to a higher degree of generality.

As for the IC and CQS questionnaires used in this study, they are based only on their own assessment. We believe that if the self-assessment were compared with the employer's assessment of the employee, the results would be much more accurate, and by implication more eloquent, in terms of the relationship between IC and CQ.

In addition to IC there are a very large number of possible predictors of CQ, the concurrent analysis of the influence of a wider group of predictors, e.g., educational attainment, time spent abroad, personality traits, foreign languages known, may provide additional insights into how to act at the individual level to significantly increase CQ. Expanding, in future research, the number of predictors analysed that can directly and positively influence CQ and/or its factors is an important direction of study that can significantly contribute to making explicit, to clarifying the role of CQ in a multicultural context.

As studies on the evolution of the relationship between IC and CQ at the individual level are generally highly dynamic, a future research direction may be to carry out a longitudinal study, which would add value to the research and allow us to observe and analyse changes over time in the individual CQ level and the evolution of the intensity of the predictors (influencing factors) as the CQ level varies.

Due to the large number of Romanian students studying abroad, a study can be carried out to highlight the evolution of their CQ level in direct relation to the culture of the host country, in the context of a deep cultural variety at the European level (e.g., Anglo-Saxon countries vs. Latin countries).

Another area of study could be the adaptability of the different ethnic groups from which foreign students studying in Romania come, given that their number is relatively high, around 15-20 thousand people. In this context, we consider that an important direction of study can be the analysis of the relationship between the level of IC of the foreign students, expressed by the level of knowledge of the Romanian language and CQ, between the cultural adaptation capacity of the foreign students and their desire to integrate, after completing their studies, in the Romanian cultural space. Based on this idea, the relationship between the level of IC and the level of CQ of foreigners who are already integrated and working in Romania can be analysed.

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