

# Cultural Intelligence (CQ) in Erasmus Mundus Students and Alumni: an exploratory study on the levels and antecedents of CQ

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## Abstract

Erasmus Mundus Masters (EMM) are programs with a strong component of interculturality. Our study aimed at understanding the level of cultural intelligence (CQ) of EMM students and alumni, as well as some of the characteristics associated with higher levels of CQ. The study included 626 EMM students and alumni from 109 different countries that encompasses 6 continents. Ang and Van Dyne's (2006) cultural intelligence scale was used; closed and open ended questions were used to describe the sample's sociodemographic characteristics and experiences regarding interculturality. After validating and assessing the scale's psychometric properties, relations between different variables were explored using Pearson's correlation, ANOVA, *t* Tests, and GLM procedures. We then analysed the open ended responses to gain further insight on our results. Differences among respondents are mainly equated with international experience rather than nationality or training. Respondents' open ended replies provided us with a deeper insight on why training seems to be so ineffective in developing CQ. This is a transversal study that uses self-reporting measures; also, questionnaires were conducted in English, which was not the mother tongue of most of the respondents. This work is consistent with the CQ literature, however we argue that training mentioned by respondents systematically fails to meet some of literature's foremost conditions for effective CQ trainings and provide clues for the implementation of more successful initiatives. With an exceptionally diverse sample, this study contributes towards the understanding of mechanisms of developing CQ among EMM and international Students. Results can be useful for selection processes, training/development of CQ and reducing dropout/turnover.

## Sample

The present study is based on a sample of 626 participants from 109 different countries, encompassing 6 continents. Ages of respondents vary between 22 and 74 years old (mode= 53 years and mean= 43.4 years; standard deviation= 10.5); most respondents are female (79.3% female respondents; 16.4% male respondents; 4.3% did not answer this question). The high mean of age is attributed to general characteristics of Erasmus Mundus programs, which include many adults/ persons who come back to university after having gained certain work experience.

## Analysis

Data analysis was performed using SPSS 20. The analysis included Pearson's correlation, ANOVA, *t* Tests, and GLM procedures. In this study we are mainly interested in getting a general glimpse of the levels of CQ in Erasmus Mundus Students and realizing the influence of demographic variables in this variable.

## Introduction

The process of globalization is well established and its effects have been widely discussed in the literature (e.g. Landis 2008). One such effect is the unquestionable growing diversity in modern day societies that requires greater cultural awareness of citizens (Fischer 2011). The increased diversity means that the intercultural competence (IC) is needed more and more in multicultural domestic work teams (Tsui and Gutek 1999); multinational work teams (Earley and Gibson 2002); by global leaders (Ang and Van Dyne 2006); and by those in overseas work assignments (Bhaskar-Shrinivas et al. 2005). So much so that nowadays, IC is deemed necessary for any person, regardless of one's age or occupation (CEC 2005, 13).

The present study served as an exploratory research on perceptions and needs concerning Intercultural Training and Issues among Erasmus Mundus Students and was the basis of EU funded Erasmus Mundus Intercultural Competence (EMIC) Project that aims at creating a toolkit for helping Erasmus Mundus Students develop intercultural competences.

## CQ: Construct & Scale

Like many models of IC, CQ is a multidimensional construct, with 4 dimensions and in addition to the construct development, Ang and Van Dyne proposed a scale that intends to capture the self-rated ability to perform and adapt well to different cultural contexts and therefore has much potential as a diagnostic tool for intercultural success (Earley and Peterson 2004).

The Cultural Intelligence Scale (CQS) is a 20-item instrument that uses a 7-point Likert type scale and where subjects respond whether or not the item statements describe how they really are, from 1 (strongly disagree) to 7 (strongly agree). The scale is divided into 4 subscales, namely: metacognitive (CQ (4 items), cognitive CQ (6 items), motivational CQ (5 items) and behavioral CQ (5 items).

**CQ-Strategy** or **Metacognitive** is how a person makes sense of inter-cultural experiences. It reflects the processes individuals use to acquire and understand cultural knowledge. It occurs when people make judgments about their own thought processes and those of others. This includes strategizing before an inter-cultural encounter, checking assumptions during an encounter, and adjusting mental maps when actual experiences differ from expectations.

**CQ-Knowledge** or **Cognitive** is a person's understanding of how cultures are similar and how cultures are different. It reflects general knowledge structures and mental maps about cultures. It includes knowledge about economic and legal systems, norms for social interaction, religious beliefs, aesthetic values, and language in different cultures.

**CQ-Motivation** is a person's interest in experiencing other cultures and interacting with people from different cultures. Motivational CQ is magnitude and direction of energy applied toward learning about and functioning in cross-cultural situations. It includes the intrinsic value people place on culturally diverse interactions as well as their sense of confidence that they can function effectively in settings characterized by cultural diversity.

**CQ-Behavior** is a person's capability to adapt verbal and nonverbal behavior so it is appropriate for different cultures. It includes having a flexible repertoire of behavioral responses that are appropriate in a variety of situations and having the capability to modify both verbal and nonverbal behavior based on those involved in a specific interaction or in a particular setting.

## Results

### Levels of CQ in sample

Table 1 – Minimum, Maximum, Means and standard deviations for CQ (Global scale and subscales)

	N	Minimum	Maximum	Mean	Std. Deviation
MC	625	1,00	7,00	5,54	1,10
COG	625	1,00	7,00	4,43	1,11
MOT	625	1,00	7,00	5,92	1,08
BEH	625	1,00	7,00	4,92	1,20
IC_GLOBAL	625	1,30	7,00	5,15	,84

### NOT SIGNIFICANT

The following comparisons resulted in non significant results. There were no statistically significant results in self reported CQ between:

- Males and females
- Subjects with and without prior training in Intercultural competences
- Subjects with and without assistance in Intercultural issues during the master course
- Subjects with and without classmates from the same country as them.

### CQ vs people who prefer to socialize with people from their own country

Table 2 – t test results comparing subjects with and without a preference for socializing with people in their own culture on CQ

	No preference		Preference		df	t
	M	SD	M	SD		
MC	5,66	1,07	5,50	1,10	317	1,180
COG	4,36	1,05	4,44	1,08	317	-,566
MOT	6,11	0,88	5,81	1,09	317	2,330*
BEH	4,94	1,14	5,00	1,18	317	-,397
IC Global	5,20	0,76	5,13	0,82	317	,698

\**p*<0,05; \*\**p*<0,01; \*\*\**p*<0,001

### CQ vs prior experience living in a foreign country

Table 3 – t test results comparing subjects with and without prior experience living in a foreign country on CQ

	Not experienced		Experienced		df	t
	M	SD	M	SD		
MC	5,50	1,10	5,58	1,11	623	-,85
COG	4,26	1,07	4,58	1,13	623	-,57***
MOT	5,85	1,08	5,98	1,07	623	-,151
BEH	4,88	1,17	4,97	1,22	623	-,90
IC Global	5,06	0,82	5,23	0,85	623	-,244**

\**p*<0,05; \*\**p*<0,01; \*\*\**p*<0,001

### Does age correlate with CQ?

Table 4 – Pearson correlations of age and CQ

	age	MC	COG	MOT	BEH	IC_GLOBA L	
age	Pearson Correlation	1	,100*	,045	,043	,090*	,090*
	Sig. (2-tailed)		,013	,265	,283	,025	,025

\**p*<0,05; \*\**p*<0,01; \*\*\**p*<0,001

### Does study level correlate with CQ?

Table 5 – Spearman correlations of level of study (1st years, 2nd years and alumni) and CQ

	Correlation Coefficient	MC	COG	MOT	BEH	IC_GLOBAL	Level of study
Level of study	Sig. (2-tailed)	0	0,001	0,059	0,001	0	.

\**p*<0,05; \*\**p*<0,01; \*\*\**p*<0,001

## Discussion & Conclusions

In this exploratory study we have found that gender and previous training do not seem to influence CQ; whether or not the subject have others from their own country in their masters programs seems not to make a difference in this aspect as well. However, CQ does seem to be associated with age, especially in terms of CQ Strategy and Behavior, whereby older respondents tend to exhibit higher CQ. As one would expect, students that have a preference for dealing with others from their own culture report a lower CQ Motivation. Living in another country prior to the EM experience seems to be positively related with CQ globally and especially CQ Knowledge. The EMM experience seems to affect all dimensions of CQ positively except Motivation which remains unchanged. These findings suggest that the EMM experience has an impact on subjects' CQ, more than simply living abroad. We argue that training mentioned by respondents systematically fails to meet some of literature's foremost conditions for effective CQ trainings, namely the use of specific situations that subjects are facing as well as a longer accompaniment of subjects so as to help them integrate their experience with the knowledge acquired in training. With an exceptionally diverse sample, this study contributes towards the understanding of mechanisms of developing CQ among EMM and international Students. Results can be useful for selection processes, training/development of CQ and reducing dropout/turnover.

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