

## Erasmus+ Student Profile in the Development of Intercultural Competence: A Case Study

### Perfil del estudiante de Erasmus+ en el desarrollo de su competencia intercultural: estudio de caso

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As university lecturers within the European Higher Education Area (EHEA) who also engage in research, we should evaluate the Erasmus+ programme in terms of its role in promoting the cultural development of participants. This article focuses on the assessment of the IC of 60 non-Spanish Erasmus+ students in a case study at the University of Las Palmas de Gran Canaria. The main objective of this article is to define the intercultural profiles of participants in a case study based on the following different factors (age, gender, mother tongue, degree of multilingualism, mobility, academic level and field of knowledge). The study has been designed using a mixed methodology and aims to collect and analyze data gathered regarding actors included in the intercultural model devised by Fantini and Tirmizi (2006). The results we obtained allow us to specify different profiles and the factors that directly affect how they are classified. This study's contribution should be understood in the light of the implementation of the EHEA, an area that aims to promote intercultural communication among students as future professionals in a global world.

**Keywords:** *intercultural competence; Erasmus +; EHEA; intercultural profile; intercultural learning*

Erasmus+ es un instrumento que promueve el crecimiento cultural de los participantes que debemos evaluar como docentes investigadores implicados en el Espacio Europeo de Educación Superior (EEES). Este artículo se centra en la valoración de la CI de 60 estudiantes no españoles de Erasmus+ a través de un estudio de caso en la Universidad de Las Palmas de Gran Canaria. Este artículo tiene como objetivo general delimitar los perfiles interculturales de un estudio de caso a través de diferentes factores (edad, género, lengua materna, grado de plurilingüismo, movilidad, nivel académico y rama de conocimiento). La investigación diseñada con una metodología mixta persigue la recolección y análisis de datos obtenidos a través de los factores incluidos en el modelo intercultural propuesto por Fantini y Tirmizi (2006). El resultado obtenido permite especificar diferentes perfiles y los factores que inciden directamente en las agrupaciones. La contribución de esta investigación se debe entender a la luz de la implantación del EEES, espacio en que se solicita la intercomunicación cultural de los estudiantes como futuros profesionales de un mundo global.

**Palabras clave:** *competencia intercultural; Erasmus+; EEES; perfil intercultural; aprendizaje intercultural*

## 1. INTRODUCTION

In 2017 the Erasmus programme turns 30 and it continues to aim to strengthen the European dimension of higher education by fostering transnational cooperation between universities through mobility. Currently, the 27 EU member states participate in the programme, along with students from other continents that take part in Erasmus Mundus as a subprogramme of Erasmus+.

Within the EHEA, the role of IC as it affects the outcomes of students participating in internationalization programmes has started to attract the attention of some researchers. As university lecturers, we are interested in identifying the relationship between this competence and the goal of European universities to foster internationalization through student mobility and multilingualism in the EHEA (Beaven, Borghetti & Pugliese, 2015; Rondeau & De Janon, 2016).

Deadorff (2006), Fantini (2009), Almeida, Fantini, Simões and Costa (2016), and Gregersen-Hermans (2017) explain the existing difficulties in defining this competence due to a lack of consensus between those responsible for mobility, on the one hand, and internationalization, on the other. However, it would seem that it is unanimously considered to be the ability of the foreign language learner to function properly and satisfactorily in situations of intercultural communication. This is why there has been a spectacular growth in number of the exchange placements undertaken by students pursuing university level qualifications to support the implementation of the European Policy Agenda for Growth, Employment, Equity and Inclusion (European Commission, 2016).

Despite the positive effect of Erasmus+, intercultural development has yet to be contemplated within the planning of its various projects. For example, mobility is measured in quantitative terms, but neither its cultural impact on participants, nor their level of *adaptation* to the host university context during their mobility period is taken into consideration. This lack of feedback means students are not receiving any useful IC related preparation for their mobility period and very little, if anything, is being done to evaluate intercultural learning (Villalón de la Isla, 2017).

With this in mind, it is necessary to investigate the profile of Erasmus + students in relation to IC (Pozo-Vicente & Aguaded-Gómez, 2012). We consider this analysis to be a strategy for addressing the students' needs and, in this way, for developing cultural ties through intergroup awareness which, in some way, is promoted by cultural-linguistic ties. This allows for proposed aims within higher education to be met with regard to internationalisation because learning a new language not only implies achieving linguistic competence, but also assuming new sociocultural roles (González-Peiteado & Rodríguez-López, 2017).

Our main objective is to delimit intercultural profiles in accordance with the variables of age, gender, mother tongue, degree of multilingualism, mobility, academic level and field of knowledge by means of a case study involving 60 non-Spanish Erasmus+ students in the University of Las Palmas de Gran Canaria ULPGC (Canary Islands, Spain). As is the case elsewhere in Spain, this host university, with more than 22,000 students per year (see [www.ulpgc.es](http://www.ulpgc.es)), is not characterized by a great development of multilingualism or by specific measures that promote IC (Cáceres-Lorenzo, Salas-Pascual, Alfonso-de-Tovar, Santana-Alvarado, Santana-Quintana & Vera-Cazorla, 2017).

We hope that this study will contribute to European mobility programmes, since international exchange fosters a sense of fraternity and humanitarian collaboration (Milne & Cowie, 2013) and also constitutes an investment in future development as a result of the relocation of highly skilled people within the labour market (Rindoks, 2010). In other words, the aim here is to contribute to the cultural analysis of these mobility periods, thereby helping to assess the extent to which the latter achieve their goals from an intercultural perspective.

## 2. THEORETICAL FRAMEWORK

Exchange programmes have forced the contact between different educational systems in different countries and have in fact constituted the first step in the changes in higher education that were born with the Bologna Declaration. This reality is due to the fact that in the EU we can appreciate how intercultural, multilingual, communication skills offer professionals better job opportunities and competitive advantages to their businesses (Rondeau & De Janon, 2016). However, many of the IC objectives set out in the EHEA are not met, such as including contemplating multilingualism within the context of multiculturalism (Blanco Valdés, Garosi, Rodríguez Mesa, Borsari & Galeandro Gal, 2017). Language is not just an important aspect of culture, but also a means of access to cultural manifestations.

The need for research on IC was shown in a longitudinal study conducted by Schartner (2016) with a group of 223 international postgraduate students at a British university, as the results indicate that exposure to a multicultural study environment might not be enough to develop IC among international students. Gutiérrez Almarza, Durán Martínez and Beltrán Lavador (2015) pose the question of how to identify the intercultural communicative competence of 30 students in the University of Salamanca and 25 students from British universities hosted by other Spanish universities. In spite of the differences between the two groups, mainly with respect to their experience abroad, it is possible to highlight the following criteria among the students: the expectations of the sending university and its language level in L2, L3 and L4, a positive attitude towards the host country and, at the same time, less awareness of the intercultural dimension, especially in the case of the Spanish group.

No one way of evaluating IC has yet been found, so Deardorff (2006), Fantini (2009), Griffith, Wolfeld, Armon, Rios and Liu (2016) and Gregersen-Hermans (2017) have analysed different procedures, concluding that it is necessary to use a quantitative methodology. This will not entirely solve the lack of consensus regarding the skills needed to make up IC, but does provide a survey that reflects the level of IC. Therefore, in this research we have opted for the IC model of Fantini and Tirmizi (2006). In this methodology, four dimensions are established as a basis for teaching and assessing the various stages of intercultural development and host language levels: cultural awareness, attitudes, skills and knowledge, in addition, the questionnaire used provides a valid model for the investigation of IC levels by means of surveys. Another important aspect is the notion of cultural awareness (the metacognitive aspect in IC), which is crucial for intercultural development and for higher order thinking (Almeida, Simões & Costa, 2012).

When examining the factors linked to Erasmus + students, age, gender, mother tongue, multilingualism, participation in different mobility actions, academic level (undergraduate degree, master and doctorate) and field of knowledge have been analyzed. Previous studies show that age is a determining factor in the process of learning a new language. With regard to motivation for learning a new language, differences among adults are evident between the 20-40 and 41-60 age groups (González-Peiteado & Rodríguez-López, 2017). However, other studies go beyond this to link age with the different interests of each generation (Cortés Moreno, 2001; Caceres-Lorenzo et al., 2017).

Gender influences the use of resources and strategies during the learning process, since female students make greater use of study support strategies. On the other hand, in a study with more than a thousand participants, Tompkins et al. (2017) conclude that men develop less IC. However, differences in motivation during the learning process have not been confirmed on the basis of gender (Martín del Buey & Camarero Suárez, 2001).

A good multilingual profile is not necessarily the same as intercultural richness since it is possible to have a good command of knowledge of a language system and, nevertheless remain ignorant of important aspects of its culture. It is for this reason that multilingualism and interculturalism should be developed simultaneously through a natural process, as the linguistic and cultural competences in each language interact, are enriched by knowledge of the other language, and contribute to develop skills, abilities and intercultural attitudes.

IC is constructed at the same time as multilingualism, although the professional ambitions of students begin to be taken into account, as it would seem that interculturality is developed by training in areas where communication plays a larger role (Rindoks, 2010; González & Rodríguez, 2017). In view of the above, we put forward the following research questions, which meet our overall objective:

- 1) How do the personal factors of each student influence the development of IC dimensions in a case study?
- 2) Is it possible to map the cross-cultural profiles of mobility students using the model established by Fantini and Tirmizi (2006)?

### 3. METHODOLOGY

In order to answer the questions raised, a mixed two-phase study was carried out based on data collection and data analysis. The personal variables analyzed for each subject are as follows: age, gender, native language (L1), degree of multilingualism (L2, L3, L4, and qualifications obtained), duration of mobility periods, academic level, and field of knowledge (see Table 1).

In the 2016-2017 academic year, the ULPGC received about 2000 exchange students (<https://www2.ulpgc.es/index.ulpgcencifra>). In this case study, 60 non-Spanish students (13 males and 47 females) were included in a multilingual and multicultural group (34 Europeans and 26 Africans and Asians) participating in Erasmus +, as shown in Table 1.

*Table 1: Data of research subjects.*

S.	A.	G.	L1	L2	L3	L4	C.	M.	N.	R.	S.	A.	G.	L1	L2	L3	L4	C.	M.	N.	R.
1	41	1	2	1	3	4	2	2	3	1	31	21	1	7	4	1	0	1	1	1	11
2	25	1	3	2	1	4	1	2	3	5	32	22	2	7	1	4	0	2	1	2	12
3	30	2	5	3	1	4	1	2	3	2	33	23	1	11	4	1	0	2	1	1	7
4	24	1	3	2	1	4	1	2	2	1	34	22	2	11	1	0	0	1	1	1	7
5	25	1	6	3	1	4	1	2	2	2	35	22	2	7	1	4	0	2	1	1	11
6	34	1	4	3	1	4	1	2	3	1	36	24	2	7	1	4	0	1	1	2	2
7	24	1	4	1	3	4	1	2	2	2	37	24	1	9	1	4	0	1	1	1	7
8	24	1	6	3	1	4	1	2	3	2	38	23	1	9	1	2	4	1	1	1	1
9	40	1	1	1	4	0	1	2	3	4	39	21	1	7	1	4	0	1	1	1	6
10	29	1	3	2	1	4	2	2	3	3	40	21	1	7	1	4	0	1	1	2	12
11	25	1	3	2	1	4	2	2	3	1	41	22	1	9	2	4	0	1	1	1	9
12	30	1	3	2	1	4	2	2	2	1	42	21	1	7	1	4	0	0	1	1	1
13	21	2	4	3	1	4	1	2	2	1	43	24	1	11	1	4	0	1	1	2	12
14	28	2	4	3	1	7	1	2	3	2	44	24	1	12	4	1	0	1	1	2	2
15	28	1	3	2	1	4	1	2	3	13	45	24	1	9	1	4	2	1	1	1	6
16	27	1	3	2	1	4	1	2	3	14	46	22	1	11	1	4	0	2	1	1	7

17	36	1	3	1	2	4	1	2	4	1	47	20	1	11	1	4	0	2	1	1	6
18	27	2	13	7	2	4	1	2	3	15	48	21	1	7	1	2	0	1	1	1	6
19	28	1	4	3	1	4	1	2	3	2	49	22	1	12	1	4	0	1	1	1	6
20	33	2	3	2	1	4	1	2	3	6	50	23	1	11	1	2	4	1	1	1	7
21	27	2	4	3	1	4	1	2	2	1	51	22	1	9	1	4	0	0	1	1	9
22	28	1	14	1	3	0	2	2	2	2	52	22	1	7	1	4	3	1	1	1	7
23	37	2	3	1	4	8	1	2	4	1	53	19	1	10	4	0	0	1	0	1	11
24	32	1	6	3	1	4	1	2	3	1	54	20	1	7	1	4	0	1	1	1	9
25	41	2	3	1	7	4	1	2	4	1	55	20	1	7	4	3	0	1	1	1	9
26	23	1	7	4	0	0	2	1	2	6	56	20	1	7	3	4	0	1	1	1	6
27	19	1	7	0	0	0	2	1	1	7	57	21	1	7	4	1	0	1	1	1	11
S.	A.	G.	L1	L2	L3	L4	C.	M.	N.	R.	S.	A.	G.	L1	L2	L3	L4	C.	M.	N.	R.
28	22	1	8	4	1	0	2	1	1	8	58	21	1	9	1	4	2	1	1	1	7
29	24	1	9	1	2	4	1	1	1	5	59	22	1	8	1	4	0	1	1	1	6
30	20	1	8	1	4	0	2	1	1	1	60	35	2	15	8	3	1	1	2	3	2

A: age; G (Gender): 1: Female; 2: Male; German, 2: Czech, 3: French, 4: English, 5: Italian, 6: Arabic, 7: Berber, 8: Karakalpak, 9: Kyrgyz, 10: Tajik, 11: Uzbek, 13: Indonesian, 14: Mongolian, 15: Vietnamese; L2, L3 and L4, 1: English; 2: French; 3: Russian; 4: English; 5: Polish; 6: Romanian; 7: Arabic; 8: Uzbek; C (Certificates): 1: Yes; 2: No; M (Mobility): 1: Erasmus; 2: Erasmus Mundus; N (Level): 1: Undergraduate degree; 2: Master's degree; 3: Doctorate, 4: PostDoc; R. Field (Rama): 1: Tourism; 2: Economics; 3: Mathematics; 4: Literature and Cultural Studies; 5: Human Resources; 6: Management and Business Management; 7: Classical Philology; 8: Engineering; 9: Modern languages; 10: Law; 11: Translation; 12: Marketing; 13: Biology; 14: Chemistry; 15: Sociology.

As a tool for collecting information, a survey was used to gather the personal information shown in Table 1. This was also used to establish the IC profiles, according to the methodology of Fantini and Tirmizi (2006) which allows quantitative data to be compiled on a Likert scale, as follows: 1) completely disagree; 2) disagree; 3) neither agree nor disagree; 4) agree; and 5) completely agree. In this study, we used the 54 questions in the section Intercultural Abilities for each of the IC: knowledge, attitude, ability and awareness (see Appendix 1).

The analysis of the results is based on two phases that endeavour to answer the research questions. Firstly, the correlation between the variables (both personal and those relating to IC) was tested for each student using Pearson's correlation coefficient. This enabled us to discover how personal and academic aspects affect the different dimensions of IC.

In a second phase we tried to explain the previous results by studying the profiles of the different students. Initially, a linear regression was carried out in which the dependent variable was the total score of skill acquisition plus explanatory variables, together with the different personal aspects that define the profile of each subject. This enabled us to determine whether the variables analysed were sufficient to explain the results, while also allowing us to group the students within different profiles. Statistical analyses were carried out using the XLSTAT Addissoft program, version 19.01, which works with Excel.

#### 4. RESULTS AND DISCUSSION

The results from Fantini and Tirmizi's (2006) survey are shown in Figure 1.

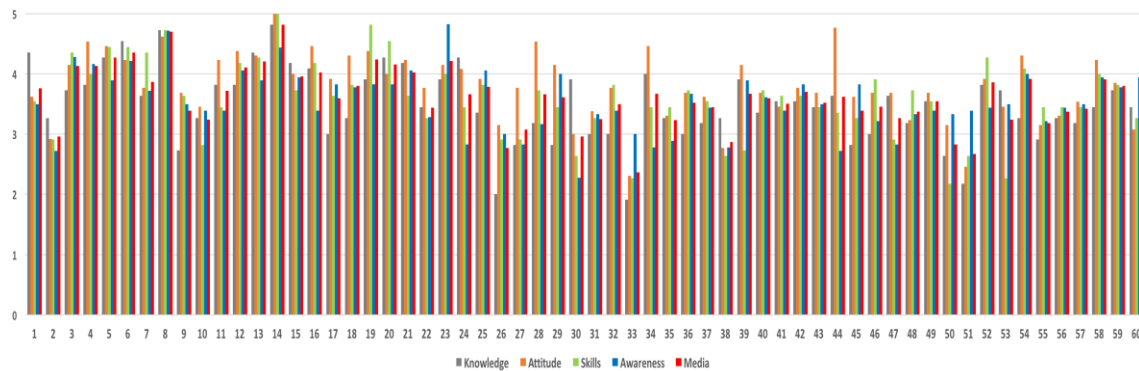


Figure 1: **Results of the IC survey** (Fantini & Tirmizi, 2006). 1: completely disagree 2: disagree 3: neither agree nor disagree 4: agree 5: completely agree.

The following correlation matrix shows the correspondence between variables, taking into account both personal variables shown in Table 1, and the results of the survey seen in Table 2.

Table 2: **Pearson correlation.**

Variables	A.	G.	L1	L2	L3	L4	C.	M.	N.	R.	K.	At.	S	Aw.
A.	<b>1</b>	<b>0.29</b>	<b>0.52</b>	0.08	0.05	<b>0.55</b>	-0.01	<b>0.72</b>	<b>0.82</b>	<b>-0.43</b>	0.19	0.17	0.20	0.25
G.	<b>0.29</b>	<b>1</b>	0.14	0.21	0.05	<b>0.27</b>	-0.05	<b>0.28</b>	<b>0.35</b>	-0.08	-0.01	0.05	0.17	0.24
L1	<b>0.52</b>	0.14	<b>1</b>	0.20	-0.19	<b>0.36</b>	0.14	<b>0.66</b>	<b>0.52</b>	<b>-0.47</b>	<b>0.27</b>	<b>0.27</b>	<b>0.35</b>	<b>0.40</b>
L2	0.08	0.21	0.20	<b>1</b>	<b>-0.43</b>	0.06	-0.05	0.19	0.20	0.09	-0.04	0.25	0.18	0.14
L3	0.05	0.05	-0.19	<b>-0.43</b>	<b>1</b>	<b>-0.29</b>	-0.13	-0.24	-0.16	0.07	<b>-0.30</b>	<b>-0.43</b>	<b>-0.29</b>	-0.11
L4	<b>0.55</b>	<b>0.27</b>	<b>0.36</b>	0.06	<b>-0.29</b>	<b>1</b>	-0.13	<b>0.74</b>	<b>0.68</b>	<b>-0.43</b>	<b>0.57</b>	<b>0.37</b>	<b>0.36</b>	<b>0.47</b>
C.	-0.01	-0.05	0.14	-0.05	-0.13	-0.13	<b>1</b>	0.00	-0.03	-0.02	-0.17	-0.04	-0.23	-0.21
M.	<b>0.72</b>	<b>0.28</b>	<b>0.66</b>	0.19	-0.24	<b>0.74</b>	0.00	<b>1</b>	<b>0.84</b>	<b>-0.48</b>	<b>0.44</b>	<b>0.36</b>	<b>0.41</b>	<b>0.36</b>
N.	<b>0.82</b>	<b>0.35</b>	<b>0.52</b>	0.20	-0.16	<b>0.68</b>	-0.03	<b>0.84</b>	<b>1</b>	<b>-0.35</b>	<b>0.29</b>	<b>0.31</b>	<b>0.34</b>	<b>0.35</b>
R.	<b>-0.43</b>	-0.08	<b>-0.47</b>	0.09	0.07	<b>-0.43</b>	-0.02	<b>-0.48</b>	<b>-0.35</b>	<b>1</b>	<b>-0.27</b>	-0.15	-0.14	<b>-0.27</b>
K.	0.19	-0.01	<b>0.27</b>	-0.04	<b>-0.30</b>	<b>0.57</b>	-0.17	<b>0.44</b>	<b>0.29</b>	<b>-0.27</b>	<b>1</b>	<b>0.66</b>	<b>0.59</b>	<b>0.39</b>
At.	0.17	0.05	<b>0.27</b>	0.25	<b>-0.43</b>	<b>0.37</b>	-0.04	<b>0.36</b>	<b>0.31</b>	-0.15	<b>0.66</b>	<b>1</b>	<b>0.71</b>	<b>0.51</b>
S	0.20	0.17	<b>0.35</b>	0.18	<b>-0.29</b>	<b>0.36</b>	-0.23	<b>0.41</b>	<b>0.34</b>	-0.14	<b>0.59</b>	<b>0.71</b>	<b>1</b>	<b>0.63</b>
Aw.	0.25	0.24	<b>0.40</b>	0.14	-0.11	<b>0.47</b>	-0.21	<b>0.36</b>	<b>0.35</b>	<b>-0.27</b>	<b>0.39</b>	<b>0.51</b>	<b>0.63</b>	<b>1</b>

The values in bold are different from 0 with an alpha significance level: 0.05. A: age; G: gender; L1: mother tongue; C: official foreign language certificates; M: mobility periods; N.: academic level; k: knowledge; At: attitude; S: skills; Aw: awareness

As we can see in Table 2, the strongest correlations (between 0.7 and 0.8) are observed between mobility, academic level, and the age of subjects, although the relation between level and mobility is also high. Logically, it takes several years to reach a high academic level or have had extensive experience in international mobility (Lantz-Deaton, 2017). There are also high correlation levels (between 0.4 and 0.7) between the different dimensions of IC, indicating that these dimensions develop simultaneously. Knowledge and Attitude present the strongest correlation, while the weakest levels were observed for Knowledge and Awareness.

The correlation between the personal variables and the results of the different dimensions confirms the relationship between the degree of multilingualism across the different languages, and mobility, academic level, and the L1 (Beaven et al., 2015). The scores awarded for each of the IC criteria rise as the number of languages spoken by the student, their accademic level, and their level of mobility increases. We therefore partially

agree with Pozo-Vicente & Aguaded-Gómez (2012), since in our analysis, students with a non-European native language achieved better averages scores in all dimensions. There is no significant correlation with age (Cortés Moreno, 2001; Cáceres-Lorenzo et al., 2017), gender (Martín del Buey & Camarero Suárez, 2001), qualifications or field of study (Rindoks, 2010; González-Peiteado y Rodríguez-López, 2017). It is an apparent contradiction that age has a strong influence on mobility and academic level, and that these in turn affect the level of attainment within each dimension, but that there is no relation between age and the level attained.

In the second phase of the analysis we calculated the mean for each dimension across the 60 participants, as seen in Figure 1, and thus could see the degree to which each student has acquired competence. This mean figure represents the differences between the participants and a new order which will serve as a dependent variable in the linear regression carried out in order to identify which variable best explains the results. The correlation matrix of this regression is shown in Table 3.

*Table 3: Linear regression with the mean obtained by the research subjects.*

	A.	G.	L1	L2	L3	L4	C.	M.	N.	R.	O.
A.	<b>1</b>	0,29	0,52	0,08	0,05	0,55	-0,01	0,72	0,82	-0,43	-0,34
G.	0,29	<b>1</b>	0,14	0,21	0,05	0,27	-0,05	0,28	0,35	-0,08	-0,29
L1	0,52	0,14	<b>1</b>	0,20	-0,19	0,36	0,14	0,66	0,52	-0,47	-0,45
L2	0,08	0,21	0,20	<b>1</b>	-0,43	0,06	-0,05	0,19	0,20	0,09	-0,05
L3	0,05	0,05	-0,19	-0,43	<b>1</b>	-0,29	-0,13	-0,24	-0,16	0,07	0,13
L4	0,55	0,27	0,36	0,06	-0,29	<b>1</b>	-0,13	0,74	0,68	-0,43	-0,60
C.	-0,01	-0,05	0,14	-0,05	-0,13	-0,13	<b>1</b>	0,00	-0,03	-0,02	0,25
M.	0,72	0,28	0,66	0,19	-0,24	0,74	0,00	<b>1</b>	0,84	-0,48	-0,58
N.	0,82	0,35	0,52	0,20	-0,16	0,68	-0,03	0,84	<b>1</b>	-0,35	-0,48
R.	-0,43	-0,08	-0,47	0,09	0,07	-0,43	-0,02	-0,48	-0,35	<b>1</b>	0,29
O.	-0,34	-0,29	-0,45	-0,05	0,13	-0,60	0,25	-0,58	-0,48	0,29	<b>1</b>

*A: Age; G: Gender; L1: Mother Tongue; C: Official Qualifications in Foreign Languages; M: Mobility Periods; N: Academic Level; R: Field of Study; k: Knowledge; At: Attitude; S: Skills; Aw: Awareness; O: Order of Research Subjects according to the result obtained in the survey.*

The students with the best results were those with previous experience abroad, a high academic level, a non-European mother tongue and, to a lesser extent, a high degree of multilingualism because they have more notion of cultural awareness (the metacognitive aspect in IC), which is crucial for intercultural development and for higher order thinking (Almeida et al., 2012). Despite being beneficial to achieving IC, age, gender, qualifications, and field of study were seen to be of lesser importance.

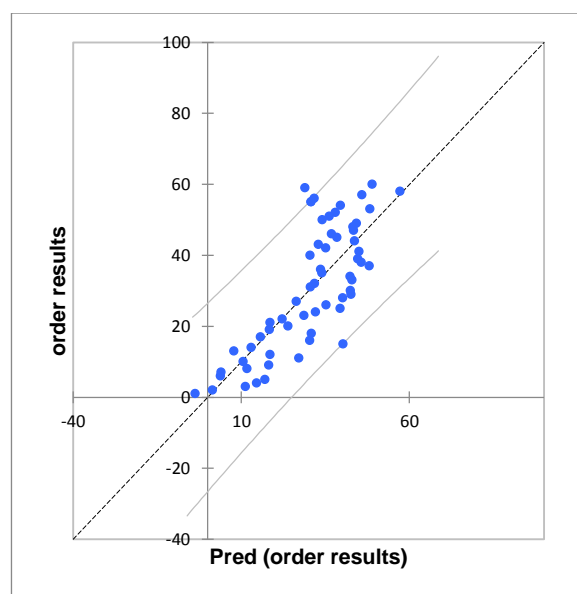


Figure 2. *Pred (order results) / order results*

As can be seen in Figure 2, the predictive capacity of the model is quite reliable, which means that the set of variables explains the order in which the samples are presented well, all of which shows the model's goodness of fit.

The second phase of analysis identifies the ideal Erasmus+ student participant profile for obtaining good results on completing the IC survey. The profile of those with the best results is: previous international experience, a high academic level, a non-European L1 and, to a lesser extent, a high degree of multilingualism (Gutiérrez Almarza et al., 2015). Age, gender, L2, L3 and L4 qualifications, and field of study have less weight, despite playing a positive role in achieving IC.

The 60 students in Table 1 can be divided into four groups on the basis of the average score achieved for each of the IC dimensions as follows: a) students with an average score lower than 3; b) those with a score of between 3 and 3.5; c) those with an average of 3.5 and 4; and d) those with an average of more than 4.

- 1) The first group (score of under 3) comprises subjects: 2, 29, 32, 37, 49, 50 and 60. These participants are mainly women, their average age is 25 and their L1 is either a European language or Turkish. Only half of those in this group have knowledge of an L4 and have spent no more than 6 months on a mobility placement (or an international experience). The average academic level of the group is 1.7, falling between an undergraduate degree (1) and a master's (2), with no difference in the field of study.
- 2) The second group consists of 17 students, of whom two thirds are European. The majority are women and there is an average age of 23.5. Only 3 have an L4, very few have more than 6 months of international experience, their academic level is 1.4, between an undergraduate and master's, and there is no field of study shared by all subjects 9, 10, 22, 26, 30, 31, 34, 36, 44, 45, 46, 47, 52, 54, 55, 56 and 59.
- 3) The third group is made up of a total of 23 students who scored, on average, between 3.5 and 4. These are women with an average age of 25 and a European language as their L1. When completing questionnaires they indicate that they do not have an L4 and, in cases where they do, this language is Spanish. Those within this grouping have spent at least 6 months on international mobility placements and have an average academic level of 1.8 in different fields of study.



- 4) Finally, the group with the best IC scores comprises 13 Uzbek and Arabic L1 students, including two from Kyrgyz and one Tajik speaker. These are participants 3, 4, 5, 6, 8, 12, 13, 14, 16, 19, 20, 21 and 23. Among this group there are no students with a European language as their L1. The average age of this group is higher (28.3) and the group includes 6 men and 7 women. Given that more women than men have participated in this study, within this group there is a proportionally large number of men. All have an L4, have spent at least 10 months on international mobility placements, have an average academic level of 2.6, between a master's and a doctorate and most have studied tourism or economics.

In this case study, 40 participants obtained an average score of 3 and 4 in IC acquisition. The majority are European women between the ages of 23 and 25 who have participated in mobility programmes for around 6 months, with no L4, with an academic level between an undergraduate degree and a master's, and with no specific field of study. It is for this reason that we do not agree with Rindoks (2010) and González-Peiteado & Rodríguez-López (2017) about interculturality in areas where communication plays a larger role. However, we therefore agree with Tompkins, Cook, Miller & LePeau (2017) who conclude that men develop less IC. From this large group those who, without any differentiating characteristics, show worse results in the degree of their IC development have been excluded. The reason for these lower performances may be due to aspects intrinsic to each student, such as immaturity, shyness, cultural issues, etc., that have not been contemplated in the model defined in this study.

Another small group of participants stands out clearly from the rest, as those with the highest level of education. As seen in Figure 1, this includes men and women who, since choosing their university studies have been geared towards this type of learning, and who have extensive international experience. The fact that they are Asian or African differentiates them from European students, who do not present the level of academic and multilingualism reached by these non-EU students.

## 5. CONCLUSIONS

By analysing a series of factors along with the criteria established by Fantini and Tirmizi (2006) for such a purpose, this study raised the question of the level of IC among Erasmus+ students. In this research, we have established profiles that allow us to define and identify the cognitive and intercultural priorities of students participating in such programmes. In this sense, this contribution to the field answers the initial research questions.

As a response to the first question, "How do age and gender influence the development of IC components in mobility students?", we conclude that gender does not have an obvious impact on the development of IC of the students studied (Martín del Buey & Camarero Suárez, 2001). This can be seen in the correlation matrix devised in this paper and is a finding which goes against that of Tompkins et al. (2017). However, the proportionately significant number of men within the group achieving the highest scores is striking. It may be the case that it is not gender that most affects the degree to which IC is developed among this group. However, age can be considered as a variable that influences motivation (González-Peiteado & Rodríguez-López, 2017) and which has pedagogical implications during the language learning process, although it cannot be considered to be a determining factor (Cortés Moreno, 2001). In our analysis the age variable has no direct effect on the levels achieved in IC, although there does seem to be some correlation between age and the group of which each student forms a part. The groups with the best IC scores have higher average ages than the rest.

Regarding the impact of multilingualism on aspects of IC, we can confirm that multilingual education has a clear influence on the development of IC components, to a greater extent than the factors previously mentioned. This proves the relevance of intercultural, multilingual, communication skills in the EHEA, as they offer professionals better job opportunities and competitive advantages for their businesses (Rondeau & De Janon, 2016). This is verified in our analysis, both in the study of the correlation between variables and in the regression or the study of the groups which emerged.

Finally, our last question addressed the possibility of designing intercultural profiles for mobility students using the model established by Fantini and Tarmizi (2006). In this sense, we can conclude that it is possible to create an intercultural profile for mobility students, according to their characteristics and language skills, as long as valid evaluation tools are used, such as the one designed by Fantini (Almeida et al., 2012), and provided that the controversial subjectivity element of this competence is not contemplated (Deardorff, 2006; Fantini, 2009; Griffith et al., 2016). The variables analyzed have resulted in a valid model to predict the success in the acquisition of IC (see Figure 2), even though some of them (like the studied academic branch), do not seem to have great implication on its development.

A limitation of this investigation would be that, because it is a case study, further continuity is needed to increase the number of subjects and include the participation of other European university institutions, with the aim of establishing comparisons regarding this intercultural phenomenon in mobility programmes. Likewise, this investigation considers it necessary to carry out a longitudinal study (Schartner, 2016), which would enable us to monitor these subjects in future mobility periods, in order to eliminate cohort factors. Thus, we could test whether the differences observed in intercultural components are really linked to natural factors and variables as well as to multilingualism. Furthermore, this type of research has major potential in terms of its application to other linguistic and sociocultural fields and the highlighting of the importance of intercultural learning in student mobility (Almeida et al., 2016).

In subsequent studies the analysis of further sets of psychological, cultural or socioeconomic variables is needed to explain why some students with the potential to reach higher levels of IC acquisition fail to do so, as well as the reason why subjects from less socioeconomically favoured places report a higher level of ongoing experience in their international training.

In conclusion, this study aims to provide a new perspective on the intercultural component of mobility programmes in Europe, which must be taken into account both for the design and the applicability of each of the actions implemented by the European Commission in the area of humanitarian action (Milne & Cowie, 2013). Likewise, this study has endeavoured to contribute to the teaching and management of these programmes with the aim of evaluating IC as a resource that can help achieve objectives and its impact on the community in which learning and international cooperation programmes within and outside Europe operate.

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## **APPENDIX 1**

### **Questions in the section *Intercultural Abilities* for each of the IC: knowledge, attitude, ability and awareness**

#### **Knowledge**

1. I could cite a definition of culture and describe its components and complexities
2. I knew the essential norms and taboos of the host culture
3. I could contrast important aspects of the host language and culture with my own
4. I recognized signs of culture stress and some strategies for overcoming it
5. I knew some techniques to aid my learning of the host language and culture
6. I could contrast my own behaviours with those of my hosts in important areas
7. I could cite important historical and socio-political factors that shape my own culture and the host culture
8. I could describe a model of cross-cultural adjustment stages
9. I could cite various learning processes and strategies for learning about and adjusting to the host culture
10. I could describe interactional behaviours common among spanish people in social and professional áreas
11. I could discuss and contrast various behavioural patterns in my own culture with those in Spain

#### **Attitude**

While in Spain, I demonstrated willingness to

12. interact with host culture members (I didn't avoid them or primarily seek out my compatriots)
13. learn from my hosts, their language, and their culture
14. try to communicate in Spanish and behave in "appropriate" ways, as judged by my hosts
15. deal with my emotions and frustrations with the host culture (in addition to the pleasures it offered)
16. take on various roles appropriate to different situations
17. show interest in new cultural aspects (e.g., to understand the values, history, traditions, etc.)
18. try to understand differences in the behaviours, values, attitudes, and styles of host members
19. adapt my behaviour to communicate appropriately in
20. reflect on the impact and consequences of my decisions and choices on my hosts
21. deal with different ways of perceiving, expressing, interacting, and behaving

22. interact in alternative ways, even when quite different from those to which I was accustomed and preferred
23. deal with the ethical implications of my choices (in terms of decisions, consequences, results, etc.)
24. suspend judgment and appreciate the complexities of communicating and interacting interculturally.

### **Skills**

25. I demonstrated flexibility when interacting with persons from the host culture
26. I adjusted my behaviour, dress, etc., as appropriate, to avoid offending my hosts
27. I was able to contrast the host culture with my own
28. I used strategies for learning the host language and about the host culture
29. I demonstrated a capacity to interact appropriately in a variety of different social situations in the host culture
30. I used appropriate strategies for adapting to the host host culture and reducing stress
31. I used models, strategies, and techniques that aided my learning of the host language and culture
32. I monitored my behaviour and its impact on my learning, my growth, and especially on my hosts
33. I used culture-specific information to improve my style and professional interaction with my hosts
34. I helped to resolve cross-cultural conflicts and misunderstandings when they arose
35. I employed appropriate strategies for adapting to my own culture after returning home

### **Awareness**

While in Spain, I realized the importance of

36. differences and similarities across my own and the host language and culture
37. my negative reactions to these differences (e.g., fear, ridicule, disgust, superiority, etc.)
38. how varied situations in the host culture required modifying my interactions with others
39. how host culture members viewed me and why
40. myself as a "culturally conditioned" person with personal habits and preferences
41. responses by host culture members to my own social identity (e.g., race, class, gender, age, etc.)
42. diversity in the host culture (such as differences in race, class, gender, age, ability, etc.)
43. dangers of generalizing individual behaviours as representative of the whole culture
44. my choices and their consequences (which made me either more, or less, acceptable to my hosts)

45. my personal values that affected my approach to ethical dilemmas and their resolution
46. my hosts' reactions to me that reflected their cultural values
47. how my values and ethics were reflected in specific situations
48. varying cultural styles and language use, and their effect in social and working situations
49. my own level of intercultural development
50. the level of intercultural development of those I worked with (other program participants, hosts, co-workers, etc.)
51. factors that helped or hindered my intercultural development and ways to overcome them
52. how I perceived myself as communicator, facilitator, mediator, in an intercultural situation
53. how others perceived me as communicator, facilitator, mediator, in an intercultural situation
54. Is there anything else you would like to add?

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