# Erasmus Experience: Impact on Students' Improvement of skills and Employability

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### **Abstract**

The Erasmus Program is a mobility program that allows students to have an exchange experience abroad. This article analyses some of the advantages of these exchange experience, focusing on the development of skills and the impact on employability. A sample of 118 students who did Erasmus answered a questionnaire about their perceptions regarding the development of skills and the evolution of their employability. Results indicate that Erasmus experience has a positive impact on students, both for the development of skills and for increasing their employability. The study also shows that "broad-mindedness", "attention to career possibilities" and "autonomy" are the three skills students perceive as the most important for employability. A gender analyses shows that females have a significantly higher perception of the development of six skills than their male counterparts ("initiative", "adapting to change", "autonomy", "initiating changes", "meeting new challenges", and "integration in multidisciplinary teams". Another relevant finding is that students who had fulfilled the objectives set for the Erasmus exchange had a higher perception of the development of the skill "independence"

### Introduction

The Erasmus Program, probably the most famous European Program, was established in 1987. With this program students can study abroad for up to 12 months per each cycle of tertiary education. In 2014, this program was superseded by the EU's program for education, training, youth and sport, referred to as 'Erasmus+'. In the field of higher education, Erasmus+ gives both students and staff opportunities to develop their skills and boost their employment prospects [1].

According to the annual reports of the European Commission, by 2017, when the 30<sup>th</sup> anniversary of the program was celebrated, 4,4 million of higher education students had participated in the Erasmus program [2]. Between 2014 and 2020, two million are expected to participate. Given the growing numbers of participants, it has become relevant to understand how an Erasmus exchange can affect the future life of the students, both in terms of the development of personal/professional skills and of the development of employability prospects. The current paper presents an investigation conducted on students who did Erasmus between 2013 and 2017, with four major objectives:

a. Analyse the perception Erasmus students have about the development of their skills.

- b. Analyse the perception that Erasmus Students have about their employability after Erasmus.
- c. Analyse whether perceptions about the development of skills and employability are significantly different among different groups of Erasmus students.
- d. Analyse which skills are perceived by Erasmus students as most relevant to their employability.

# **Literature Review**

# Erasmus and the development of skills

The Erasmus Impact Study [3] is probably the most important reference concerning the development of skills of participating students. This European Commission study goes beyond perceptional measures and introduces a new method of measurement based on a six memo© factors that compares the effects of mobility on students' employability related skills and their development through studying abroad.

The Erasmus Impact Study questioned mobile students about the degree which they considered having met these factors. Erasmus students after mobility did show a 70% higher memo© value than non-mobile students. Erasmus students ranked especially high on the Confidence value. According to the study, their advantage over non-mobile students increased by 42% in comparison with the pre-Erasmus experience.

On the other hand, a pool of employers questioned in the study considered all the six factors relevant, ranking them in the following order: curiosity ('openness to and curiosity about new challenges'), serenity ('awareness of one's own strengths and weaknesses'), confidence ('conviction regarding one's own abilities), tolerance of ambiguity ('tolerance towards other person's values and behaviour'), decisiveness ('better knowledge of what one wants and reaching decisions more easily') and vigour ('management of one's own career development, problem-solving skills').

Employers were also questioned about other relevant aspects regarding the hiring process of recent graduates. Interpersonal and soft skills were very relevant for all groups of employers, as well as experience in the area, while international orientation was also valued. Language skills, Information and Communication Technology skills (ICTs) and organisational skills were in the second tier of valued skills but still behind personal or soft skills [3].

Besides the Erasmus Impact study, a few authors have researched the impact of Erasmus on the development of skills. The study made by Martinez-Usarralde et al. [4], analysed how the different agents involved in an Erasmus exchange (Organizations members, professors of Universities and the Erasmus Students) perceive the influence of the Erasmus experience as regards the acquisition of skills. The authors grouped the benefits of doing Erasmus in 6 areas which they called "Adaptive Capabilities": Development of life projects, basic needs, mobility, professional development (skills), autonomy and development of individual intelligence. In one of these areas called "Professional Skills", they found out that doing Erasmus promotes the acquisition of professional skills such as mastery of other languages, autonomy, initiative, flexibility, empathy, capacity for adapting to multicultural environments and mind-opening.

Bryla [5] conducted a study with Polish alumni who had made an Erasmus exchange, which analysed the impact of the Erasmus exchange on their employability and professional career. The most relevant conclusions of this paper regarding the acquisition of skills, is that the Erasmus program allows students to have an advantageous cultural and social experience and gain new skills which future employers are looking for. From the skills learned, the author gives emphasis to language proficiency considering it as very important regarding their job position or professional career. The same author, in another study, tried to analyse the satisfaction of a group of International Polish alumni, regarding their Erasmus experience. This study, among other conclusions, verified that an Erasmus student can benefit from this experience, improving their foreign language skills, facilitating their social mobility and autonomy and increasing their self-confidence [6].

# **Erasmus and employability**

As far as employability as a reason to do Erasmus is concerned, nowadays work-related factors are becoming more important for students when they decide to take part in an exchange experience. Employability awareness, and consideration of international and intercultural experiences as a relevant element for the CV have been on the rise [3]. In this sense, the team of the Erasmus Impact Study points to a "institutionalization and development in the perception of the program itself; from origins linked more closely to the travelling and festive aspects, towards 'professionalization' of the admissions requirements, content and impact" [3, page 99].

Several authors have highlighted the employability as a benefit of doing Erasmus. According to Dolga et al. [7, page 1012] "the Erasmus exchange may be a strong point in itself, in the sense that it may help to increase the level of employability, and it may turn into an advantage in the labour market competition, as an element that most employers appreciate as positive". For Martinez-Usarralde et al. [4, page 7], "this program promotes the development of capabilities as regards adaptation of participants to different environments, the development of skills suited to the labour market, the increase in opportunities for employment and broadening in the range of options for life projects". Bryla [5] also concludes that the Erasmus program is associated with the enhancement of employability for the students, since it allows them to improve and obtain skills which the employers are nowadays looking for.

However, a review of the literature on the Erasmus context shows that studies regarding the development of skills and employability generally assume that the former lead to the latter [4]. We were unable to find empirical studies simultaneously measuring the development of skills and employability in the Erasmus context. This literature gap underlies the decision to undertake an empirical study including the two variables. The method and results of this study are described in the following sections.

### Method

Between July and August 2017, 200 e-mails were sent to students who did Erasmus between 2013 and 2017<sup>1</sup>. The e-mail provided a link to the questionnaire, placed in *Qualtrics*. A total of 118 questionnaires were completed, with a response rate of 59%.

<sup>&</sup>lt;sup>1</sup> All the students contacted were listed on the database of ESN (Erasmus Student Network) Association in Lisbon.

# **Participants**

In the total sample of 118 participants, 33 (27.7%) were male and 85 (71.4%) were female. All the participants were born between 1989 and 1996, with a majority of 87 (73.8%) between 1992 and 1995. About half of the participants (67, 56.3%) did Erasmus in Portugal and the other were scattered in 20 other countries. The most-represented country of origin is Italy, with a total of 36 (30.3%) participants, followed by Portugal with 19 (16.1%), Romania with 7 (5.9%), Spain and Czech Republic with 6 (5.1%) each. The questionnaire was directed only for participants who did Erasmus between 2013 and 2017. About half of participants (60, 50.4%), were studying Social Sciences, which was the largest group in the field of studies, followed by Humanities with 25 (21.2%), Applied Sciences with 22 (18.6%), Natural Sciences with 7 (5.9%) and Arts with 3 (2.5%). In total, 104 (87.4%) of the participants fulfilled all the academic objectives that were set for the Erasmus Exchange Program and 50% (59) of them are currently working.

# **Instrument**

To measure students' perceptions on the impact of Erasmus for the development of professional skills we used the list of 33 skills identified by Martínez-Usarralde *et al.* [4] as the main skills students can acquire while doing Erasmus. For each skill, participants were asked to rate themselves regarding their skills before and after Erasmus, using a 7-point scale, where 1=extremely poor and 7=excellent.

To measure the perception that Erasmus student have about their employability after they finish Erasmus we used a single question specifically developed for the purpose of this study: "I believe doing Erasmus had a positive effect on my employability". A 7-point scale was used, where 1=strongly disagree and 7=strongly agree.

### Results

Our first objective was to analyse the perception Erasmus students have about the evolution of their skills. For this, we used paired samples t-test for each skill, where the pair was composed by the two ratings – before and after Erasmus. For all the 33 skills, there was a significant difference in the rating before and after Erasmus (p<0.05). In all cases, the rating after Erasmus was significantly higher than the rating before Erasmus (Table I).

Table I – Paired samples t-test

Pair		Mean	t-value	Df	Sig.
Flexibility	Before Erasmus	4,36	-20,134	118	0,000
	After Erasmus	6,28			
Initiative	Before Erasmus	4,28	-15,865	118	0,000
	After Erasmus	6,03			
Self-Management	Before Erasmus	4,42	-14,615	118	0,000

	After Erasmus	6,16			
Responsibility	Before Erasmus	5,14	-7,662	118	0,000
	After Erasmus	6,09			
Problem Solving	Before Erasmus	4,71	13,311	118	0,000
	After Erasmus	6,16			
Social Skills	Before Erasmus	4,76	15,811	118	0,000
	After Erasmus	6,37			
Entrepreneurship	Before Erasmus	4,05	10,994	118	0,000
	After Erasmus	5,15			
Efficiency	Before Erasmus	4,64	-8,917	118	0,000
	After Erasmus	5,54			
Negotiation	Before Erasmus	4,38	-9,972	118	0,000
	After Erasmus	5,34			
Communication Skills	Before Erasmus	4,59	-19,547	118	0,000
	After Erasmus	6,38			
Tolerance for others	Before Erasmus	5,06	-10,994	118	0,000
	After Erasmus	6,36			
Adapting to change	Before Erasmus	4,82	-15,757	118	0,000
	After Erasmus	6,54	_		
Pro-activeness	Before Erasmus	4,50	-14,163	118	0,000
	After Erasmus	5,82	_		
Personal Maturity	Before Erasmus	4,73	-16,093	118	0,000
	After Erasmus	6,10	_		
Courage	Before Erasmus	4,32	-14,696	118	0,000
	After Erasmus	6,01	_		
Respect for others	Before Erasmus	5,76	-9,458	118	0,000
	After Erasmus	6,59	_		
Team Work	Before Erasmus	4,93	-9,286	118	0,000
	After Erasmus	6,00	_		
Independence	Before Erasmus	4,91	-15,006	118	0,000
_	After Erasmus	6,55	_		
Coping with uncertain situations	Before Erasmus	4,50	-13,481	118	0,000
	After Erasmus	5,82	_		
Mastery of foreign languages	Before Erasmus	4,38	-18,242	118	0,000
	After Erasmus	6,14	_		
Management of resources	Before Erasmus	4,55	-11,179	118	0,000
	After Erasmus	5,67			
Building a network of relationships	Before Erasmus	4,55	-15,200	118	0,000
-	After Erasmus	6,16	_		
Initiating changes	Before Erasmus	4,51	-14,811	118	0,000
	After Erasmus	5,87	_		
Meeting new challenges	Before Erasmus	4,50	-15,464	118	0,000
	After Erasmus	6,17	- '		
Integration in multidisciplinary teams	Before Erasmus	4,50	-12,578	118	0,000
	After Erasmus	6,17	-		•

Table I – Paired samples t-test (cont.)

Pair		Mean	t-value	Df	Sig.
Attention to career possibilities	Before Erasmus	4,39	-14,158	118	0,000
	After Erasmus	6,17			
Willingness to learn	Before Erasmus	5,06	-10,989	118	0,000
	After Erasmus	6,23			

Use of Information Technologies	Before Erasmus	4,84	-8,483	118	0,000
	After Erasmus	5,63	_		
Adapting to new countries	Before Erasmus	4,62	-14,645	118	0,000
	After Erasmus	6,41	_		
Adapting to a multicultural environment	Before Erasmus	4,80	-14,144	118	0,000
	After Erasmus	6,55			
Empathy	Before Erasmus	5,02	-11,235	118	0,000
	After Erasmus	6,04			
Autonomy	Before Erasmus	4,84	-13,406	118	0,000
	After Erasmus	6,23	_		
Broad-mindedness	Before Erasmus	4,97	-12,709	118	0,000
	After Erasmus	6,24	_		
			•		

The second objective was to analyse the perception that Erasmus student have about their employability after they finish Erasmus. Students have a high perception of their employability after they finish Erasmus (mean of 6,09; standard deviation of 1,086), well above 4, the theoretical mid-point of the scale (Table II).

Table II – Employability Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
I believe doing Erasmus had a positive effect on my employability Valid N (listwise)	118 118	2	7	6,09	1,086

The third objective was to analyse whether there are sub-groups of Erasmus Students with different perceptions about their evolution of skills and their employability. The subgroups were identified by gender (Male and Female), by the fulfilment of objectives that were set for the Erasmus Exchange (Fulfilled or Not fulfilled), and by the current employment situation (Employed or Non-employed).

To have a measure of evolution of skills, new variables were created. For each skill, we computed the difference between the rating before Erasmus and the rating after Erasmus. Subsequently we conducted ANOVA to analyse differences in the three sub-groups (Table III). As far as gender is concerned, significant differences were found for "initiative", "adapting to change", "autonomy", "initiating changes", "meeting new challenges" and "integration in multidisciplinary teams" (p<0,05). In all cases, females have a higher perception of the positive evolution of their skills. As far as fulfilment of objectives was concerned, a significant difference was found for "independence", with participants who have fulfilled the objectives set for the Erasmus exchange, having a higher perception of independence. For employment situation, no significant differences were found.

The fourth and final objective was to understand which skills are perceived by Erasmus students as being more associated with their employability. For this we conducted a stepwise regression analysis, with employability (measured by the question "I believe doing Erasmus had a positive effect on my employability") being the dependent variable and the 33 skills after Erasmus as the independent variables.

Table III- Development of skills by gender and fulfillment of objectives

Variable	Gender	Mean	F	Sig.
Initiative	Male	1,3939	4,208	0,042
	Female	1,8941		
Adapting to change	Male	1,2727	6,714	0,011
	Female	1,8941		
Autonomy	Male	1,0303	4,542	0,035
	Female	1,5176		
Initiating changes	Male	1,0606	4,837	0,030
	Female	1,4941		
Meeting new challenges	Male	1,818	8,032	0,005
	Female	1,8471	•	
Integration in multidisciplinary teams	Male	0,9091	8,344	0,005
	Female	1,6235	•	
Independence	Fulfilled	1,7404	4,553	0,035
	Not Fulfilled	1,0000		

The model obtained only retained three of the 33 skills: Broad-mindedness, attention to career possibilities and autonomy. These three skills explain 23.2% of the employability variance  $(R^2)$  as showed in the table below (Table IV).

Table IV- Skills more associated with Erasmus Students' employability

Predictor	R <sup>2</sup>	Std Beta	t-value	p-value
Broad-mindedness		0,246	2,690	0,008
Attention to career possibilities	0,232	0,202	2,261	0,026
Autonomy		0,197	2,248	0.026

### Conclusion

In accordance with previous researches, participants of this study perceive that their skills have significantly improved as a result of participating in Erasmus. Additionally, we found that females perception of their development of skills is significantly higher that the perception of their male counterparts. Female participants have a higher sense of the positive evolution of their skills, specially: "initiative", "adapting to change", "autonomy", "initiating changes", "meeting new challenges" and "integrating in multidisciplinary teams". It was also interesting to note that the participants who had fulfilled the objectives set for the Erasmus Exchange had a higher perception of the advantages of doing Erasmus and its positive impact on "independence", in comparison with students that had not fulfilled those objectives.

Regarding the perception the participants had about their possibilities of becoming employed after the Erasmus Experience, the results indicate that students perceive that doing Erasmus strongly increases their employability prospects. Results also indicated that, out of the 33 skills analysed, "broad-mindedness", "attention to career possibilities" and "autonomy" are the most important for employability.

The results presented above, support the growing awareness that, nowadays, the advantages of an experience studying abroad, seem strongly important for the Curriculum of the youngsters, who have the opportunity to improve the skills that can be important for their future when looking for a job. Therefore, regarding the connection found between doing Erasmus and the possibility to improve skills, we can also connect the Erasmus exchange with employability, since this experience prepare the students for the tendencies of the labour market of today.

# **Major contributions**

Whereas previous studies only studied the development of skills and from there concluded that employability had increased, we introduced a measurement of employability along with the measurement of skills. This allowed us to identify which skills are seen as contributing more to employability. This analysis, to the best of our knowledge, has not been undertaken before.

By introducing the variable "gender" in the analysis, it was possible to find that females have a perception of the development of skills that is significantly higher that the perception of males. In previous studies we did not find gender analysis and so, we believe that this result is a contribution that may be interesting to follow in subsequent researches.

### Limitations

Since the sample size is rather small, results of this study are only tentative and must be interpreted with caution. We also could not analyse whether differences in skills growth perceptions could be affected by other variables, such as country, age, study area and year in which the exchange was made, because there was not a sufficient number of participants in all these groups.

It is also worth noting that the Erasmus Impact Study [3], made in 2014 by the European Commission, included two types of assessments for participants: one based on self-assessment, like the one used in this paper, and another based on psychometric external analyses. This double method allowed researchers to prove that not only did students consider themselves to have improved certain employable skills, but external tests gave the same evidence. Although this paper was based exclusively on self-assessment, we believe that it is supported by the scope of the Erasmus Impact Study which concluded that Erasmus+ students really improve their skills while on mobility.

### **Suggestions for future research**

It would be interesting that future research on the topic could reach a bigger sample in order to clarify the impact of Erasmus exchanges, namely, whether cultural and nationality differences have an impact in students' skills development. It would also be interesting to explore the reasons for the gender differences found in the present study.

Another suggestion for future research would be to have a control group made up by students that did not do Erasmus in order to better understand the effects of the Erasmus Exchange on the perception of skills development. Both groups could also be analysed a year after graduation, in order to learn about their job status, to better connect employability and Erasmus.

### References

- [1] Eurostat (2016). Annual Activity Report: Education, Audiovisual and Culture Executive Agency [online] Available at: <a href="https://ec.europa.eu/info/sites/info/files/file\_import/aar-eacea-2016\_en\_0.pdf">https://ec.europa.eu/info/sites/info/files/file\_import/aar-eacea-2016\_en\_0.pdf</a> [Accessed 2 Sep.2017].
- [2] Europa.eu. (2017). European Commission PRESS RELEASES Press release New figures show record number of participants in Erasmus+. [online] Available at: http://europa.eu/rapid/press-release\_IP-17-82\_en.htm [Accessed 2 Sep. 2017].
- [3] European Commission (2014). *The Erasmus Impact Study. Education and Culture*. Luxembourg: European Union.
- [4] Martinez-Usarralde, M., Pausá, J. and Lopez, R. (2017). The ERASMUS experience and its capacitating potential: Analysis of adaptive capabilities. *International Journal of Education Development*, 5, 101-109.
- [5] Bryla, P. (2015a). The impact of international student mobility on subsequent employment and professional career: a large-scale survey among polish former Erasmus students. *Procedia Social and Behavioral Sciences*, 176, 633-641.
- [6] Bryla, P. (2015b). Self-Reported Effects Of And Satisfaction With International Student Mobility: a large-scale survey among polish former Erasmus students. *Procedia Social and Behavioral Sciences*, 176, 2074-2082.
- [7] Dolga, L., Filipescu, H., Mazilescu, C., and Mitroi, M. (2015). Erasmus Mobility Impact On Professional Training And Personal Development Of Students Beneficiaries. *Procedia – Social and Behavioral Sciences*, 191, 1006-1013

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