ACADEMIC TOURISM: A MORE SUSTAINABLE TOURISM RODRÍGUEZ, Xosé A.* MARTÍNEZ-ROGET, Fidel PAWLOWSKA, Ewa

Abstract: This paper tries to justify that academic tourism, due to its characteristics, is a more sustainable type of tourism than conventional tourism. For this reason, we have analysed academic tourism taking into account the three dimensions of the sustainable development: economic, environmental and social. The results demonstrate that academic tourism has relatively greater economic impact than conventional tourism, that its negative effects on the environment are not significant, and that it benefits the future generations, since it contributes to increase knowledge and interrelationship among students of different countries and cultures. In light of these results, policy implications are then discussed. We analyze the experience of European Erasmus students in Spanish universities for the period 2000-2010.

Keywords: academic tourism; economic impact; sustainable tourism **JEL Classification**: L83, I29, Q26

1. Introduction

The last few decades have witnessed an important growth in student mobility across countries for the purpose of studying. In this sense, the increased mobility of students in higher education has been of special significance. Given that this type of student mobility shows its own specific characteristics, it is possible to consider this kind of mobility as a new type of tourism (Rodríguez, Martínez-Roget, & Pawlowska, 2012). This new type of tourism is known as "academic tourism", this being defined as a distinct type of tourism that would include any stays made in higher education institutions in places outside their usual environment for a period of less than one year, the main objective of which is to complete degree-level studies in universities and / or attending language courses organized by these centres. Therefore, one could differentiate between domestic academic tourism (if the move to study takes place within the country) and international academic tourism (if the move is abroad). This research focuses on this latter form of academic tourism.

As one out of several side effects of globalisation, the last few decades have witnessed a significant growth in student mobility across countries for the purpose of studying. In this sense, the increased mobility of students in higher education has been of special significance. The ERASMUS (European Region Action Scheme for the Mobility of University Students) programme is a good example of this dynamic. Since the

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programme's inception in 1987, the number of students reaping its benefits has been on the rise every year; to the extent that, between its implementation and the academic year 2008/2009, the programme has mobilized over 2 million students (European Commission, 2010a).

Of the total number of students who come to study in Spain in an university degree as result of exchanges between universities (exchange students), about 70% are related to the Erasmus program. Table 1 presents the evolution of the number of incoming students by autonomous regions, and its relation to the evolution of enrollment at Spanish universities (presential enrollment).

From the analysis of Table 1 we can draw some interesting conclusions. First, the presence and participation in the Spanish universities of the Erasmus students is increasingly important due to a double dynamic: by continued growth in recent years (72.6% in the period considered) and by the decline in student enrollment (-3.2% in the period considered). On the other hand, it is necessary to emphasize the uneven participation of Spanish regions in terms of the attractiveness of such students.

	of the number of incoming Erasmus students and the enrollment.							
		Academic year			Academic year		Var.(2000-	
		200	0-01		2009-10		2010)%	
			(Erasmu					
	_		s/	_		(Erasmus	_	
	Eras	Enroll	enrollme	Eras	Enroll	/Enrollm	Eras	Enroll
Autonomous region	mus	ment	nt)%	mus	ment	ent)%	mus	ment
Andalusia	3130	265457	1.2	6332	251620	2.5	102.3	-5.2
Aragón	564	41035	1.4	815	35621	2.3	44.5	-13.2
Asturias	335	38704	0.9	480	26323	1.8	43.3	-32.0
Balearics	73	13716	0.5	141	15321	0.9	93.2	11.7
Canary Island	428	47346	0.9	889	44821	2.0	107.7	-5.3
Cantabria	168	13405	1.3	261	10873	2.4	55.4	-18.9
Castile and Leon	1404	99902	1.4	2331	87751	2.7	66.0	-12.2
Castile La Mancha	111	33965	0.3	376	32469	1.2	238.7	-4.4
Catalonia	3095	196686	1.6	4201	203220	2.1	35.7	3.3
Estremadura	183	28197	0.6	220	24237	0.9	20.2	-14.0
Galicia	537	95775	0.6	1234	75031	1.6	129.8	-21.7
La Rioja	43	7244	0.6	69	8403	0.8	60.5	16.0
Community of								
Madrid	3465	249939	1.4	5447	268556	2.0	57.2	7.4
Region of Murcia	348	39386	0.9	615	44198	1.4	76.7	12.2
Chartered								
Community of								
Navarre	214	19012	1.1	249	17727	1.4	16.4	-6.8
The Basque Country	745	74958	1.0	756	57490	1.3	1.5	-23.3
Valencian								
Community	2135	141458	1.5	4890	157784	3.1	129.0	11.5
	1697	140618		2930	136144			
Total Spain	8	5	1.2	6	5	2.2	72.6	-3.2

Table 1. Evolution of the number of incoming Erasmus students and the enrollment

Source: Ministry of Education, Culture, and Sport and the National Institute of Statistics

If we add to students who come to Spanish universities within the Erasmus mobility program, those coming within other exchange programs, those who enroll for Masters and PhD, and those who access universities for language courses (language students) we obtain a figure of over 60,000 foreign students studying in Spanish universities annually. These students are what we call academic international tourism. In order to set the characteristics of international academic tourism from the perspective of sustainability, a survey was carried out.

The idea of sustainability has come to enjoy strong rhetorical success in the last few decades. The Brundtland Report (WCED, 1987) advocated a referentially intergenerational definition of sustainable development: 'sustainable development is a development that meets the needs of the present without compromising the ability of future generations to meet their own needs'. The World Travel and Tourism Council (WTTC, 2010) has equated sustainability with guaranteed respect for local environments, societies and cultures. Weaver (2012) associates sustainability with strategic management that strives to minimise the direct and indirect costs of a given activity whilst concurrently maximising the attendant benefits, both locally and globally.

According to Munasinghe (1993), in order to do any analysis of sustainability, it is necessary to consider its three dimensions: economic, environmental and social. The economic sustainability reaches the maximum growth, using the available resources in an optimal way from the point of view of the market (it reaches the maximum economic efficiency). The search of the maximum economic efficiency must take the environment into account (it is necessary to keep the environmental quality). The economic efficiency and the protection of the environment do not guarantee the sustainability of an economic activity without the social dimension (the inter-generational equity, according to the definition offered in the Brundtland Report). Therefore, the main objective of this paper is to analyse the sustainability of academic tourism taking into account its three aforementioned dimensions.

The remainder of the paper is then structured as follows. In Section 2, we examine the case of academic tourism in Galicia with respect to the three dimensions of sustainability. Conclusions and policy implications of the results are then summarized in Section 3.

2. The sustainability in academic tourism

This research focuses on the analysis of the characteristics of foreign university students who enrol in official courses offered by the three Galician universities, which make up the University System of Galicia (SUG). In order to establish the characteristics of this type of tourism and to analyse the sustainability of this activity, 730 students enrolled in the SUG in 2008 were surveyed. These students were selected through stratified random sampling. The questionnaire has been elaborated following the indications of Ryan (1995). The results of the survey allow us to outline some specific characteristics of this type of tourism from the point of view of sustainability.

2.1. The economic impact of academic tourism

In order to compare the economic efficiency or the relative economic importance of academic tourism we have estimated its direct economic impact (DEI). In order to estimate the DEI, it is necessary to multiply the 'number of foreign students' by the 'average annual expenditure' made by these students. The number of foreign students enrolled in the SUG was obtained from the International Relations Offices of the three Galician universities. These students were divided into two groups: those whose purpose of stay was to conduct studies in an university degree as a result of exchanges between universities (exchange students) and those whose purpose of stay was to study languages (language students). In 2008 there were 3,212 students enrolled across the three Galician universities; 1,255 of them were students who came to study languages and the remaining 1,957 were enrolled in university degree courses.

In order to estimate the average expenditure per tourist, we used the results of the previously mentioned survey. Table 2 shows the results for academic tourism average spending (by type of expenditure) and average stay, distinguishing between exchange students and language learners. For the average expenditure per visitor, the average monthly expenditure on concepts related to everyday life (multiplied by the average stay) must be considered and must also then be added to the registration fees and expenditures in visits to other parts of Galicia. The average expenditure per foreign student is equal to 3,608 euro (equivalent to 752 euro per month) and is very similar to the average monthly expenditure estimated in Montull (2005) for these visitors. From a disaggregated point of view, different patterns (for expenditure and stay) are observed for language learners (column 2) and for exchange students (column 3). Language learners have a higher average monthly expenditure level, but a much shorter average stay (2.1 months versus 6.6 months for the exchange students) and, as a result their total expenditure is lower (2,972 euro compared to 4,016 euro for exchange students).

Language	Exchange	Academic tourism
students	students	(total)
678	539	593
1,378	318	732
170	141	152
2,1	6,6	4,8
2,972	4,016	3,608
	students 678 1,378 170 2,1	students students 678 539 1,378 318 170 141 2,1 6,6

Table 2. Average expenditure and stay per tourist

Source: Self-elaborated.

Once the number of foreign students and average expenditure are known, the direct economic impacts can be estimated. These results are presented in Table 3.

Table 3. Direct impact of academic tourism
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	Number of	Average expenditure	Impact (thousands of
	visitors	(Euros)	Euros)
Language students	1,255	2,972	3,730
Exchange students	1,957	4,016	7,859
Total academic tourism	3,212	3,608	11,589

Source: Self-elaborated.

In order to take into account the relative economic importance of academic tourism, data from students who enrol in the Galician universities (international academic tourism) may be compared to data from international visitors arriving in Galicia (conventional international tourism). To establish this comparison we used data (2008) from the Institute of Tourism Studies (IET, 2011) related to the number of foreign visitors, the direct spending of these visitors and their average stay. These data are presented in Table 4, together with the academic tourism data.

	Academic	Conventional tourism	Academic/		
	tourism	(*)	Conventional (%)		
Number of visitors	3,212	932,870	0.34		
Direct expenditure (thousands of Euros)	11,589	744,430	1.56		
Expenditure per visitor	3,608	798	4.52		
Total number of overnight stays	462,528	7,462,960	6.20		
Average overnight stays (days)	144	8	1.800		

Table 4. Relative economic importance of academic tourism

Source: Self-elaborated based on data of IET (2011) and International Relations Offices. (*) All foreign tourists are included except for those included as academic tourists.

The analysis of the data presented in Table 3 allows us to figure out the relative economic importance of academic tourism in Galicia. This importance is based primarily on the fact that, on average, foreign students coming to study in the Galician universities stay much longer, on average, than other foreign visitors (their average stay is 1,800% greater, or, which is the same, 144 days versus 8 days). This means that, in terms of overnight stays, overseas students now account for 6.20% of conventional foreign tourists. Consequently, although the number of students who enrol in the Galician universities adds up to less than 0.5% off the total percentage of conventional foreign visitors, in terms of overnight stays, one foreign student is equivalent to 18 conventional tourists and their average expenditure is thus over four times greater than that of conventional tourists. Moreover it is important to highlight:

- Their high capacity to generate additional spending to their living ones, mainly caused by their visits to localities near their centre of studies (almost 93% of these students visit other places in Galicia) and by visits of their friends or relatives (over 50% of these students receive some visit from family or friends during their stay).
- The duration of their stay, which is typically much longer than in other types of tourism and helps to reduce the seasonality in tourist activity that tends to concentrate in summer months.
 - In turn, academic tourism contributes to the diversification of regional tourism.

In conclusion, from the economic perspective, academic tourism has relatively greater economic impact that conventional tourism (it is a relatively more efficient type of tourism).

2.2 The environment impact of academic tourism

The environmental (or ecological) impacts are the consequences of the tourist interaction with the environment. The relationship between tourism and the environment is complex and it involves many activities that may have diverse environmental effects, both positive and negative. Many of them are linked to the construction of infrastructure such as roads, airports or tourist facilities. The negative impacts of tourism development can gradually destroy the environmental resources on which it depends. On the other hand, tourism has the potential to generate beneficial effects on the environment by contributing to its protection and conservation. This will create awareness for environmental values that can serve as a tool to finance protection of natural areas and increase their economic importance. Picornell (1993) makes an assessment of these effects, describing the environmental impact of three possible levels: indifference, which occurs when tourism activities cause no transformation; symbiosis, where tourism contributes to the conservation of the environment, and conflict - the result of overuse or pollution of the results of the carried-on survey proves that international academic tourism can fit into the first two levels due to the following:

- The foreign students integrate into college life similarly to other students: the duration of their stay and consumption patterns are similar to domestic students.
- Their presence does not require the creation of new infrastructure which could have further negative impact on the environment.
- Their activity is concentrated on college campuses or cities and not in open spaces that may be of special protection.
- Foreign students tend to stay mostly in shared apartments, dorms, with families, and in college-organized housing. This behaviour is typically very different from that of a conventional tourist, who usually stays in big hotels, which may have greater environmental impact because of its size and position.
- The universities themselves, as educational centres often promote the use of recycled products, alternative energy resources and direct involvement in the ecological education. Therefore, the pattern of behaviour of a university student is typically more environmentally respectful.
- Since academic tourism contributes to regional economic diversification, the installation of polluting industries may not be necessary thanks to its development.

2.3 The impact of academic tourism on future generations

The reasons for the increase in international student mobility among higher education students are diverse. There are reasons related to the growing interest of students to educate themselves in a global context. This education may include, apart from the above mentioned studies, the ability to learn new languages, experience other cultures and customs and make new friends. This latter issue is important since it will help new generations to meet and interrelate more in the future.

One section of the survey aimed to capture the level of satisfaction of students with their stay in the region and possible plans to revisit or recommend the region. As indicated in Figure 1, 88.8% of respondents would recommend Galicia as a tourist destination, compared to 3.9% who disagreed and 7.3% whose opinion was not determined in this issue (they were not sure –NS).

On the other hand, 79.7% of respondents were willing to recommend their host university to other potential students, 5.4% did not agree, while the remaining students did not have a conclusive opinion on this subject (see Figure 2).

Furthermore, 75% of the interviewed academic tourists were planning to revisit Galicia in the future, 21.2% were not sure, and the remaining 3.8% had no plans to return (see Figure 3).

Figure 1. Destination recommendation

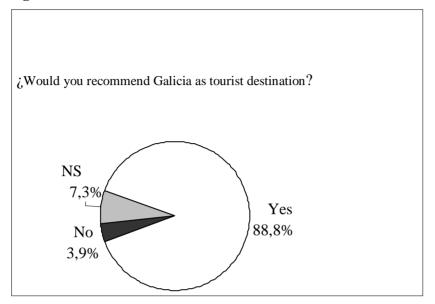
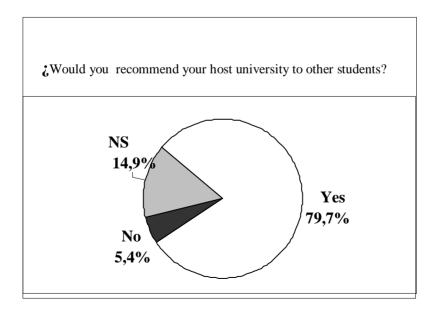
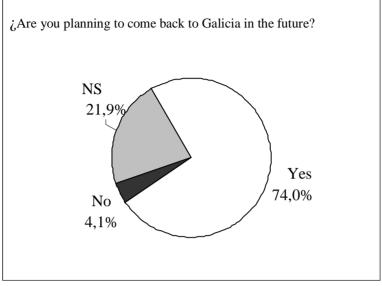


Figure 2. Host centre recommendation







Source: Self-elaborated.

The above results indicate that foreign students show a high degree of loyalty to the destination, and taking into account that the word-of-mouth effect is very important to this type of visitor (Rodríguez, Martínez-Roget, & Pawlowska, 2012), we should assume that future generations will know each other more (different customs, cultures, languages ...) and that greater mutual understanding should be beneficial for these new generations. Therefore, from this perspective, academic tourism does not reduce possibilities or capabilities of future generations but enlarges those capabilities based on increasing knowledge and interrelation of students from different countries and different cultures.

3. Conclusions and policy implications

The academic tourism is a separate part of tourism (although still interlinked with other types of tourism) that encompasses the mobility of students in higher education, provided that such mobility meets certain conditions, in accordance to the recommendations of the World Tourism Organization.

The main conclusion of this study is that, given the specific characteristics of academic tourism, it is a more sustainable type of tourism than the conventional one, due to the fact that:

- From the economic perspective the academic tourism has relatively greater economic impact that conventional tourism (it is a relatively more efficient type of tourism)
- Its environmental impact is not significant.

Rodríguez, X.A, Martínez-Roget, F., Pawlowska, E. Academic Tourism: A More Sustainable Tourism

- It enlarges the possibilities or capabilities based on increasing knowledge and interrelation of students from different countries and different cultures.

With regard to the design of the effective policies in academic tourism from the point of view of sustainability, it is necessary to implement policies that maximize the positive effects of this activity and minimize the negative ones. More specifically, it is necessary to implement policies that increase the economic and social impact of the academic tourism, and that at the same time avoid the environment deterioration. Some recommendations can be made:

- Given that academic tourism (as a distinct type of tourism) has a significant growth margin, the task of promotion and enhancement should not be exclusive to universities, but should also be shared by people in charge of the cities in which higher education institutions are located and, especially, those responsible for regional tourism policies.
- Since word-of-mouth is key in the promotion of universities, generating as it does positive preferences, it is essential to offer students adequate treatment in all areas- namely, an adequate welcome, clear information and support in areas where they might need it, such as administrative procedures, language difficulties or educational issues.
- As exchange programs, like the Erasmus program, are the key element in the arrival of foreign students at the universities, the relevant conventions must be encouraged to further increase this trend. At this stage, it is important to detect whether there are any barriers (such as the aforementioned lack of quality or lack of management) preventing the establishment of new conventions. Should any such barriers appear, the right steps should be taken to eliminate them.
- The universities should play a more active role in promoting the use of recycled products, alternative energy resources, direct involvement in the ecological education and training of the students.

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