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Cross-Border Cooperation (CBC) in Southern Europe—An Iberian Case Study. The Eurocity Elvas-Badajoz

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Abstract: The experiences of cross-border cooperation (CBC), undertaken not only in Europe but throughout the world, have enabled areas to gain greater importance in recent decades at an international level, showing potential for integrative functions and joint development as exemplified by several CBC projects. The present paper assesses the impact of CBC projects by analyzing a protocol established in 2013 between the cities of Elvas and Badajoz, which induced the creation of the Eurocity Elvas-Badajoz. The paper kicks off with a critical review on territorial factors for success in CBC areas, considering the analysis of several case studies throughout Europe. The lessons learned, taken from the analyzed case studies, and the identified territorial success factors were used as assessment points for the investigation of the target study area, the Eurocity Elvas-Badajoz. The investigation explores public participation perceptions towards the identification of what changes with respect to standards of life with the CBC project, providing the current state of affairs and identifying where to place efforts in order to reach sustainable development for the region. While being a transition area, it presents several opportunities for growth. These opportunities have not yet been object of analysis and debate with respect to lasting, sustainable successful growth. The present research enables the identification of several territorial factors for success in the study area, such as the connectivity/movement between cities and strong political commitment. From the identified critical factors, it was possible to highlight the importance of public transportation as a priority for achieving success in this CBC project.

Keywords: spatial planning; sustainable development; cross-border-cooperation; territorial cohesion; Eurocity

1. Introduction

Border areas have attained a status of special interest, not only with respect to national sovereignty but also with regard to cooperation between populations [1–3]. However cross-border cooperation (CBC) processes at the Iberian level, despite their undeniable dynamism, are not progressing and developing as fast as in other regions of Europe [4–8].

Experiences of CBC projects, undertaken all over Europe and the rest of the world and creating a global network of relationships among people, always try to achieve mutual gain situations [9–11]. CBC projects seek to cover a large range of issues, such as for example: integration activities and stimulating development of border areas [11–14], among many others.

The definition of CBC was provided for the first time in the European Charter for Border and Cross-Border Regions (1981) [1,15], in the European Outline Convention on Transfrontier Cooperation

between Territorial Communities or Authorities (1980) [1,16], and in the European Charter of Regional Self-Government (1997) [1,17].

CBC is especially relevant in Europe since this continent has a saturation of countries larger than any other when its small area is taken into account, resulting in a third of the European population living in border areas [18–20].

Policies and EU cohesion carried out by the Union's central administration are crucial for the proper functioning of several interaction activities inherent to economic, social and cultural exchange across countries. Development programs and territorial cooperation were implemented in neighboring EU countries by the Tool of Good Neighbor Association, financed by the European Development Fund [21,22].

Against this background but on a smaller, local scale instead of a regional one, the case of Eurocities takes the spotlight. Eurocities were born as agreements between neighboring municipalities, historically linked but belonging to different territories of the European Union [23]. The principle is based on sharing resources and synergies for joint promotion, trying to achieve, in the long term, stronger, more mutual cohesion and a higher development level in the region [24,25].

This paper aims to identify and analyze the critical factors for territorial success, as well as to provide a current state of affairs, and also to identify where the main effort should be spent in order to reach local and regional sustainable development. In fact, CBC projects represent a crucial step towards prosperity of border areas as mentioned by Yigitcanlar [26] and constitute an essential step to achieve sustainability, since they enable the basis creation to establish major structural changes and policies geared against sustainability issues.

At the basis of this study is the goal of fostering sustainable development, highlighting the concept of sustainability not only as urban planning concern, but also as an important contribution to the resurgence of a past concept that has been subject of discussion for a long time. At the epicenter of this concept is the economic deterioration that many developed countries have come to feel, and which unfortunately continues almost daily [27–33].

Research has gained additional momentum considering current developments, such as the recent situation in Crimea (Ukraine) with Russia, the Greek–German frictions, the rise of terrorism in European continent (leading to an increasingly fractious debate about free movement in Europe as well as the resurgence of nationalist, extremist sentiments among European citizens), economic fallouts in Europe or even the recent Brexit scenario [34–37]. These problems lead us to finding strategies and new approaches, through which it can be possible to achieve a greater territorial cohesion.

In this regard, this research analyzes other studies, such as the work of Baycan-Levent et al., Payre, or Castanho et al. [38–40], where success factors for relationships and networking between twin and Eurocities were analyzed. At the Mediterranean level, the research conducted by Nicolini and Pinto [41], considering the analysis of European Corridors, was also taken into account. At the Iberian level, studies such the one conducted by Domínguez et al. [42], have also been analyzed throughout the present research.

Considering this information and the objectives of the research, in a primary stage, 20 CBC European case studies were described and analyzed, focusing on exploratory methodology based on the case study research method put forward by Yin [43]. The obtained data and the lessons learned through this analysis process were the applied to the CBC study area of Elvas-Badajoz, through public perceptions surveys and a territorial impact assessment (TIA).

2. Methodological Approach

This study required the use of several methods throughout research, including indirect and direct research methods and tools. The project team dedicated a significant amount of time and attention to the development of a methodological framework. The methodological approach was divided into four main phases (Figure 1), ending with the identification and assessment of critical factors for territorial

success in cross-border areas. The phases are as follows: data collection, case study selection criteria, analysis of case studies, and surveys. These phases are schematized as follows:

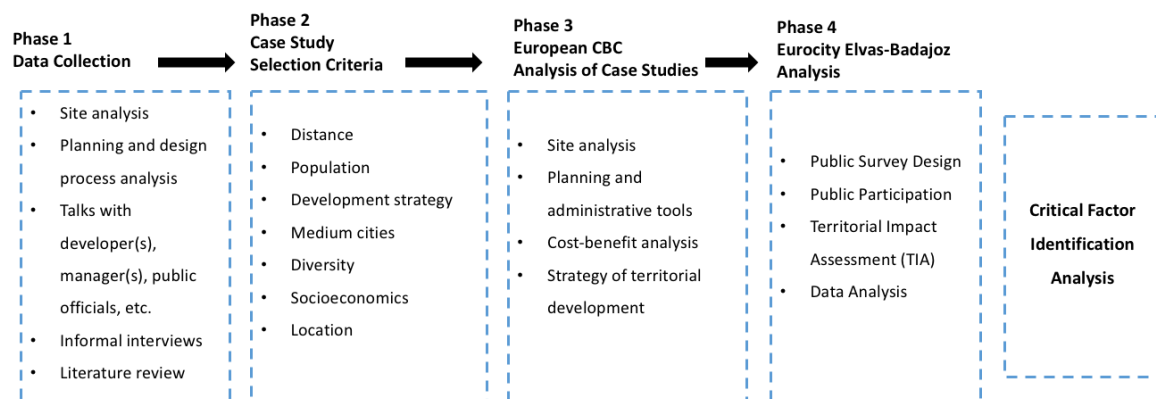


Figure 1. Methodological approach scheme. CBC: cross-border cooperation.

2.1. Data Collection

Data for the study was collected through previous analysis of the selected sites, by analyzing the process of planning and design of each case study, and even through talks and informal interviews with technicians, experts, main actors and stakeholders of the CBC process. Talks and informal interviews were engaged to identify the most relevant issues that should be answered throughout the present research, as well as the interest in this kind of study.

Throughout the literature review we intended to cover a range of issues, considering not only the state of the art regarding the CBC process, but also divergences that emerge in Europe denoting the increasing status of fragility of the overall system, as well a brief description related to Eurocities and their articulation in the CBC process, and vice-versa.

2.2. Study Area: EuroCity Elvas-Badajoz

The Eurocity Elvas-Badajoz (Figure 2) is a CBC project, located in the Euroregion EuroACE (EuroACE is an Euroregion with respect to the Portuguese regions of Alentejo and Centro, and also the Spanish region of Extremadura.) [44,45] that aims to link these two cities. During the planning project of the Eurocity Elvas-Badajoz, the CBC project targeted several areas, such as economy, culture, recreation, tourism, trade, and employment, among others.

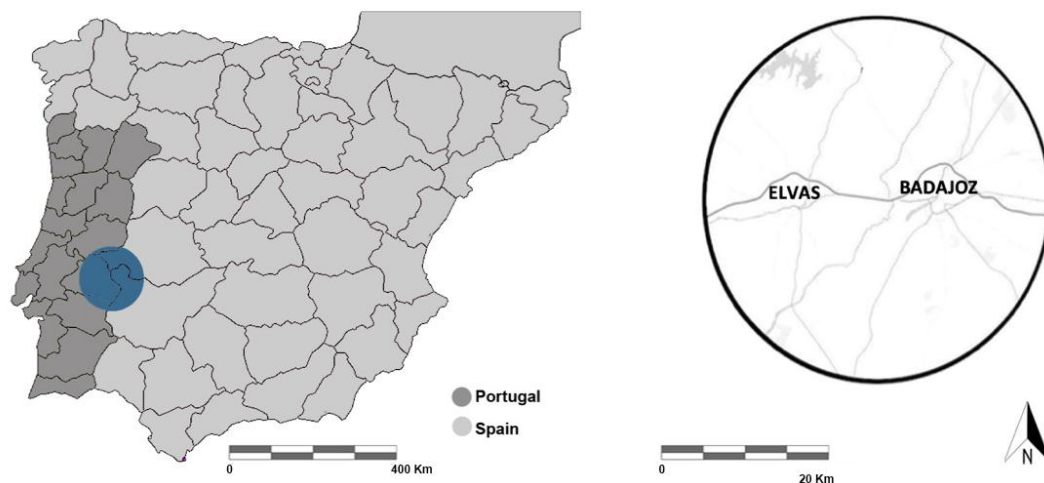


Figure 2. Case study area.

In 2013, a protocol between the cities of Elvas and Badajoz was signed, leading to the creation of the Eurocity Elvas-Badajoz. This culminated in creating the highest population area around Portuguese-Spanish border heart, through the union of Elvas, Alto Alentejo (Portugal), and Badajoz, in the Extremadura Region (Spain).

2.2.1. Demographic Framework

Comparing the two regions in terms of size, it is noticeable that the area occupied by the region of Extremadura (Spain), is substantially greater than the Portuguese border surface that is adjacent [46]. This area represents approximately 8% of Spanish territory, however, it represents only 3% of the population. Regarding the Alentejo region, the area occupies 5% of Portuguese population, but 33% of the territory—a much higher population vs. area discrepancy, even though both areas demonstrate low population density.

The union of the two regions cover an area of approximately 69,000 km², representing about 12% of the Iberian Peninsula (583,000 km²), and corresponding to 2% of the European Community Space (3,157,000 km²) [47]. Data adapted from statistical institutes of each country and also from Eurostat [47–49] can be seen in Table 1.

Table 1. Demographic framework.

	Total Area km ²	Resident Population (N.º)	Population Density (Inhabitants/km ²)
	2011	2011	2011
Spain (Country)	504,645	47,190,493	94
Extremadura (Region)	41,634	1,092,997	26
Badajoz (City)	1470	151,565	103
Portugal (Country)	92,090	10,476,021	114
Alto Alentejo (Region)	6230	118,410	19
Elvas (City)	631	23,078	37

With respect to population density, it is denoted that despite the difference in the number of inhabitants, while the Alto Alentejo region is equivalent to only 15% of the Extremadura region, the Alentejo region, with its three sub-regions combined (Alto, Centro and Baixo) represents an area of 31,484 km², a value that is equivalent to 76% of the Extremadura region. The region's densities, with the sum of all Alentejo's sub-regions, result in both values being now closer, while still presenting a higher value for the Spanish territory. Both deviated from their respective national averages, which can be justified by their remote geographical position with respect to metropolitan areas and decision centers, where the employment rates are more favorable than in the analyzed regions.

2.2.2. Economic Framework

Regarding the economic framework (Table 2 [47–49]), the paper analyses not only employment activity sector of active population, GDP/per capita (GDP–Gross Domestic Product.), but also shows how these indicators have been critical in territorial development.

Table 2. Economic framework.

	Total Population	Active Population	Employed Population	Unemployed Population	Activity Index	Unemployment Index
	Thousands of People				%	%
Spain	47,190.493	22,874	18,094	4780	59	21
Extremadura	1092.997	507	355	152	56	30
Portugal	10,476.21	5392	4532	860	52	12
Alentejo	757,302	342	299	44	51	13

With the results presented in the table, the employability issue becomes crucial to understanding the demographic exodus of the population. Following observation and analysis of some indicators, such as the unemployment rate in the Alentejo region, when compared to its border region their value is far lower (over half). Approximately two-fifths of the Extremadura population is unemployed.

For the Alentejo region, the listed values look promising. The activity rate is higher than the Portuguese domestic average, with the activity rate being almost equivalent to the national rate. However, it has a smaller population and also fosters a youth exodus of those seeking better working conditions, which consequently leads to an increase of the population age.

The analyzed border productive fabric is characterized by an area of small businesses, and also by scant growth amounts/development ratings. According to previous studies [46], some explanations are commonly given for this fact: the weakness of the economic and business fabric, the weak capacity to attract new businesses, difficulty in accessing the main markets, lower capacity for communication with decision centers, and even the simple lack of entrepreneurial endeavors in those areas.

2.3. Case Study Analysis

The method of case study analysis put forward by Robert Yin [43], is considered by the authors as a powerful tool to analyze and obtain information for similar examples—it extracts the lessons learned and applies them to the specific Iberian case study. Accordingly with Mark Francis [50]: “A case study is a well-documented and systematic examination of the process, decision-making and outcomes of a project, which is undertaken for the purpose of informing future practice, policy, theory, and/or education.”

In the scope of the research, a total of nine CBC case studies were selected from a sample of a previous study put forward by Castanho et al. [40]. The selection focuses CBC case studies (Figure 3) marked by deep cooperation in issues such as transportation, spatial planning, economic development, tourism, culture, research, education and employment.

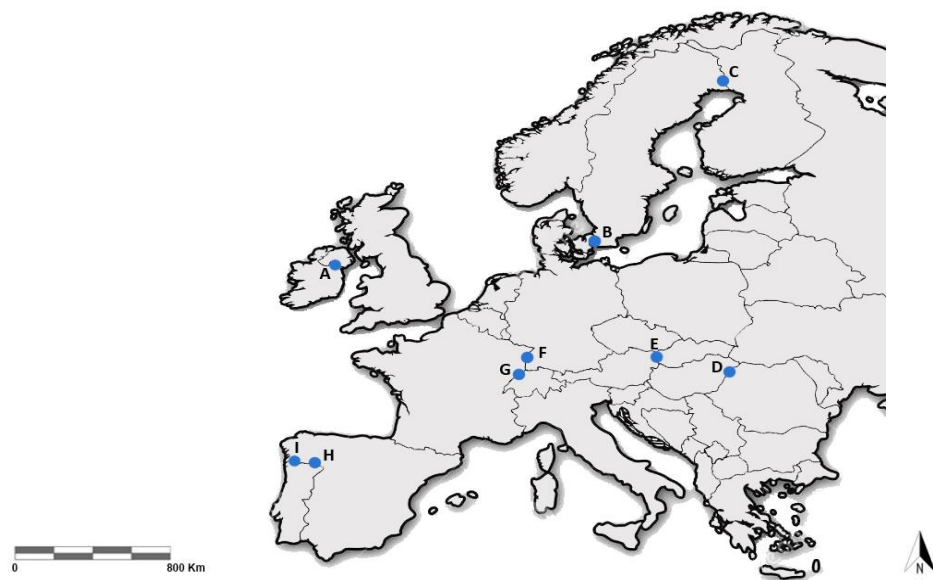


Figure 3. Selected study cases. (A) Newry-Dundalk; (B) Copenhagen-Malmö; (C) Haparanda-Tornio; (D) Oradea-Debrecen; (E) Vienna-Bratislava; (F) Strasbourg-Kehl; (G) Saint Louis-Basel; (H) Chaves-Verín; (I) Tuy-Valença.

Following the method used previously by Castanho et al. [40], the analysis of the selected case studies was conducted by collecting varied data, aiming for a good understanding of their intricacies. Issues such as population, distance between cities, strategy of territorial development, border typology, languages, currencies and GDP/capita have all been studied and analyzed. It should

be taken into account that some of these case studies were already identified as fertile ground for CBC by the Luxembourg Institute of Socio-Economic Research (LISER) report [51] “*Opportunities of cross-border cooperation between small and medium cities in Europe*”; some of these include Strasbourg-Kehl (France-Germany), Copenhagen-Malmö (Denmark-Sweden), Vienna-Bratislava (Austria-Slovakia), and also by work by Boehnke et al. [12], which identified Strasbourg-Kehl (Germany-Poland).

Besides the aforementioned pre-established criteria, the selected projects were required to meet seven specific principles, some of which were adapted from the study developed by Castanho et al. [40]:

- Cities must have a record of previous work on CBC.
- The CBC project should consider the integration of environmental, sociocultural and economic development goals, as part of a singular development strategy.
- Cities should demonstrate relationships with multiple stakeholders organized in a group association created to develop and strengthen aspects inherent to CBC, and development objectives.
- The distance between cities could not be greater than 60 km.
- At least one of the cities should be a medium-sized city.
- There should be a considerable connectivity—movement between cities.
- Eurocity marketing and advertisement must be previously identified as critical factor for territorial success.

These criteria were used to select and analyze the Iberian study area. Beneficial knowledge taken from the case studies analysis and factors for territorial success were then applied to the selection of an Iberian study area, the Eurocity Elvas-Badajoz. However, at an Iberian scale are other areas that fits into the selection criteria such as: Chaves-Verín; Tuy-Valença; or Vila Real de Santo António-Ayamonte.

2.4. Public Participation Questionnaires/Surveys

The questionnaire was developed considering face-to-face interviews. The selection of this type of interview was based on the fact that it is a very reliable method of data collection in which the researcher has full range and depth of information, the respondents have the opportunity to ask for clarifications during the interview process, the target population may be easily located and defined, and no one is excluded a priori from the sample [52–56].

2.4.1. Sampling and Procedure

The sample population consisted of the citizens of the Eurocity Elvas-Badajoz, which are the closest to and most affected by decisions and policies taken for the study area. The sample was composed of two hundred individuals. Face-to-face interviews were carried out over the course of one month, between June and July 2016.

2.4.2. Data Analysis

Once data regarding the survey instruments was collected, statistical analysis was first performed using first spreadsheets to organize the collected data, and then refined by statistical analysis using SPSS. Principal components analysis (PCA) was also applied.

2.5. Territorial Impact Assessment (TIA)

Based on the available ESPON (ESPON–European Spatial Planning Observation Network.) literature and tools [57,58], a TIA was developed, aiming to evaluate the policies and strategies that were implemented in the study area. This took into account several dimensions for territorial development, such as economic, social cohesion, environmental sustainability, territorial governance; and spatial governance dimensions [59–61].

3. Results

The results listed below are provided by:

- Indirect analysis—through the literature review, in conjunction with the talks and informal interviews with the technicians, experts, main actors and stakeholders of the CBC process, the case studies were analyzed; and,
- Direct analysis—through the implemented surveys, and using a territorial impact assessment, a definition of the main variables that should be analyzed was enabled.

3.1. Case Study Analysis

Through the case study analysis, the established research protocol enabled us to identify fourteen critical factors to achieve territorial success in CBC areas. The results were summarized in Table 3, after being organized according to their relation to each specific case study (Table 4).

Table 3. Identified factors through the case study analysis.

(1) Connectivity—movement between cities	(8) Better life quality standards
(2) A strong territorial strategy	(9) Attracting young and talented people
(3) Avoiding duplication of infrastructure	(10) Common objectives and master plans
(4) Increasing the sense of belonging	(11) Stronger political commitment
(5) Diverse infrastructure availability—Euro citizenship	(12) Citizen involvement
(6) Access to European funds	(13) Political transparency and commitment
(7) A stronger economy	(14) Eurocity marketing and advertisement

Table 4. Critical factors identified through the case study analysis.

Case Study	Identified Factors
Newry ^(IE) -Dundalk ^(UK)	(2) + (7) + (14)
Venlo ^(NL) -Düsseldorf ^(DE)	(7)
Aachen ^(DE) -Liège ^(BE)	(7)
Copenhagen ^(DK) -Malmö ^(SE)	(7)
Haparanda ^(SE) -Tornio ^(FI)	(4) + (14)
Valga ^(EE) -Valka ^(LV)	(6) + (8)
Ruse ^(BG) -Giurgiu ^(RO)	(6)
Oradea ^(RO) -Debrecen ^(HU)	(6)
Frankfurt Oder ^(DE) -Slubice ^(PL)	(4) + (9)
Cieszyn ^(PL) -Cesky Tesín ^(CZ)	(8)
Vienna ^(AT) -Bratislava ^(SK)	(1) + (7) + (10)
Gorizia ^(IT) -Nova Gorica ^(SI)	(8)
Strasbourg ^(FR) -Kehl ^(DE)	(1)
Saint Louis ^(FR) -Basel ^(CH)	(3) + (10)
Geneva ^(CH) -Annemasse ^(FR)	(11) + (12)
Nice ^(FR) -Monaco ^(MC)	(3) + (7) + (13)
Bayonne ^(FR) -San Sebastián ^(SP)	(4) + (7)
Chaves ^(PT) -Verín ^(SP)	(5) + (14)
Tuy ^(SP) -Valença ^(PT)	(3) + (5) + (9) + (14)
La Línea ^(SP) -Gibraltar ^(GI)	(13)

IE—Ireland; UK—United Kingdom; NL—Netherlands; DE—Germany; BE—Belgium; DK—Denmark; SE—Sweden; FI—Finland; EE—Estonia; LV—Latvia; BG—Bulgaria; RO—Romania; HU—Hungary; PL—Poland; CZ—Czech Republic; AT—Austria; SK—Slovakia; IT—Italy; SI—Slovenia; FR—France; CH—Switzerland; MC—Monaco; SP—Spain; PT—Portugal; GI—Gibraltar. (1) Connectivity - movement between cities; (2) A strong territorial strategy; (3) Avoiding duplication of infrastructure; (4) Increasing the sense of belonging; (5) Diverse infrastructural availability—Euro citizenship; (6) Access to European funds; (7) A stronger economy; (8) Better life quality standards; (9) Attracting young and talented people; (10) Common objectives and master plans; (11) Stronger political commitment; (12) Citizen involvement; (13) Political transparency and commitment; (14) Eurocity marketing and advertisement.

Through the identified factors for territorial success based on the case study analysis, it has been possible to apply those acquired critical factors for the study area of the Eurocity Elvas-Badajoz. According to Levy [62], this typology of case study may be considered as within the category *Hypothesis-Generating Case Studies*, after the method was used in order to “*examine one or more cases for the purpose of developing more general theoretical propositions, which can then be tested through other methods*”.

3.2. Eurocity Elvas-Badajoz

The demographic information of the surveyed population pertaining to the Eurocity is presented in Table 5. The survey, which divided the participants into ages groups, includes all groups represented. The least represented group was that of people aged over 50 and the most represented was the 18–35 age group, which accounted for 40.0 percent of the total, differing from the Elvas population where the most representative group was those of aged 36–50. Regarding gender, the total percentage was balanced, with approximately fifty percent female and male. Individual cities results differed between Elvas and Badajoz, Elvas having higher proportion of males, and Badajoz higher proportion of females surveyed. The educational level of the participants in the survey mainly consisted of college graduates (54.5 percent), those who had finished high school (33.5 percent), and people with basic education (12.0 percent). Once more, the group with higher proportion surveyed in each city differed, Elvas having a higher number of high-school graduates (45.0 percent), and Badajoz with a greater proportion of higher college graduates (73.0 percent).

Table 5. Sample profile of the surveyed population.

Variables	Elvas	Badajoz	Total
Gender			
Male	54.0	47.0	50.5
Female	46.0	53.0	49.5
Age Group			
18–35	33.0	47.0	40.0
36–50	45.0	29.0	37.0
Over 50	22.0	24.0	23.0
Education level			
Basic Education	19.0	5.0	12.0
High School	45.0	22.0	33.5
Graduate	36.0	73.0	54.5

Note: Bold numbers were the higher percent is found.

Regarding the five closed questions, three of them showed a higher percentage of “yes” responses in total, one of them evenly spread fifty-fifty, and only one of the question shows a marginally higher percentage of “no” answers (55.5 per cent). Elvas displays four questions with a higher percentage of “yes” responses, and only one where the higher proportion is for “no”. Regarding Badajoz, the results differed significantly, since while three questions show a higher level of agreement (yes), two present a higher percentage of disagreement (no). Additionally, it is important to note that with respect to the question: “In 2013 a protocol was signed for the creation of Eurocity Elvas-Badajoz. Did you have knowledge of this agreement?”, the obtained results for each of the analyzed cities were completely distinct. The results described can be seen in Table 6.

Table 6. Percentages of “yes or no” answers.

Questions	Elvas		Badajoz		Total	
	Yes	No	Yes	No	Yes	No
Do you know what a Eurocity is?	88.0	12.0	68.0	32.0	78.0	22.0
In 2013 a protocol was signed for the creation of the Eurocity Elvas-Badajoz. Did you have knowledge of this agreement?	68.0	32.0	32.0	68.0	50.0	50.0
Do you believe that by being included in a Eurocity, your quality of life could improve?	71.0	29.0	83.0	17.0	77.0	23.0
Do you believe that your city benefits from the creation of the Eurocity Elvas-Badajoz?	76.0	24.0	52.0	48.0	64.0	36.0
Following the creation of the Eurocity Elvas-Badajoz, are you noticing greater opportunities for success in the region?	45.0	55.0	44.0	56.0	44.5	55.5

Seven questions used an assessment rating method (Table 7), where participants replied through their assessment level, between (1) bad; (2) adequate; (3) great, to each question. In questions I, III, V, and VII, the most selected level was 1 (respectively, 68.5; 61.5; 48.0; 52.0 per cent). Regarding questions II, IV, and VI the most selected level of assessment was 2 (59.0; 47.0; 52.0 per cent). Level of assessment 3 was not the most selected level for any of the present questions. Regarding independent results obtained for each city, only questions IV and V showed changes in the assessment level. Whereas Elvas had a higher percentage rating of 2 in those questions, Badajoz had a higher percentage rating of 1 in the same questions.

Table 7. Assessment ratings.

Questions	Elvas			Badajoz			Total		
	1	2	3	1	2	3	1	2	3
I	73.0	21.0	6.0	64.0	35.0	1.0	68.5	28.0	3.5
II	24.0	70.0	6.0	46.0	48.0	6.0	35.0	59.0	6.0
III	62.0	34.0	4.0	61.0	30.0	9.0	61.5	32.0	6.5
IV	25.0	52.0	23.0	50.0	42.0	8.0	37.5	47.0	15.5
V	42.0	53.0	5.0	54.0	40.0	6.0	48.0	46.5	5.5
VI	8.0	53.0	39.0	29.0	51.0	20.0	18.5	52.0	29.5
VII	68.0	30.0	2.0	46.0	42.0	12.0	57.0	36.0	7.0

Note: Bold numbers were the higher percent is found.

(I) As a resident of the Eurocity, how do you rate the functioning of public transportation/movement between cities?; (II) As a resident of the Eurocity, how do you rate the political commitment/cooperation between municipalities?; (III) As a resident of the Eurocity, how do you rate the efforts carried out by the municipalities in attracting investors/generating employment?; (IV) As a resident of the Eurocity, how do you rate the efforts carried out by the municipalities for environmental issues/green spaces?; (V) As a resident of the Eurocity, how do you rate the efforts carried out by municipalities for education and science?; (VI) As a resident of the Eurocity, how do you rate the efforts carried out by the municipalities for culture and tourism/preservation of identity?; (VII) As a resident of the Eurocity, how do you rate the efforts carried out by the municipalities with respect to health?

Participants were also asked, through open questions, which should be the three priority factors in the Elvas-Badajoz CBC Project (Table 8). The Eurocity participants (the total of respondents from both cities), considered that the three priority factors in the Elvas-Badajoz CBC Project should be attracting investors/generating employment (22.3 per cent), public transportation/movement between cities (22.3 per cent), and education/science (14.5 per cent). The priority factors related to attracting investors/generating employment and public transportation/movement between cities were consensual, with singular results of the cities Elvas and Badajoz. However, for the Elvas population,

health was the third priority factor to be considered with a percentage of 18.0, and for Badajoz population, the third priority factor to be considered in the CBC project was education /science, at 15.3 percent.

Table 8. Priority factors for cross-border cooperation (CBC) selected by citizens.

Considering that Elvas-Badajoz Is a Eurocity, from the Following Factors Select Which Do You Believe Should Be a Priority?	Elvas	Badajoz	Total
Education/Science	14.6	15.3	14.5
Environmental issues/Green spaces	4.6	3.3	3.9
Health	18.0	7.6	12.8
Attracting investors/Generating employment	20.3	24.3	22.3
Other services	2.6	2.6	2.6
Political commitment/Cooperation between municipalities	11.6	13.0	12.3
Public transportation/Movement between cities	21.6	23.0	22.3
Tourism and culture/Identity preservation	6.3	10.6	8.4

The other open questions were made in order to ascertain peoples' opinion regarding the three main services/activities they sought when visiting the neighbor city (Table 9). For the Elvas population the three main services/activities sought when visiting Badajoz were: shopping (60.0 per cent), health care (15.0 per cent), and employment (8.0 per cent). The results differ with respect to the population of Badajoz, where the three main services/activities sought in Elvas were: restoration (62.0 per cent), cultural events/tourism (17.0 per cent), and other services (10.0 per cent). For the Eurocity as a whole the three main services/activities sought for each population were: restoration (32.0 per cent), shopping (32.0 per cent), and cultural events/tourism (12.0 per cent).

Table 9. Services/activities that the population seeks in each city.

What Brings You to the Neighbor City?	Elvas	Badajoz	Total
Cultural events/tourism	7.0	17.0	12.0
Employment	8.0	4.0	6.0
Health care	15.0	2.0	8.5
Other services	4.0	10.0	7.0
Restoration	2.0	62.0	32.0
Shopping	60.0	4.0	32.0
Study	4.0	1.0	2.5

Note: Bold numbers were the factors/priorities with higher per cent in each open question.

Additionally, two questions about transportation and the periodicity of visits to the neighboring cities were asked. Relating to transportation, the results were clear (both in total as well as for the individual cities) with 95.0 per cent or above using private transport to move between cities. However, regarding the periodicity of visits to the neighbor city, the results change. For Elvas, a higher percentage for weekly periodicity was given, and a higher percentage of annual periodicity was given by the Badajoz citizens. The results with respect to both questions can be seen in Table 10.

Through principal components analysis (PCA), eight variables were analyzed (Table 11). The percentage of explained variance of each component can be easily computed as the corresponding eigenvalue divided by the total variance [63–65]. The first two components absorb more than 90% of the variance. The first component counts with 69% of the variance, and the second one counts with a 23% of the variance. Table 12 shows the 100% of the variance explained in the correlation matrix.

Table 10. Transportation and periodicity of visits by the citizens.

Which Type of Transport Do You Use to Travel to between Cities?	Elvas	Badajoz	Total
Public	2.0	5.0	3.5
Private	98.0	95.0	96.5
How Often Do You Visit the Neighbor City?			
Not often (annually)	5.0	46.0	25.5
Sometimes (monthly)	32.0	39.0	35.5
Often (weekly)	62.0	12.0	37.0
Do not visit	0.0	3.0	3.0

Table 11. Analyzed variables/components through principal components analysis.

(1) Connectivity—Movement between cities	(5) Culture and tourism
(2) Political commitment	(6) Education and science
(3) Other services	(7) Environmental issues
(4) Health	(8) Job opportunities

Table 12. Total variance explained.

Component	Initial Eigenvalues		
	Total	% of Variance	Cumulative %
1	0.304	69.975	69.975
2	0.101	23.240	93.215
3	0.005	1.155	94.370
4	0.005	1.155	95.525
5	0.005	1.155	96.681
6	0.005	1.155	97.836
7	0.005	1.103	98.938
8	0.005	1.062	100.000

In Table 13, the influence that the previously identified factors have shown on the area under study (Euro-city Elvas-Badajoz) are summarized through European CBC case study analysis.

Table 13. Summary of the influence of the identified factors on the area of study.

Factors	Degree of Influence		
	Major	Medium	Minor
Connectivity—Movement between cities	x		
A strong territorial strategy	x		
Avoiding duplication of infrastructure		x	
Increasing the sense of belonging			x
Diverse infrastructural availability—Euro Citizenship		x	
Access to European funds		x	
A stronger economy		x	
Better life quality standards	x		
Attracting young and talented people	x		
Common objectives and master plans		x	
Stronger political commitment		x	
Citizen involvement			x
Political transparency and commitment		x	
Eurocity Marketing and advertisement	x		

4. Discussion and Conclusions

CBC is a topic increasingly gaining momentum; this scenario is obvious, especially considering that in recent years increasing studies based on similar issues, such as in the present research, have been developed. Other examples include the research conducted by Cao and Wang (2016) which explored the relationships between neighbor and twin cities [66], the work of Ballas (2013) [67] regarding life quality in urban territories, or even, in this research line, the survey studies/methods aiming to define measures and patterns put forward by Craglia et al. [68], Mulligan et al. [69,70], Lambiri et al. [71], and Stimson and Marans (2011) [72]). The topic of CBC is also gaining momentum bearing in mind that borders have become places of intense activity due to increasing migration processes, motivated by several different factors, and also because border areas are historically places of intense development, benefitting from different but complementary catalysts for redevelopment as in the case of competition or cooperation.

The present research enables us to determine that the critical factors obtained through the analysis of case studies of CBC projects in the European landscape are easily identified in the study area of the Eurocity Elvas-Badajoz, giving important insights to future developments in this area. Nevertheless, is important to note that some of these factors have already been identified in previous studies as being specific to the Iberian border, such as the one put forward by Medeiros (2011) on the scope of the analysis of the first INTERREG-A (INTERREG are programmes aiming to stimulate the cooperation between regions in the European Union, INTERREG-A is one of the mentioned programmes that operates in the Euroregion EuroACE.) program (1989–1993) [73]. However, the authors believe that this kind of analysis should be performed with some periodicity to assess and even refresh some data.

Eurocity marketing and advertisement is a very good example of how people's knowledge on the existence/formation of the Eurocity Elvas-Badajoz was significantly different. While the Elvas population shows a higher level of knowledge/information about this protocol, citizens from Badajoz claim not to know a lot about this issue. This fact can be explained through the level of marketing and advertisement that Elvas made on this subject, since on a scale basis, the impact of the Eurocity, is far greater for the city of Elvas than for the city of Badajoz.

In any case, both populations believe that their insertion in a Eurocity will strengthen their life quality and their access to services and goods. However, both populations claim that they felt no changes after the creation of the Eurocity. In fact, people feel that there were not any implemented measures to increase the success of the region. These results should lead to reflection, as well as the definition of a distinct approach for the territorial development in order to foster the achievement of the envisioned success. In this regard, critical factors for territorial success, as in the case of stronger economy, better life quality standards, and attracting young and talented people, should be present in future approaches and redevelopment strategies.

Issues such as public transportation/movement between cities, political commitment and cooperation between municipalities, and health are not considered by the Eurocity residents as being adequately addressed. Moreover, none of the assessed issues was qualified as great, giving the idea that no one is totally satisfied with the results obtained with the creation of this Euro-city. In fact, these results should be understood as an alarm sign with respect to the future of this CBC project.

The study enabled also to define the most relevant factors which should be considered in this particular CBC project, namely: attracting investors/generating employment, public transportation/movement between cities, education/science, and health.

Throughout the present study it was also possible to verify that the Elvas population, when visiting Badajoz, mainly seek shopping, while the population of Badajoz visiting Elvas seek restoring services. Cultural events/tourism, health, and employment are other services/activities that should be considered.

In any case, as mentioned before, the relationship envisioned with respect to the Eurocity is a symbiotic one. The study demonstrates, particularly throughout the interpretation of Tables 9 and 10, that the citizens of Elvas seek a lot more of the city of Badajoz than vice versa. Acquired data on CBC projects

and strategies should provide different resources on one side of the border and the other, aiming to stop infrastructural duplication and trying to create always the so called win-win-situations [10,74]. However, this should not be an unbalanced scale, as is demonstrated by the present research.

Private transport is the most popular means of transport for the movement between cities, which supports the importance of public transport as an immediate priority for the success of this CBC.

Similar results shown by the principal components analysis were the factors of connectivity—movement between cities and political commitment explains more than 90 percent of the variance and correlations, ideas in accordance with the findings presented by Antrop [75,76]. This data highlights once more the increasing importance of transport and the political commitment for the success of this particular CBC project. This data corroborates with the conclusions presented by Lewis and Maund [77], regarding the importance of transportation infrastructures and accessibility/mobility between places.

Considering the territorial impact assessment combined with the public perceptions surveys results it is possible to conclude that, from a social, economic and even spatial and territorial governance perspective, the impacts are not significant or visible. The acquired investments and efforts carried out to materialize the CBC Project between the cities of Elvas and Badajoz have not yet yielded the expected benefits, particularly for the residents. Regarding the impact for the policy-makers, the authors expect future research to provide further results and answers.

Through the analysis of Table 13 is possible to endorse five factors with a major influence on this particularly study area. However, to achieve a sustainable, well-developed and abiding CBC project, all the fourteen critical factors put forward by Castanho et al. [40], even the ones that have been assigned as having a minor influence, should be considered and not be underestimated.

As the case studies of Chaves-Verín, Tuy-Valença, and Vila Real de Santo António-Ayamonte, share a considerable number of characteristics and similarities with the case of the Eurocity Elvas-Badajoz [4,42], and even match with the pre-established selection criteria previously mentioned in the present work, future solutions and developments found in some of those case studies should be taken into account by policy-makers, planners, researchers and other main actors in this procedure, particularly when the time comes for decision-making about common problems, fostering correct and sustainable growth for all Iberian CBC areas.

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