Motivações, comportamento de viagem e benefícios obtidos dos turistas de bicicleta: uma análise do Mercado jovem

Motivations and travel behavior of cycling tourists: a youth market analysis.

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Resumo | É amplamente reconhecido que as viagens ativas, particularmente o ciclismo, proporcionam vários benefícios económicos, ambientais e ao nível da saúde, tanto para os destinos turísticos como para os turistas. No entanto, o número de turistas que usam a bicicleta nas suas viagens é ainda é muito limitado, especialmente os turistas jovens. Além disso, a literatura sobre esta temática é ainda muito escassa. Para ampliar os conhecimentos neste domínio, este trabalho tem como objetivo analisar as motivações, comportamento de viagem e benefícios obtidos pelos estudantes universitários que utilizam a bicicleta nas suas atividades turísticas. Realizou-se, em 2016, um inquérito aos estudantes universitários portugueses para analisar o comportamento em termos de utilização da bicicleta. Foram obtidos 591 questionários válidos. Os resultados revelam que 44% dos estudantes entrevistados utilizam a bicicleta e que 21% a utilizam durante a prática de atividades turísticas. Este artigo apenas analisa as motivações, comportamento de viagem e os benefícios obtidos dos alunos entrevistados que utilizam a bicicleta nas suas atividades turísticas. O artigo termina com algumas sugestões para promover o uso da bicicleta por parte de turistas jovens durante as suas viagens.

Palavras-chave | Turismo de bicicleta, motivações, comportamento de viagem, benefícios obtidos, mercado jovem

Abstract | It is widely recognized that active travel, in particularly cycling, provides diverse economic, environmental and health benefits both for tourism destinations and for the tourists. However, the number of tourists who use the bicycle is still very limited, especially youth tourists. Moreover, the literature in this field is not fully explored. To expand the knowledge in this field, this paper aims to analyze the motivations, travel behavior and benefits obtained by young bicycle tourists. A Portuguese university student survey was carried out, in 2016, to analyze the cycling behavior of this segment. A total of 591 completed questionnaires were obtained. Results reveal that 44% of the students interviewed use the

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bicycle and 21% use it during their tourism activities. This paper only analyzes the motivations, travel behavior and benefits obtained of the students interviewed that use the bicycle in their tourist activities. The paper ends with some guidelines to promote the use of bicycle by youth tourists during their trips.

Keywords | Bicycle tourism, travel motivations, travel behaviors, benefits derived, youth market

1. Introduction

In the last years, the link between cycling and tourism has been growing. Since cycling is no longer seen only as a sportive activity, but is also perceived as a leisure recreational activity, this growth led to an exponential interest from academics in this type of transportation. (Fozto, 2014; Lamont, 2009).

Despite the importance that cycling tourism has been gaining over the past years, there is still lack of research concerning this product, and how it can be promoted (Baltes, 1996; Downward & Rasciute, 2015; Hopkinson & Wardman, 1996; Ritchie, Tkaczynski, & Faulks, 2010). There is still the need of develop further research, as well as defining better policies regarding the development of cycling tourism. In order to empower the growth of cycling tourism and put the bicycle as an universal accepted mode of transportation, it is demanding the investment in appropriate infrastructure and the implementation of strategies. (Hopkinson & Wardman, 1996; Lamont & Buultjens, 2011; Ritchie, 1998).

Regarding the Portuguese example, it is known that the bicycle only contributes with 1% for the total dislocations. Apart from Murtosa, there is little interest in using the bicycle. Portugal presents itself in one of the last places in the European ranking that compares several indicators regarding the use of the bicycle. Currently Portugal is occupying the 23 rd position along with Spain (Garcia, 2013).

The cycling tourism market is seen as an ecofriendly market and profitable for destinations. This market brings advantages not only for the tourists, but also for the local communities and tourism destinations, since it has the potential to reduce negative impacts on the environment (Dickinson & Robbins, 2009; Fradd & Spanswick, 2009; Luka, 2012; Lumsdon, 2000; McClintock, 2002). These advantages have been recognized across the globe. Therefore, countries throughout all Europe, North America and Australasia have been promoting the creation of more cycle routes and infrastructures for this type of tourism (Downward & Lumsdon, 2001; Sustrans, 1999). However, it is not possible to develop a product successfully, if first we do not perform a deep analysis of the market.

The youth tourism market segment has been recognized as a very important and growing market (Bai et al., 2004; Bicikova, 2014; Eusébio & Carneiro, 2012; Eusébio & Carneiro, 2014; Moisa, 2010; UNWTO, 2011). The young people have more time to travel than other groups, are more adaptable to new situations and are less influenced by negative events, such as terrorism, pollution and natural disasters (Eusébio & Carneiro, 2014; Kim & Jogaratnam, 2003; Middleton, 2009; UNWTO, 2011). According with UNWTO, (2011) this market presents itself at the head of the innovation and is exploring the path to responsible tourism since they are self-aware of their impact in the destinations. When we look back in history, the youth tourism movement can be attributed to the beginning of the Grand Tour, a circuit where wealthy social elite would travel around of Western Europe. The Grand Tour proved to be a great tool to improve youth knowledge, culture, and pleasure (Davies & Cairncross, 2013).

The youth market segment is also known for being more open-mind and, therefore, more tolerant to other cultures and costumes, they think outside the box and are always trying to push their boundaries (Eusébio & Carneiro, 2014; Field, 1999; Kim & Jogaratnam, 2003; UNWTO, 2011). Inside the youth market we can find the university students, that will be the focus of this paper, since it represents a large part of the youth segment (Eusébio & Carneiro, 2012). Through the last years, several studies were made regarding the youth market (Bicikova, 2014b; Chadee & Cutler, 1996; Davies & Cairncross, 2013b; Field, 1999; Hsu & Sung, 1997; Kim & Jogaratnam, 2003; Moisa, 2010; Morgan & Xu, 2007; Phau, Shanka, & Dhayan, 2010; Ryan & Zhang, 2007), however the number of studies concerning the use of the bicycle by youth in tourism activities are very scarce. In order to extend knowledge in this field, in this paper the bicycle tourism are analyzed in terms of travel motivations, travel behavior and benefits obtained by youth bicycle tourists from the use of bicycle during their trips. To accomplish these objectives the paper is structured in five sections. After this introduction, a brief literature review is provide concerning the concept of bicycle tourism, benefits generated and the relevance of the use of bicycle by youth tourists during their trips. In the third section the collection methods and analysis methods used are described. Further, in the fourth section, the results obtained are presented and discussed. Finally, the paper ends with the conclusions and theoretical and practical implications.

2. Literature review

Over the years, the relation between tourism and cycling has been growing, which has led to an increasing interest from the academics, concerning the resurface of the cycling experiences as not only a sportive activity, but also as a leisure and recreational activity (Fozto, 2014; Lamont, 2009a). Thus, it has been developed several attempts to define this new niche market. However, it was not possible, yet, to elaborate a universal definition due to the fact that there are inconsistent parameters regarding the type of activities, intensity of participation, characteristics of the cycle tourists and the purpose of the trip (Lamont, 2009; Ritchie, 1998). In the literature, several definitions of cycling tourism are presented (e.g. Lumsdon, 1996; Pratte, 2014; Ritchie, 1998; Sustans, 1999). Some authors considered that cycling tourists are all tourists that the use of the bicycle is an integrant part of their holydays (Pratte, 2014; Ritchie, 1998; Simonsen & Jorgenses, 1998; VisitScotland, 2005). However, other authors argue that people who travel to participate or watch cycling competitions should also be considered as cycling tourists (Coker & Bull, 2006; Lamont, 2009). In this paper the definition of cycling tourism adopted is the one proposed by Lamont (2009). This definition was the chosen one because it is considered the amplest one since includes overnight stay tourists. excursionists and those who attend cycling competitions to compete or to watch them.

Cycling and tourism have an old link that dated from the last century in the 1890's (Tobin, 1974). The connection was established when the combination of rail and cycling transport was made, giving to the public the possibility of choosing their way of transport before the car boom (Tobin, 1974). During the last years, cycling has becoming a very popular way to spend leisure time or holydays and the bicycle has become a valid mode of transportation (Bíl, Bílová, & Kubeček, 2012; Börjesson & Eliasson, 2012; Litman et al., 2009). Recently, it has gained the attention of the urban and tourism planners since it is seen as an efficient mode of transportation regarding costs and time savings (Börjesson & Eliasson, 2012). This happened mainly due to the increasing of awareness for sustainable development that have been happening over the last decades (Chang & Chang, 2003; Fradd & Spanswick, 2009; Lamont, 2014; Lankford et al., 2011; Pratte, 2014).

In the last years, some studies about cycling tourism (Cope et al., 2003; Lamont, 2007, 2009; Lamont, 2008; Lee & Huang, 2014; Maine Department of Transportation, 2001; Pratte, 2014; Ritchie, 1998; Ritchie & Hall, 1999; Schuett & Holmes, 1996; Wilbur Smith Associates, 2001), have been published. However, there is still a lack of studies regarding the use of bicycle by youth tourists during their trips. It is necessary further research as well as a better definition of policies regarding the development of this product. The investment in appropriate infrastructure, and the implementation of strategies expected to put the bicycle as a universal accepted mode of transportation, are imperative in order to potentiate the growth of cycling tourism (Hopkinson & Wardman, 1996; Lamont & Buultjens, 2011; Ritchie, 1998).

In the literature, several factors have been referred as potential determinants of the use of bicycle during tourism trips (e.g. age, gender, level of education, level of income, cycling experience, environmental and health factors). Regarding the different factors influencing cycling, age and gender assume a preponderant position. These factors can determine a cyclist's physical strength. This means that more experienced and old cyclists, who have more cycling skills, may prefer riding in the street rather than on a separate bike path (Antonakos, 1994). Several studies (Antonakos, 1994; Coker & Bull, 2006; Cope et al., 1998; Dean Runyan Associates Inc., 2014; Downward & Lumsdon, 2001; Dowson & Doxford, 1997; Garrard et al., 2008; Lamont & Buultjens, 2011; Meschik, 2012; Moudon et al., 2005; Neves & Esperança, 2011; Nickerson et al., 2013; Ortúzar et al., 2000; Ritchie, 1998; Weston et al., 2012) support the idea that most of the cyclists are male and highly educated. It is safe to say that cycling is still seen as an activity for older groups, i.e., for

people over 45 years old (Antonakos, 1994; Baltes, 1996; Dill & Voros, 2008; Downward & Lumsdon, 2001; Lamont & Buultjens, 2011; Meschik, 2012; Moudon et al., 2005; Pucher & Buehler, 2008; Ritchie, 1998). According with these evidence, it is of utmost relevance analyse the use of bicycle by youth tourists in order to identify some guidelines to stimulate the use of this eco-friendly type of transportation by this tourism market segment.

It is known that riding a bicycle has multiple advantages and that should be promoted to be a preferential mode of transportation. This activity not only improves health and fitness but it also has a huge role in improving air quality and the national economy (Ransdell et al., 2013).

In order to improve cycling in youth market it is necessary to promote the idea that cycling is the ideal mode of transportation since give them health benefits as well as economic. However, Balsas (2003) considered that college administrators almost never consider bicycle as valid mode of transportation and thus, do not have a full extent plan for its development. Thus there is the need to promote the practice of physical activities. Despite that lack of planning, a lot of schools universities are concerned with the effects of the overuse of the cars and are seeking to create a more sustainable campuses (Rybarczyk & Gallagher, 2014).

Ransdell et al. (2013) studied the predictors of cycling in college students and found out that females use less the bicycle then males. Also teenagers that consider their weight as normal may be more willing to cycle than the others. Another one of the findings of the author was that there was a high number of students who used the bicycle both for transportation and for leisure. According with Sigurdardottir et al. (2013) positive cycling experiences are integrated in six items that are, the speed and ease of cycling, the sense of travel independence, cycling in any weather conditions and the added value of cycling as a healthy exercise activity. Also parents who use the bicycle to go to work have a positive effect in adolescents cycling experience.

3. Methodology

The students of Portuguese universities are the population of this study. In 2015, there were 349,658 students enrolled in superior teaching in Portugal (Pordata, 2016). There are more female students (53.6%) than male students (46.4%). In order to analyze the use of bicycle by Portuguese university students during their tourism trips a questionnaire was carried out in 2016. The questionnaire includes question related with the use of bicycle in tourism trips, the travel motivation related with these trips, the travel behavior and the benefits obtained from the use of bicycle. An extensive literature was used to formulate the guestions (e.g. Antonakos, 1994; Beanland, 2013; Ho, Liao, Huang & Chen, 2015; Hunt & Abraham, 2007; Lumsdon, 2001; Meschik, 2012; Oja, Vuori & Paronen, 1998; Ritchie, 1998; Ritchie et al., 2010). In order to improve the questionnaire a pre-test with twenty students from the first year of the tourism degree from University of Aveiro was carried out on March 16 th 2016. Based on the results of pre-test some improvements were made in the questionnaires.

An online survey was used, through two stages, in order to administer the questionnaire. First, an e-mail to 226 Portuguese higher education institutions was sent to ask from them to spread the questionnaire among their students. From the 226 institutions reached, 25 of them manifested interest to participate in this research. Further the questionnaire was sent for higher education institutions to disseminate the questionnaire for their students. The questionnaire was online during three months (May, June and July). A total of 591 questionnaires valid were obtained.

4. Findings

4.1. Sample Profile

Of the 591 questionnaires obtained, 262 claimed using the bicycle, which represents 44.3% of the total sample, and from those who use the bicycle in their daily life, 123 already used the bicycle in their tourist activities, which represents 21% of the total sample. In this paper only the questionnaires of the university students that used the bicycle in their last trips were analyzed.

Regarding the socio-demographic characterization more than half of the respondents were female (67%) against 33% male and this supremacy prevails when we reduce the sample to only who uses the bicycle. This could be analysed in the sense that, according with the literature, males cycle more than females (Antonakos, 1994; Coker & Bull, 2006; Cope et al., 1998; Dean Runyan Associates Inc., 2014b; Downward & Lumsdon, 2001; Dowson & Doxford, 1997; Garrard et al., 2008; Lamont & Buultjens, 2011; Meschik, 2012; Moudon et al., 2005; Neves & Esperança, 2011; Nickerson et al., 2013; Ortúzar et al., 2000; Ritchie, 1998; Weston et al., 2012), which can lead us to believe that if our total sample would have more males, we could had a higher number of people using the bicycle in their tourist activities.

When analyzing the environment where each person lives, it is possible to conclude that the the age of the respondents, the average of the 591 respondents was 22 years old. It is interesting to see that, the mean of the ages rises when we analyse only the one who use majority of them live in the city (58%). That scene prevails when we analyse only who uses the bicycle and only who uses the bicycle in tourist activities. This may explain why the percentage of people using the bicycle is so low, since in the literature is has been proved that driver's behaviors and the traffic conditions may affect the desire to cycle (Antonakos,

1994; Downward & Lumsdon, 2001), and inside the cities the traffic is higher.

Table 1 | Sociodemographic Profile

	25 10	Total Sample					Use of the bicycle in Tourist Activities			
Variables	N	%	Mean	Std. Deviation	N	%	Mean	Std. Deviation		
Gender	591				123					
Male	194	32.8			59	48				
Female	397	67.2			64	52				
Age	591		22.35	2.779	123		23.02	3.043		
Residence	591				123					
City	344	58.2			70	56.9				
Town	124	21			23	18.7				
Village	123	20.8			30	24.4				
Studies	591				123					
Degree	385	65.1			67	54.5				
Master	144	24.4			41	33.3				
Integrated Master	26	4.4			11	8.9				
PhD	7	1.2			1	0.8				
Post-Graduation	4	0.7	l	1 1	1	0.8	l			
Technological Specialization Course	19	3.2	l	1 1	2	1.6	l			
Other	6	1								

Source: Own elaboration

4.2. Travel motivations

With the view to understand what drives university students to travel, it was asked to those who use the bicycle in their tourist activities, to express their agreement with a set of statements in a Likert scale (from 1 - totally disagree to 5 totally agree).

Expand knowledge and contact with other peoples are the travel motivations more important to youth tourists that use the bicycle during their trips (Table 2). The respondent travel so they could get away with their routines and to have social interactions with others such as, meet new people from others cultures. These findings go along with the literature that also points as main factors for adolescents to travel as meet new cultures, increase their knowledge and have the opportunity to relax (Chadee & Cutler, 1996; Eusébio & Carneiro, 2012; Richards & Wilson, (2003); Morgan & Xu, (2007); Kim & Jogaratnam, (2003).

Table 2 | Travel motivations

Travel motivations	Mean	Std. Deviation
To change my routine	3.96	0.995
To escape from my usual environment	3.92	1.068
To feel good with myself	3.85	1.056
To get out of a streesful environment	3.69	1.117
To be with friend	3.46	1.14
To meet new cultures	3.41	1.226
To get over my bad mood	3.27	1.261
To get to know me better	3.04	1.278
To meet new people	2.96	1.211
To be with people with the same interests as mine	2.88	1.212
To avoid people who annoy me	2.85	1.291
To tell other my experiences	2.71	1.253
To avoid interactions with others	2.33	1.198

Source: Own elaboration

4.3. Travel behaviour

The average number of trips during those last three years was 4.73 trips per person. However, it was made a question in order to see, from those trips, in how many did they use the bicycle. It was asked to them to quantify the level of use of the bicycle (on a scale from 1 - never to 5 - always) and the average went down to only 2.76, which indicates that they do not use the bicycle always during their holidays. Concerning the duration of the trips, the mean 4.94 which it is a good average of days to spend on holidays, and it goes according with the literature which says that cycling tourist are slow travelers, and so, they stay longer in the destinations (Coker & Bull, 2006) (table 3).

Taking now into account the mode of transportation preferred by the respondents, it is possible to assume that they prefer the "car" (53.7%) to go from their home to their tourism destination, and that 18.7% prefer using the "bicycle" as their main mode of transport. When the type of tourism accommodation is analyzed, we conclude that most of the respondents did not stay in any type of tourist accommodation (N=75). So it is possible to

assume that most of the respondents were excursionists who engaged on one-day trips, which represents 61% of the respondents who used the bicycle in their tourist activities. The ones who affirmed that stayed in a tourist accommodation, most of them preferred the "youth hostels" (31.3%) and "private accommodation" (20.8%). Most of the respondents did not spend a lot of money in their trips. In fact, 55.3% admitted to only have spent between 0€and 200€. Regarding the travel company, the majority of them, travelled "with friends" (39%) or "with family" (22.8%).

As predicted by the question "did you stay in any type of tourist accommodation", the activity that the respondents engage the most during their trips was "one-day trip around the destination" (75.6%), followed by the "bike tour" (17.9%), since 61% of the respondents were excursionists.

Finally, regarding the future use of the bicycle in tourist activities, the majority of them, said that they would use the bicycle again in their tourist activities (93.5%), and that they would recommend the use of the bicycle in tourist activities to their friends and family (91.1%). These findings are very interesting since, according with the literature; the cycling tourist is an older individual. However, these shows that despite the fact that, there are still only a few adolescents using the bicycle, those who use it are happy with that choice and have the intention to use the bicycle again in the future. This could mean that this type of tourism is increasing among the youth market, and that, in the future the age range can change.

Table 3 | Travel behavior

Variables	N	%	Mean	Std. Deviation	Variables	N	%
Nº of trips in the last 3 years	123		4.73	12.751	Mode of transport	123	
Duration of the last trip	123		4.94	12.012	Car	66	53.7
Money spent	123		2.31	2.548	Bicycle	23	18.7
Use of the bicycle	123				Bus	12	9.8
Never	38	30.9			Train	20	16.3
Rarely	18	14.6	20.0		Plane	33	26.8
Often	19	15.4			Ship	1	0.8
Sometimes	28	22.8			Other	9	7.2
Almost Always	19	15.4			Accommodation	123	
Always	1	0.8			Yes	48	39
Travel Companions	123				No	75	61
Alone	12	9.8			Type of Accommodation	48	
With Friends	48	39			Local Accommodation	8	16.7
As a couple	22	17.9			Youth Hostel	15	31.3
Organised Trip	2	1.6			Bikehotel	9	18.8
With Family & Friends	15	12.2			Hotel	5	10.4
With Family & Friends	28	22.8			Hostel	10	20.8
Other	6	4.8			Camping	4	8.3
Activities during the trip	123				Tourist Apartments	0	0
One-day trip around the destination	93	75.6			Private Accommodation	10	20.8
Road-Bicycle competitions	5	4.1			Other	2	4.2
Mountain bicycle competitions	6	4.9			Use of the bicycle again	123	
Biketour	22	17.9			No	8	6.5
Watch bicycle competitions	12	9.8			Yes	115	93.5
Other	17	13.6					
Recommend using the bicycle	123						
No	11	8.9					
Yes	112	91.1	50				

Source: Own elaboration

4.4. Benefits obtained from the use of bicycle during tourism trips

Regarding the benefits obtained by youth tourists through the use of bicycle during their tourism activities, the results show that the use of bicycle has a positive effect on several domains of their Quality of Life (QOL). Respondents reporting an average level of agreement in all domains analyzed between 3.20 and 4.48 in all domains of QOL analyzed (on a scale from 1 - completely disagree, to 5 - completely agree). However, the highest impact perceived corresponds to the health domain, namely: (i) increases the possibility to be in healthier environment (mean = 4.48); (ii) improves their mobility (4.36); (iii) increases the opportunities to do outside activities (mean = 4.33); (iv) increases their satisfaction with their

body (mean = 4.30); (v) increases their energy (4.25); and (vi) increases their positive thoughts (mean = 3.99).

By comparing these findings with the literature, it is possible to see connections. It is already known that tourism enhances QOL of the young tourists (Eusébio & Carneiro, 2014). However, it is possible that the bicycle as a way to engage in tourist activities, could have a higher impact on the improvement of QOL. That low importance can be explained with the fact that young people are still in the beginning of their tourist career. Therefore, with the time, they will have a higher perception of the impact that the bicycle can have in their QOL (Eusébio & Carneiro, 2014; Yu et al., 2016).

Table 4 | Benefits taken from using the bicycle

Benefits	Mean	Std. Deviation
Increases the possibility to be in a healthier environment	4.48	0.711
Improves my mobility	4.36	0.769
Increases the opportunities to do outside activities	4.33	0.706
Increases my satisfaction with my body	4.30	0.742
Increases my energy	4.25	0.808
Increases my positive thoughts	3.99	0.840
Increases my skills on daily basis	3.83	0.925
Increases my self-esteem	3.81	0.987
Decreases my physical pain	3.59	1.072
Increases m y productivity at work	3.57	1.013
Increases my abilities to focus	3.50	1.016
Allows me to have a meaningful life	3.42	1.111
Give me more opportunities to improve my knowledge	3.39	1.019
Decreases my dependency on medication	3.20	1.236

Source: Own elaboration

5. Conclusions and implications

Tourism is one of the sectors that have contributed more for the economic development of several countries. Therefore, cycling tourism assumes itself as a type of tourism capable not only to contribute for the economic development of the regions, but also for the sustainable development of the tourism destinations (Bíl et al., 2012; Börjesson & Eliasson, 2012; Fradd & Spanswick, 2009; Lamont, 2014; Lankford et al., 2011; Litman et al., 2009; Pratte, 2014; Ritchie, 1998).

From the 591 respondents 44% claimed using the bicycle in their daily life and 21% said that they use it during their tourist and leisure activities. These findings were already in some way expected since the "traditional" cyclist is an older individual. Despite that it is preoccupant to think that young people are not choosing in new forms of transportation and still prefer to use the car that pollute more than using a bicycle.

Relatively to what could motivate the youth market to use the bicycle during their tourism trips, it was concluded that most of the reasons were related with the possibility change their routine, to meet new people and new cultures, but at the same time, also to be alone and escape from the pressure of their daily life. Considering the travel patterns of the population in study, it is possible to affirm that the young traveller, usually, chooses the car as mode of transportation and prefers to stay in hostels, i.e., low budget accommodation. Most of them travel with company and they do not spend a lot of money during their trips.

Finally, the majority of the students who use the bicycle in their tourist activities have the intention to continue using this mode of transportation and will recommend without any doubt to their friends to do the same. This can be a helpful tool to gather more supporters of this type of tourism, since the power of worth of mouth is incalculable.

Also, was possible to conclude that, concerning

the impact in quality of life, students do not see the use of the bicycle as a big factor. In the literature, this was explained by the fact that they are still in the beginning of their tourism career. However, with our sample these results were expected since there are only a few students using the bicycle in their tourist activities.

Although the theoretical and practical implications of this research, some limitations may be identified. The size of the sample is one of these limitations. This limitation comes with the low rate of answers from the universities to the mail. asking for them to spread the online survey. It was proven that each time it gets harder to obtain collaboration, when the mode of disclosure is the e-mail. Concerning further research it would be interesting to use a different administration mode in order to get more answers. This study would also be more complete if the research was extended to other countries, allowing us to make comparisons. Therefore, it would be possible to improve the national reality by having as example foreign policies. Finally, further research on quality of life and bicycle usage is also needed, so it would be possible to better understand how to improve this use.

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