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ADVERTISING AND TOURISM DEMAND: THE CASE OF ASTURIAS

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DECLARACIÓN DE AUTORÍA Y ORIGINALIDAD DEL TRABAJO FIN DE GRADO

(de acuerdo con lo establecido en el artículo 8.3 del Acuerdo de 5 de marzo de 2020, del Consejo de Gobierno de la Universidad de Oviedo, por el que se aprueba el Reglamento sobre la asignatura Trabajo Fin de Grado de la Universidad de Oviedo)

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DECLARO QUE:

El Trabajo Fin de Grado titulado **Advertising and Tourism Demand: The Case of Asturias**, que presento para su exposición y defensa, es original y he citado debidamente todas las fuentes de información utilizadas, tanto en el cuerpo del texto como en la bibliografía.

En Gijón, a **18 de mayo** de **2022**

Firma:

Abstract:

In this study, I analyze how having seen advertising affects tourism demand. For this purpose, I use the Principality of Asturias as the case study. Exploiting a rich dataset provided by the Tourist Information System of Asturias (SITA), I study potential differences in tourists' total expenditure and length of stay depending on whether the tourist has seen advertising about the destination or not. Specifically, I evaluate any type, advertising in the media, and advertising on the internet to explore potential differences by channel. After setting the hypotheses after a literature review, I perform three different t-tests (one per channel) for mean comparisons. I find that there are significant differences between having seeing advertising or not: those who have seeing advertising stay for longer and spend more money in Asturias, with the Internet emerging as the most powerful channel.

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1. INTRODUCTION

1.1 Tourism and its importance for Spanish and Asturian economy

According to the World Tourism Organization (UNWTO), *“Tourism is a social, cultural, and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes. These people are called visitors (which may be either tourists or excursionists; residents or non-residents) and tourism has to do with their activities, some of which involve tourism expenditure.”*

Even though leisure and fun are what we might first think when we hear about tourism, it does not only involve leisure but also a highly relevant economic sector worldwide. The tourism sector involves several subindustries like accommodation, bars and restaurants, tour guides, transportation, etc. As several studies in economics have shown, tourism is an important driver of economic growth (Faber and Gaubert, 2019; Aratuo and Etienne, 2019).

Taking the example of Spain, it is the 12th more visited country in the world. The tourism industry represented around 12.4% of its GDP and 12% of its employment before the pandemic according to the Spanish National Statistics Institute (INE). As Caixa Bank analyzed, the lockdown and the subsequent drop in arrivals during the summer of 2020 caused GDP declines (directly and indirectly) of around 4.6 to 5.3 percent points (Caixa Bank Research, 2020). These figures indicate the large importance of the tourism sector, being one of the most important activities of the service industry in Spain.

If we focus on the specific case of Asturias, in 2018 tourism represented about 11% of the Asturian GDP and around 12.4% of its employment (Vallejo, 2021). The contribution of tourism to the Asturian economy has indeed increased over time. Nonetheless, as it happened with other regions, the pandemic caused a large drop of tourism activities and revenues. It is expected that the region will recover and even potentially increase their arrivals during the post-COVID-19 recovery (*El Comercio*, 2018; *Sánchez-Silva*, 2022)

1.2 The use of destination marketing to attract tourists

As there is a huge number of potential customers but also an enormous variety of destinations, tourism marketing is extremely important to attract the largest number of clients as possible.

Firstly, marketing campaigns should focus on making the destination known and discoverable. This includes offline as well as online actions to defend its name. Here, the destination must know what image it wants to be perceived by the client (luxury, relax, familiar, cultural, with lots of parties, etc.) and what are the objectives of the campaign (Visiones del turismo, 2019). Then, they should establish the target market, that is, who are the clients the destination wants to attract related to its image (high class families, couples, groups of young friends...).

Having all this been settled, the subsequent step involves communication decisions. Based on your target market, the advertising campaigns are going to focus more on some channels than on others. It is true that, nowadays, there are mainstream channels that get to potential customers of all ages and conditions but, in some cases, it is necessary to use specific ones (travel magazines, specialized articles, etc.) (Entorno Turístico, 2017).

It is known that the most effective and useful tool for a tourism destination right now is the Internet. Webpages, blogs, and social media are in everybody's daily lives with a complete easy access, so potential clients can look for information about the destination at any moment. That is the reason why destination's image on the Internet is crucial, since it is the most widespread and with the most power on decision-making processes (Ortiz, n.d).

1.3 Objectives of the study, research question and methodology

Considering the importance of the sector and of its promotion campaigns, the aim of this study is to analyze if advertising strategies influence tourism outcomes. To this end, I choose the Principality of Asturias (Spain) as the case study of my analysis. In particular, I will analyze the influence of its famous campaign "Asturias, Paraíso Natural" on tourists' consumption patterns and behavior at destination, measured in terms of total expenditure and length of stay.

My research question is the following: how does advertising (any kind and distinguishing between advertising on the media, or on the internet) affect tourists' length of stay and total expenditure on the trip? For this purpose, I use survey data collected to a large sample of tourists visiting Asturias between 2010 and 2019. The dataset is kindly provided by the Tourist Information System of Asturias (SITA). The analysis compares the length of stay and total expenditure of tourists who have seen advertising with that of those who have not, using

different t-tests for mean comparisons. I make the analysis considering having seen any kind of advertising and separately depending on having seen advertising on the media or on the internet. In this way, the study provides some descriptive evidence about the role of marketing campaigns in generating differences in tourism consumption patterns at destination.¹

1.4 Results

After conducting different statistical tests, I arrived at some interesting results. The t-tests showed that we can reject the null hypothesis of advertising not affecting the length of stay and total expenditure, since there were significant differences between their means. Moreover, the Internet is found to be the most effective channel, with higher mean values (clients stay for longer and spend more money) and lower standard deviations (they behave in a more similar way and much closer to the mean) than the other channels selected (any kind and media advertising). This is also related with some studies discussed in the literature review section, according to which media advertising has changed from being the most important channel for destinations promotion, to become a secondary and less effective way to attract tourists. This can be affected by the huge impact of the new technologies, the Internet, and social media, which led to a decrease on TV and newspapers consumption.

1.5 Paper structure

This paper is structured as follows:

Firstly, I will review all the topics I found interesting in my literature research, considering that they were linked to the case I wanted to study and their possible results. This includes the evolution of advertising channels and how they are related to tourism, and their effectiveness. Secondly, I will explain the case study I have selected for the analysis (Asturias), my research question, how the data was obtained, some descriptive statistics to know the representative tourist of the destination, and how the variables of interest have evolved during the period selected (2010-2019). Next, I will present my hypotheses and some tables reporting the different tests I made, analyzing the obtained results. Finally, I will end with a general discussion in which I summarize the main conclusions of the work.

¹ I am aware that the results offered in this study cannot be given a causal interpretation, since tourists likely self-select into marketing campaigns and there might be other confounding factors affecting tourism outcomes like travel history, income, prices or other traits. Nonetheless, the results are still relevant as a first approximation to the influence of advertising strategies on tourist consumption.

2. LITERATURE REVIEW

2.1 Evolution of the advertising channels and its effects on tourist decisions

Advertising and marketing campaigns are important targeting strategies for tourist destinations to increase their tourism demand. In this regard, some studies show that tourism demand is highly sensitive to tourism advertising campaigns (Divisekera and Kulendran, 2006).

In the past decades, broadcast media (radio and television) and print media (newspapers, magazines, and flyers) have been the leading channels to attract and target potential visitors. The choice between one type of advertising channel or another depends on the target population and the strategic purposes of destination managers. For instance, television advertisement is quite popular when the purpose is to target mass audiences. However, it has the drawback that it produces low personal involvement in the viewer. It is generally used for the sake of creating a destination brand image, with videos, sounds and color, rather than a huge campaign with lots of information and slogans the viewers might not remember. If that were the purpose, the best channel would probably be the print media. It offers the advantage of a greater involvement and interest by its audience, who are less likely forget the main ideas of what they are reading. This is very useful for tourism marketing campaigns, since it is widely known that persuading messages are more effective in this kind of media than in other alternatives (Saikat and ThemeZaa, 2020).

These were some of the aspects that destination managers used to take in account when designing their marketing campaigns some years ago. However, destination branding advertising has changed substantially in recent years (Comunidad Hosteltur.com, n.d). The developments of the Internet and social networks have totally modified consumers' consumption patterns, information gathering strategies and decision-making processes.

Information technologies have completely revolutionized the tourist sector. Nowadays, consumers can easily find the services and experiences that satisfy their needs with a fast and simple online search. Indeed, the supply of tourism services is more concentrated in online platforms (Booking, Airbnb...) and the possibility of comparing alternative options has increased significantly. The distinguishing factor of this kind of platforms is that they are Internet Distribution Systems (IDS) and not Online Travel Agencies (OTA). This means that they only intermediate the supply and the demand without making any decision (the accommodations are the ones who decide the number of rooms and the prices they want to show on these platforms).

Taking Booking.com as an example, around 1.4 million bookings are daily made. This figure is clearly far above that what a traditional travel agency could ever achieve according to the statistics provided by *Portal de Estrategia y Marketing*. Therefore, branding and advertising your destination on the Internet is key nowadays: a good online marketing campaign can make a tourist destination discoverable by millions of tourists. This is related with what Lin et al. (2006) showed on their case study of *I left my heart on the Aegean Sea*, a blog made by Yahoo that promoted tourism to Greece. In this blog, tourists could not only see impressive and beautiful photographs of the destination, but also know what to do in the different islands, prepared plans depending on the type of trip and many other suggestions. This could be a very useful tool if you want to visit Greece, but you do not know how to start or what activities would be worthier for you to do. This is a particular example, but, with it, we can observe how many helping features the Internet supplies us when planning a trip. The fact that, as I will explain later, self-planners are taking the majority of target market quota is in some way conditioned by this kind of factors.

The Internet allows us to increase our awareness of destinations' information, lets us book everything we need for our trip (transportation, accommodation, activities) without moving from home. Moreover, as Park et al. (n.d) explained, the Internet lets us purchase those services together (plane+hotel, hotel+activity, hotel+restaurant...). Currently, pack advertising is very common on online platforms and very accepted by consumers, since it lets them make all their reservations in one booking and, sometimes, buying them in pack will reduce the price of buying them separately. We do not need no more to go to a travel agency in search of any type of information, because we only have to type the name of our selected destination on our smartphone or computer, and we will have everything we needed and more.

Overall, the Internet is currently a very useful tool that is related to the so-called electronic word-of-mouth (eWOM): the spread of (positive) opinions about a tourist destination either in specialized websites like TripAdvisor or in personal social media like Twitter or Instagram. There is some agreement in the tourism literature that the diffusion of positive feedback about a destination in terms of facilities, service quality or value for money are crucial for increasing potential demand in the future (Liu, 2020). Due to this, destinations' marketing campaigns should focus only on the advertisement strategies they could develop, but also in ensuring visitors a pleasant stay and encouraging them to engage into word-of-mouth communication. At the end, if tourists enjoy their trip, they will be the best advertisers of the quality of the destination.

2.2 The effectiveness of tourism advertisement

We now proceed to briefly review the literature that has analyzed how tourism advertising affects tourism outcomes. Firstly, De Souza et al. (2020) show that the effectiveness of the advertising campaign crucially depends on the type of customer. These authors divide the target market in 3 types: those intermediated by traditional travel agencies, those who organize the trip by online travel agencies, and those who plan the trip themselves. The latter group is the largest, representing around 50% of the market. According to the results presented in their study, the predominant advertising channel is the Internet (45.3%), followed by TV/radio (20.2%) and newspaper/ magazine (19.9%). Interestingly, the so-called 'traditional' customers (those who are less into new technologies) are the ones with the greatest expenditure at the destination. Nevertheless, when considering the advertising campaigns, the authors show that self-planners are the most aware of them.

Using data for Illinois, Kim et al. (2001) show that the highest percentage of visitors were the ones who had seen and requested advertisement and information about it (69.7%); whereas the lowest rate was for the ones who were not aware of the advertisement and did not request any type of information about the destination (21.1%). Another interesting fact is that the study was made in the year 2001, before the Internet boom. They document that television is the most prevalent media channel, followed by newspapers and magazines. Curiously, the Internet was the least used in terms of advertising and seeking of information, which is something that today we would find completely surprising. Nevertheless, in a more recent study, Mahmoudi et al. (2018) find that the Internet effectiveness has reached the rates of television in terms of the information provided (40% vs 40.7%), becoming the most powerful in terms of attracting tourists (38.7% vs 30.7%).

As the Internet is nowadays the most important promotional channel, social media becomes a very useful tool for marketing purposes. Icoz et al. (2018, p.1056) indicate that "as individuals' knowledge about tourism services increases through social media, their acts of buying them also increase." This is related to opinions and comments that other tourist had made on these platforms, which may create a positive or negative influence in the decision-making. Seeing good comments about a destination will make a potential visitor more willing to go rather than seeing negative opinions. This is what Albarq (2014) calls 'electronic word of mouth (e-WOM)', which is a competitive advantage for a destination. We can also link this with the following idea that Hamouza (2018) highlights in his work: social media sources (SMSs) require nowadays not only to be informative but also to fulfill some entertaining standards to make them attractive

and appealing. The advertising value of social media increases with both information-rich and entertaining contents.

Moreover, due to the positive effect these channels bring to costumers, its behavior will be favorably affected towards the publicized landing place. This value gets even more powerful if the destination's target markets are millennials and gen Z generations, barely born with Internet and social media, and much more influenceable by this kind of advertising campaigns and other users' opinions. As Sahin et al. (2015) show on their study on university students, decisions from the youth are affected (in positive and negative ways) by the comments they see about the destination on social media. Plus, social media is found to be an interesting tool for attracting young generations, being an important part of some marketing strategies.

As we can see, tourist advertisement is related with the final visit of the consumer, since the more information and concern the tourists have, the more likely is that they will return. Additionally, the way channels are changing and how the supply is adapting to the demand needs is highly remarkable. It is undeniable that the Internet has changed our lives in many different senses and, for better or worse, we cannot nowadays live without it. That is why public institutions, destinations and other kind of tourist organizations should invest not only on advertising campaigns, but also on the latest ways of analyzing data, to offer the best services (Casanueva et al., 2014). Social Networks Analysis is still a very new model of analysis in this field, but its use will definitively increase in the next few years, due to the useful conclusions the destination's managers can obtain. This network analysis is based on finding the cooperation and cohesion of chosen variables, so that is easier to find strengths and weaknesses of the destination (Tran et al., 2016). For instance, David-Negre et al. (2017) revealed that the relation between tourists and their expenditure on leisure activities can be studied by this way, something that could be particularly interesting for our case study.

3. CASE STUDY

3.1. Asturias as a Natural Paradise

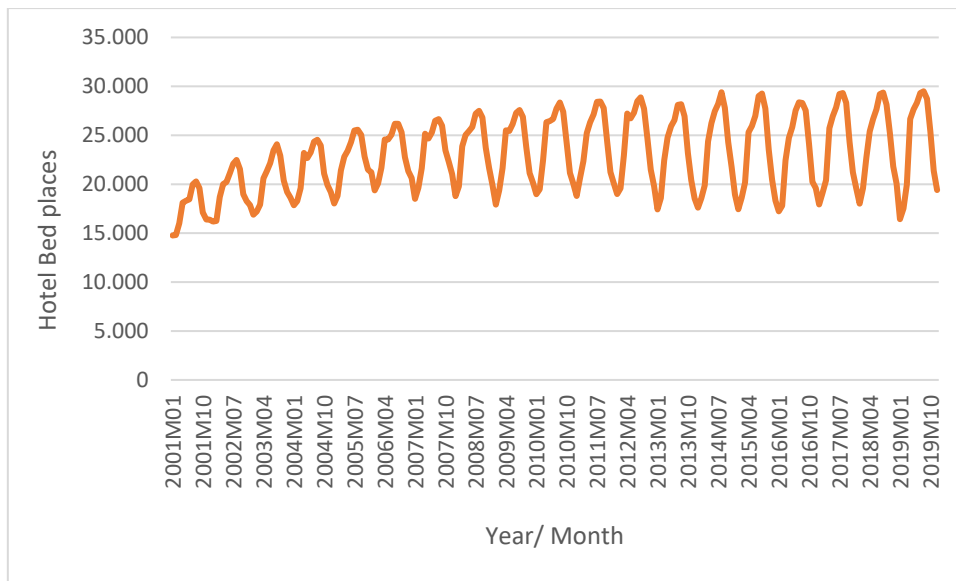
The Principality of Asturias is Spanish Northwestern region that consist of only one province, with a surface area of 10,640 km² and 1,008,897 inhabitants. It is surrounded by sea and mountains, and it is very well-known for its beautiful landscapes, good gastronomy, and its welcoming locals.

In 1985, a public-private partnership between tourist associations (a primitive Otea) and the Principality of Asturias developed a promotional campaign named “Asturias Paraíso Natural”. The purpose was to publicize its landscapes, culture and traditions and make them attractive to new tourists. Apart from the proper advertisement of the campaign, Asturias put all its effort on touristic fairs like FITUR, to show all the options tourists have when visiting it. At first, they had a small place in the fair but, little by little, the Autonomous Community has reached a space of 901 square meters for presentations, gastronomic tastes, and entertaining activities (EuropaPress, 2022).

This campaign has achieved that, throughout the passing of the time, Asturias has been linked to the promoted concept of “paradise”. As a matter of fact, even *The New York Times* published an article with a collection of photographs showing part of the natural landscapes, places to visit and traditional Asturian gastronomy and culture (Goya, 2020).

Graphic 3.1 shows the evolution on hotel bed places in Asturias from 2001 to 2019. This graph clearly illustrates that the high stationarity in accommodation supply, since the number of hotel bed places is always higher during the summer period. If we compare data for the month of July, we document that in 2001 there were 20,292 hotel bed places whereas in 2019 there were 29,319. Although we cannot establish a causal connection, this increase in the accommodation supply likely reflects associated increases in tourism demand in the region. The above-mentioned promotional campaign is likely to be partly responsible for this. Asturias had around 2.3 million visitors and 5.7 million overnight stays in 2019, becoming one of Spanish regions where the tourist sector has increased its importance in the last years. In this regard, the global pandemic affected Asturias in a positive way since during the summer of 2020 tourists prioritized travelling to rural areas and the practice of outdoor activities (Vaishar and Stastá, 2022). This has made that in 2020, Asturias had better accommodation rates than other traditionally popular destinations, like Balearic Islands and Cataluña (EP, 2021). Furthermore, Baños-Pino et al. (2021) show that average expenditure per person has remained almost unchanged in 2020 as compared to 2019.

Graphic 3.1: Evolution of hotel bed places (units) in Asturias (2001-2019)



Source: Own elaboration based on Spanish National Statistics Institute (INE)

3.2. Research questions

The goal of this research is to analyze how advertising campaigns might affect total expenditure and the length of the stay of those tourists visiting Asturias. A secondary aim is to deepen into whether there are differences depending on the type of advertising considered. Specifically, I will examine the distinct effectiveness of Internet advertising (blogs, websites, social media, etc.) versus traditional advertising (TV, newspapers, magazines, flyers, etc.).

3.3 Database

For the analysis, I use survey data for tourists visiting Asturias between 2010 and 2019. The dataset is provided by the Tourist Information System of Asturias (SITA). This is a public Institute for tourism research that belongs to the University of Oviedo which annually surveys a representative sample of tourists visiting the region to develop tourism statistics. The database is composed of surveys to people over 18 that visit the region. We work with a total of 47,598 individuals, which is a good sample figure to make conclusions (as bigger the sample, more significant results will come out). The polls include questions that gather information about different topics: what areas they are visiting, their satisfaction with the trip, travel purpose (leisure or work), travel companions, total expenditure, length of stay and the

sociodemographic profile (age, gender, educational level, labor status, etc.), among others. Respondents are also asked whether they have seen advertising about Asturias and (if so) which specific type of advertising (on the Internet, on print media, on the TV, etc.). Further details about the dataset can be found in <http://www.sita.org/>.

For the purposes of this study, we will devote our attention to two tourism outcomes: the length of the stay (in days) and total expenditure (in euros).

3.4 Descriptive statistics

Table 3.1 presents descriptive statistics of the sample to characterize the representative tourist ('persona' customer) visiting Asturias. For simplicity, I only consider the following variables: age (in years), gender (male indicator), previous experience in Asturias (binary indicator), travel party size (people), professional/labor status (dummy indicators) and trip purpose (leisure indicator).

The average tourist is mainly a male (53%) of 40 years old who mostly has not been before in the region (86%) and comes in a group of around 3 people (on average). Moreover, this representative consumer travels predominantly for leisure reasons (82%). Around 70% of total visitors stay overnight whereas the remaining 30% is a same-day visitor. Students and public servants are the most prevalent professional statuses (10% and 17 %, respectively), followed by housewives/househusbands and retired people (6% and 7 %). Finally, businesspeople only represent a 3% of the sample.

Table 3.1: Descriptive statistics

Variable	Mean	SD
Male	0.53	0.499
Age (years)	40.75	12.698
Travel party size (people)	3.78	6.902
Previous experience	0.14	0.349
Student	0.1	0.297
Public servant	0.17	0.271
Businessman	0.03	0.157
Housewife/househusband	0.06	0.235
Retired	0.07	0.248
Leisure trip	0.82	0.387
Tourist	0.7	0.457
Same-day visitor	0.3	0.457

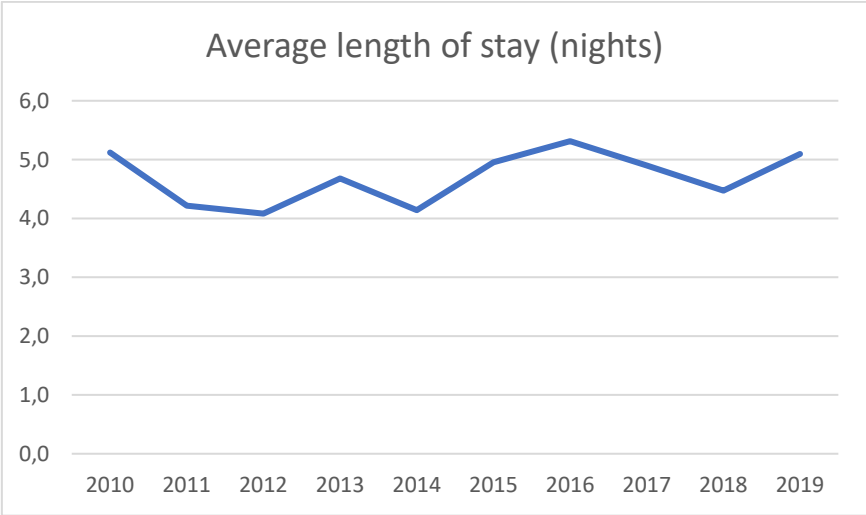
3.5 Evolution of the variables of interest throughout the study period

As a preliminary analysis and before conducting any statistical test, I examine the evolution of the two variables of interest, length of stay and total expenditure, during the study period (2010-2019). This will bring me an idea of how tourists have behaved during this period in general terms. Furthermore, with this data I can see if the Principality of Asturias has increased its tourism demand over time, potentially as a result of a successful advertisement campaign.

Graph 3.2 shows the evolution of the average length of stay (in nights) spent in Asturias from 2010 to 2019. Here, we can see how during the years after the economic crisis of 2008 (2010-2014) there is a decreasing shift of the number of nights spent at the region, without being able to reach 5 nights as in the beginning of this period. This is mostly affected by the economic crisis I have mentioned before, since the increasing unemployment and reduced disposable income made tourist to shorten their trips. Therefore, as the economy was getting better, the length of stay increased too, reaching 5.3 nights on average. At the end of the period, after a decrease of nearly 1 night in two years, the length of stay achieved again 5 nights on average, as in 2010. This can reflect how after a difficult economic crisis where the sector was damaged, Asturias managed to regain the same nights as the beginning. This recovery may come from many factors, but it is clear that a good advertising and pricing campaign could play an important role. Another highlighting point is the fact that, during this period, the average length

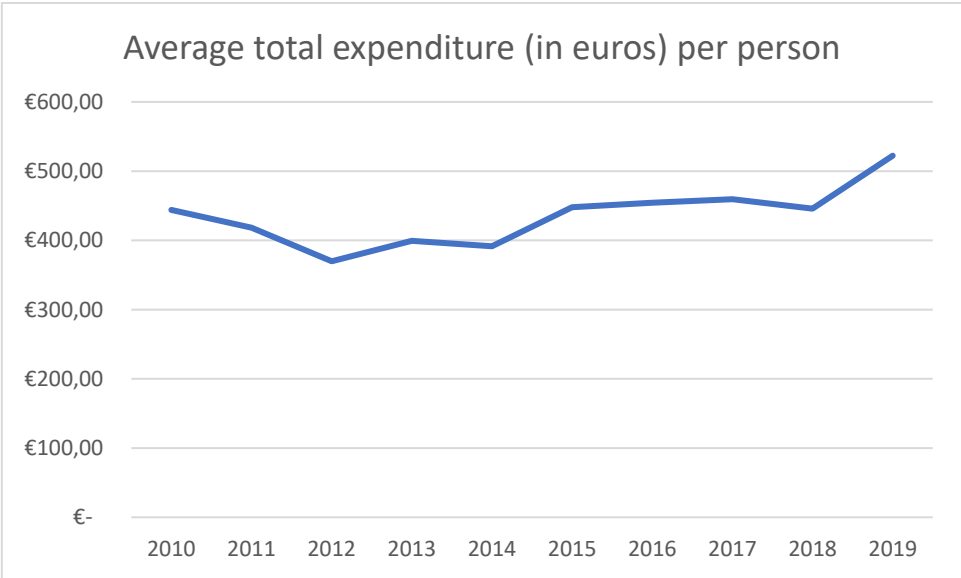
of stay has never been below 4 nights. I find this particularly interesting, since 4 nights is more than a “weekend trip”. More nights, more time in the region, and, subsequently, more money spent on Asturias.

Graph 3.2: Average length of stay (nights) spent in Asturias (2010-2019)



Source: Own elaboration based on data provided by the Tourist Information System of Asturias (SITA)

Graph 3.3: Average total expenditure (in euros) per person in Asturias (2010-2019)



Source: Own elaboration based on data provided by the Tourist Information System of Asturias (SITA)

In Graph 3.3, we can see the average total expenditure per person by journey during the period of the study (2010-2019). This graph shows the same shift as Graph 3.2, but it is more stable (lower difference between high and low points). The effects of the economic crisis are also reflected in a decrease in expenditure, as it happened with the length of stay (decrease in nights, decrease in money). However, the economic recovery made that, little by little, tourists started spending more. At the end of the period, the average expenditure was 522,29 euros, 72,27 more than in 2010 (nominal terms). This means that, unlike the length of stay, the average total expenditure did not only recover from the crisis; but also increased.

If we consider the lowest point for both graphs (2012), where the length of stay was 4.1 nights and total expenditure 369.83 euros per person, we could say that the minimum that a tourist has spent per day (on average) in Asturias during this period was 90.2 euros.

With all this information, we cannot ascertain if the recovery and increase on expenditure and length of stay following the 2008 economic crisis has been affected by advertising or not. In the following section, I will make a comparison of the two variables of interest (length of stay and total expenditure) depending on whether the individual has been advertising or not.

4.RESULTS AND ANALYSIS

4.1. Main results

In this section, I present comparative statistics about the differences in length of stay and total tourist expenditure depending on whether the tourist has seen advertising. As introduced before, I select the two variables of interest: length of stay and total trip expenditure. Next, I consider a binary indicator for whether the respondent has seen any kind of advertising, and two indicators distinguishing between the internet and the rest (traditional media).

The research hypotheses are the following:

Ho: The length of stay and total expenditure do NOT vary between those who have seen tourism advertising and those who have not

H1: The length of stay and total expenditure vary between those who have seen tourism advertising and those who have not

Table 4.1: Length of stay and total expenditure depending on whether the tourist has seen advertising (any type)

	Advertising	Mean	SD
Length of stay (nights)	0	3.82	9.48
	1	4.22	7.74
Total expenditure (€)	0	291.69	479.55
	1	332.39	362.84

Table 4.1 shows the mean values and standard deviations of length of stay and total expenditure depending on whether the respondent has seen advertising (1) or not (0). We can see that those who had seen any type of advertising stay around 4.2 nights and spend 332.39 euros on average. Those who have not stay for 3.8 nights and spend 291.69 euros during the trip. Moreover, advertising viewers are more similar in terms of their expenditure and stay than non-viewers according to their lower standard deviation.

To test the null hypotheses H_0 (separately for length of stay and expenditure), I conduct three t-tests for mean comparison. This test consists of computing the mean difference between two groups (samples of underlying population) and testing whether they come from the same population. There are two different formulas, depending on if we assume equal variances or not (López-Menéndez et al.,2011).

If we assume equal variances, the formula is the following one:

$$T - value = \frac{mean\ 1 - mean2}{\frac{(n1 - 1) \times var\ 1^2 + (n2 - 1) \times var2^2 \times \sqrt{\frac{1}{n1} + \frac{1}{n2}}}{n1 + n2 - 2}}$$

where:

- *Mean 1* and *mean 2* are the mean values of each of the subsamples
- *Var1* and *Var2* are the variances of each of the subsamples
- *n1* and *n2* are the number of observations in each subsample

However, if we do not assume equal variances the formula changes to the following one:

$$T - value = \frac{mean1 - mean2}{\sqrt{\left(\frac{var1}{n1} + \frac{var2}{n2}\right)}}$$

Using these two formulas in SPSS software, I get the subsequent results:

Table 4.2: T-test comparison of length of stay and total expenditure by whether the tourist has seen advertising (any type)

	Type of test	Dif. means	t-statistic	p.value
Length of stay	Assuming equal variances	-0.401	-4.61	<0.001
	Not assuming equal variances	-0.401	-4.93	<0.001
Total expenditure	Assuming equal variances	-40.70	-9.43	<0.001
	Not assuming equal variances	-40.70	-10.32	<0.001

Table 4.2 presents the results from t-tests for both length of stay and total expenditure. We report the statistic assuming both equal and unequal variances. We find that advertising viewers stay for longer (+0.401 nights) and spend more money (+40.70 euros) in the region. Since the p-value is lower than 0.001, we can reject the null hypotheses of no difference. This implies there is evidence that those who have seen advertising spend more money and stay for longer than those who have not.

4.2. Differences by type of advertising

Our final part of the analysis is to test the effects of having seen media or internet advertising (1) or not (0) on the length of stay and total expenditure of the trip. Table 4.3 below shows the mean values and standard deviations of the length of stay and total expenditure depending on having seen media advertising (TV, newspapers, flyers...) (1) or not (0). In this case, having seen this kind of advertising is not related to more stay or more spending, as the mean values for non-viewers (3.97 nights and 308.51 euros) are higher than the ones for viewers (3.86 nights and 291.7 euros). However, the variability is still lower for those who have seen advertising (lower standard deviation), so that their behavior is closer to the mean.

Table 4.3: Length of stay and total expenditure by whether the tourist has seen media advertising

	Media	Mean	SD
Length of stay (nights)	0	3.97	9.14
	1	3.86	8.10
Total expenditure (€)	0	308.58	405.00
	1	291.70	346.61

Table 4.4: T-test comparison of length of stay and total expenditure by whether the tourist has seen media advertising

	Type of test	Dif. means	t-statistic	p.value
Length of stay	Assuming equal variances	0.114	1.10	0.271
	Not assuming equal variances	0.114	1.19	0.236
Total expenditure	Assuming equal variances	16.89	3.29	<0.001
	Not assuming equal variances	16.89	3.92	<0.001

Table 4.4 presents the results from t-tests for both length of stay and total expenditure depending on whether the tourist has seen media advertising. We report the statistic assuming both equal and unequal variances. In this case, the non-viewers are the ones who spend more nights (+0.114) and more money (+16.89 euros) than the viewers. Regarding the p-values, we can see that there is a significant difference in total expenditure between those who have seen media advertising and those who have not (p-value <0.001) whereas, in the case of the length of stay, the difference is not statistically significant (p-value is higher than 10%). Because of that, we reject the null hypothesis for expenditure, but we do not for the case of length of stay.

Table 4.5 shows the mean values and standard deviations according to whether the individuals has seen advertising on the internet or not. The ones who have seen internet advertising spend, on average, more nights and money (4.12 nights and 341.9 euros) per trip in Asturias. As the standard deviation is lower for viewers, we can say that they behave in a more similar way and closer to the mean values than non-viewers.

Table 4.5: Length of stay and total expenditure by whether the tourist has seen internet advertising

	Internet	Mean	SD
Length of stay (nights)	0	3.92	9.37
	1	4.12	6.28
Total expenditure (€)	0	298.29	461.00
	1	341.90	342.49

Table 4.6 presents the results from t-tests for both length of stay and total expenditure, also depending on having seen internet advertising or not. We report the statistic assuming both equal and unequal variances. The results show that internet advertisement viewers' stay longer (+0.204 nights) and spend more money (+43.62 euros) in their trips to the region. Regarding the p-values, there is a significant difference in total expenditure whether having seen internet advertisement or not (p-value <0.001). In the case of length of stay, this difference is only significant when not assuming equal variances (0.017<0.067). Nevertheless, all the p-values are below the 10%, so we can reject the null hypothesis of no difference. This implies there is evidence that those who have seen advertising spend more money and stay for longer than those who have not.

Table 4.6: T-test comparison of length of stay and total expenditure by whether the tourist has seen internet advertising

	Type of test	Dif. means	t-statistic	p.value
Length of stay	Assuming equal variances	-0.204	-1.83	0.067
	Not assuming equal variances	-0.204	-2.38	0.017
Total expenditure	Assuming equal variances	-43.62	-7.86	<0.001
	Not assuming equal variances	-43.62	-9.59	<0.001

5. DISCUSSION AND CONCLUSIONS

To sum up, along this study I analyzed how advertising affects tourist demand using as an example the case of the Principality of Asturias. After reviewing related articles, I used survey data from the SITA to characterize the representative tourist of the region based on descriptive statistics. Next, I compared tourist's behavior in terms of length of stay and total expenditure of the trip to test whether there are differences between seen advertising (any kind, media or internet) or not.

The results were the following: the three t-tests show that there are significant differences in tourism expenditure and length of stay depending on whether the tourist has seen any kind of advertising or not. We therefore reject H0 and must take H1 as true. Having seen advertising is related to more expenditure and longer stays in the principality of Asturias. Regarding the channels, it is shown that the Internet appears to be, nowadays, the most effective way to

achieve a longer length of stay and more tourism expenditure. However, media as an advertising channel seems to be ineffective for enhancing the stay, since there are no significant differences between media viewers and the rest.

The presented findings resemble previous literature (Mahmoudi et al. ,2018; Divisekera and Kulendran, 2006), where other authors explained the increasingly power of internet in advertising, more specifically in touristic advertising, over other traditional channels. The loss of power of media advertising is also contemplated by these papers, accepting their usefulness some years ago, but knowing that they cannot currently achieve the targeting, consumer arriving, and decision-maker results the Internet is having.

Considering all this results, I personally think that tourism marketing and advertising is crucial nowadays. The way a campaign can change (for better or worst) the quantity of tourists, how much money and time they spend, if they are going to repeat, and so many other variables has honestly surprised me. This is something that, innocently, everyone as a tourist has never realized while choosing a holiday or trip destination but we do it. We search for opinions and reviews (word of mouth), we normally are more interested in original campaigns rather than traditional and boring ones (attracted to good slogans, involving videos, etc.), and we are more and more used to do everything online (booking transportation seats or accommodations). All of this without noticing that, in fact, there is a huge preparation for this to happen. Because of that, my recommendation for any region that would like to improve its results would be to focus on what type of tourism they want to attract, gain a good image on your target market, and do an advertising campaign with Internet, and more especially social media, as main channel.

In view of the region studied, the Principality of Asturias, the results reassure the complete success of the campaign "Asturias Paraíso Natural". The slogan was so strong that nowadays is still remembered. The campaign made lots of tourists visit Asturias for the first time and fell in love with it by firsthand. The word of mouth, in this case, played an important role, since most of Asturias' visitors have liked the experience and probably would repeat it. Moreover, their bet on the natural and rural target was their greatest feat, since it brings a different view of Spain (for both national and international visitors) and fits with the post-COVID-19 conditions, where more people are looking for more outdoor and less populated activities. The current campaign, "Vuelve al Paraíso" is also good based too, as they are trying not only to attract new tourist, but also make the ones that have already come repeat their experience in the region. Also, they are using more social networks to communicate with their audience which, as we have seen along this paper, it is a good start to a successful campaign.

To conclude, this paper has made me unify two sectors that I am really interested about: marketing and tourism. It was rewarding to analyze the case of my region, Asturias, and be

able to say that it is being successful in terms of its campaign. Besides, all the work related was worthy, since it let me realize that I can manage to do any kind of investigation I want in the future.

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