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The interplay role of destination area hashtags to enhance small destination pictures' engagement on Instagram

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Abstract

Purpose: Hashtags are important in enriching the content of posts and in obtaining more engagement (Messina, 2007). This study aims at analysing the impact of the combination of the small destination name hashtags with hashtags mentioning the wider destination area by answering at the following research questions: (RQ1) What are the territorial hashtags used in the small destinations' pictures capture? (RQ2) Do the mentions of the wider area through territorial hashtags impact on small destination post's engagement?

Methods: Based on hashtags' destination names, a sample of 13,217 posts of 18 Italian small destinations are retrieved (period of higher tourism turnout in 2019). Both content analysis (RQ1) and linear regression models (RQ2) are used.

Results: Scholars have never focused on the link between the engagement of a photo and the hashtags related to specific territories. Through this research, we can state that people use hashtags referring to the wider destination area (mainly combining region and nation). The hashtag of a small and niche destination together with the hashtags of the region, neighbouring territories or the nation, can improve the engagement of the related picture in terms of number of likes.

Implications: This study confirms the role of the hashtags in enhancing a picture's engagement contributing to the literature about the consumers' feedback on online picture by adding the territorial dimension as a variable. From a managerial perspective, it suggests how destination management organizations should use hashtags in Instagram, in order to improve their offerings.

Keywords: Hashtags, small destination, tourist area, Instagram

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INTRODUCTION

One of the most significant Internet evolutions is the prevailing use of social media as instruments to collaborate, communicate and publish original contents both by firms and users. Social media have become an integral part of daily routines moving clearly towards real-time social media experiences based on a stronger use of visual contents (Pin, 2016).

Looking at the tourism sector, images together with their captions are particularly important in documenting and shaping the tourist's experience (Munar & Jacobsen, 2014) by allowing to share online real life activities (Lo, McKercher, Lo, Cheung, & Law, 2011) building and transforming an intangible experience into something tangible.

Social media not only heighten motivations to travel, they also promote travel to specific destinations by enhancing destination awareness and affecting the destination image. In fact, as highlighted by Leung et al. (2013), tourists mainly search through social media for information in their travel-planning phase. Social media make people aware about new places and inspire them to visit a place, bringing several benefits to an area (Dimitrova, 2019; Karsten Matthew, 2019).

Some social networks promote the use of hashtags to classify contents. Hashtags are non-spaced words, abbreviations, or phrases following the # sign used in posts' captions. It has been shown that hashtags are important in enriching the content of posts and in obtaining more engagement furthermore, the hashtag choice is considered an important social input in tourist purchase decisions (Popescu & Popescu, 2016).

Literature examining the contents shared by tourists is still limited and mainly related to large cities or famous destinations (Galí & Donaire, 2015; Mukhina, Rakitin, & Visheratin, 2017). At the same time, different analyses have begun to shed light on the potential of small cities and rural communities to position themselves more effectively from the tourism perspective (Brouder, 2012; OECD, 2014; Pierce, Martin, & Murphy, 2011).

Tourism in small destinations has a high significant impact from a logistical and environmental point of view (Istat, 2017) and could be considered also in relation to the wider tourist area they belong to. Furthermore, these kinds of destinations are an interesting case of analysis since in Italy over a fifth of the national tourist presences have been recorded in smaller places (Istat, 2019).

At the best of our knowledge no research has investigated the role of the area in enhancing the small destination awareness. We use Instagram as case, in particular no one analysed how the relation with the surrounding area could affect posts about smaller destinations.

Thus, this study aims at analysing the use of hashtags mentioning other spatial levels (meso and macro), namely neightbouring territories, the province, the region or the nation and their impact on Instagram posts' engagement in the combination of the small destination name hashtags.

1 LITERATURE REVIEW

1.1 SOCIAL MEDIA AND TOURISM

A lot of contents linked to travel experiences are posted on social media (Minazzi, 2015) and research has demonstrated that in the tourism industries some platforms influence both decision processes and tourists' expectations about destinations (Gretzel & Yoo, 2008; Narangajavana, Fiol, Tena, Artola, & García, 2017; Zeng & Gerritsen, 2014).

Traditionally, travel photo sharing was largely a private moment, with pictures assembled into albums and shared with a small audience composed by friends and relatives. A verbal narrative often accompanied the presentation to explain the context of each photograph (Walker, 1989). Nowadays, social media have completely transformed this practice. People can share their pictures potentially at a global level (Boyd, 2008; Lo et al., 2011; Schmallegger, Carson, & Jacobsen, 2010). Volo and Irimiás (2020) underlined how a systematic research on the

meanings of photos can enhance the understanding of tourists' visuals from both theoretical and empirical perspectives.

People who post images online also tend to search for travel information generated by other users (Akehurst, 2009). This trend has a serious impact on destination image development, marketing and promotion (Pan, MacLaurin, & Crotts, 2007) especially because many people consider other users' posted information more reliable than contents posted by institutions (Xiang & Gretzel, 2010).

Tourists are now active participants in establishing what the iconic, must-see destinations are by sharing their photographs on social media platforms (Månsson, 2011) adding the name of the destination and other related words to the caption.

While Facebook is the most popular social media platform with 2.740 billion users, followed by YouTube, Whatsapp, Instagram and WeChat with more than a billion users (We are social, 2021), Instagram is the first one for the engagement creation, being 10 times more engaging than Facebook, 54 times more than Pinterest and 84 times more than Twitter (Grossi, May 9, 2019). Furthermore, Instagram is particularly suitable for the tourism sector not only because it allow travellers to be always connected and share their experiences in real-time but also because through the geotag and hashtag features it helps personalizing travellers' experiences during the trips and providing new points of tourist interest (Agustí, 2021). Moreover it gives them the chance to search and organize tourism information according to their taste (Krisna, Handayani, & Azzahro, 2019).

1.2   HASHTAG VALUE

Hashtags can be considered as "*a form of metadata tag, used to mark the keywords or topics of a microblog. They can occur anywhere in a microblog, at the beginning, middle, or end*" (Gong, Zhang, & Huang, page 1, 2015). Hashtags were created in 2007 by Chris Messina, a social technology expert, to build more online interactions and/or discussions between users on Twitter (Stathopoulou, Borel, Christodoulides, & West, 2017). They were first popularized to sort information topics together on Twitter, but nowadays they are also used to organize discussions around specific topics or events (T. A. Small, 2011) on many other websites, blogs, microblogs, and many social networks (T. Kim, Hinds, & Pentland, 2012).

On Instagram they prospered to better describe the photographs, to give information about the context, to add additional information to the caption of the picture (Ibba, Orrù, Pani, & Porru, 2015; Ye, Hashim, Baghirov, & Murphy, 2018) and to make the picture easier to find. Hashtags represent Instagram's main feature of sorting and filtering content (Sigala, 2007). In fact, Instagram allows users to follow not only other users, but also hashtags, so if a user is posting a picture with a hashtag in its capture, users who follow the same hashtag will see the post on their feed. Hashtags are also used by other users that want to add related content or express a similar idea (Tsur & Rappoport, 2012). They represent a great help to stand out from the enormous mass of information available on social media, making specific posts quickly discoverable (Palazzo, Vollero, Vitale, & Siano, 2021).

Some research evaluated whether hashtags affect posts or user's performance. Hashtags are an efficient way to increase content visibility attracting attention and becoming a sign of high post readability or accessibility (Martin, Lavesson, & Doroud, 2016).

Messina (2007) found that hashtags are important for enriching the content of posts and in obtaining more likes and followers. In fact, it was also shown that posts with at least one hashtag average 12.6% more engagement than those without (Zhang et al., 2019).

Hashtags are also able to enhance interactions among social network users (Page, 2012). Lang & Wu (2011) shown positive correlations between the use of Twitter hashtags and the number of followers while Jungselius et al. (2014) found out that a user in Instagram attracts more followers and likes if he/she adds hashtags to his/her posts.

Numerous studies examined hashtag categorizations (Pang, Lee, & Vaithyanathan, 2002) both on Twitter and Instagram. Small (2011) classified hashtags into two categories: informative (topics, information) and commentary (opinions, judgments) showing that informing is the

primary function of a political hashtag rather than commentary. Tomorn and Bao (2020) focused only on the informative ones suggesting that to be successful in social media marketing channels,
businesses should use a variety of hashtags to increase brand awareness for their organizations. Ibba, Orrù et al. (2015) evaluated the effect of hashtag categorization in Instagram in the context of folksonomy-based item using them as a marketing tool, in order to improve brand or product awareness while Dorsch and Practice (2018) analyzed how Instagram users tag their pictures regarding different kinds of picture and categories through a distinction between Content-relatedness (ofness, aboutness, and iconology), Emotiveness, Isness, Performativeness, Fakeness, "Insta"-Tags, and Sentences. While on average, the Instagram users applies about 15 hashtags per picture, a closer consideration shows that the categories Pet, Fashion, and Landscape receive between 1 and 4 more hashtags on average while the fewest tags are assigned to the person-related categories Selfie and Friends (Dorsch, 2018).
On the tourism field, many studies proved that user generated contents affect destination images (Balomenou, Garrod, & Georgiadou, 2017), but just a few evaluate the role of hashtags. In general, scholars have demonstrated that factors motivating to use the hashtag on Instagram while traveling are chronicling, information seeking, and etiquette, (Krisna et al., 2019). Fatanti, Suyadnya et al. (2015) specifically found four functions of hashtags use in Instagram: to group tourists' content, to search travel content, to expand posts' relevance and to promote tourist products. Researches also confirm the role of the hashtags to reconstruct a destination brand image suggesting that destination management organizations should use hashtags related to the territory they are promoting, as for example, the name of the city or the country or a specific tourist association (Acuti, Mazzoli, Donvito, & Chan, 2018).

1.3   SMALL DESTINATIONS

With the advent of a networked society, many smaller communities, have found new opportunities to effectively compete with large cities in attracting visitors (Richards, 2019). In fact, tourism has gone through enormous changes, with small unknown destinations that take a leading role in many countries (Cracolici, Nijkamp, & Rietveld, 2008), as they are able to combine the beauty of the landscape with history, culture, and traditions that are frequently missing in large mass destinations (Goffi & Cucculelli, 2019).
According to Cracolici Nijkamp and Rietveld (2008), "*isolated or previously unknown destinations have become places to be explored, since they meet tourists' expectation*" or as Papatheodorou (2002) stated, small destinations could be the perfect places for travelers looking for genuine experiences and interactions with the territories and their communities. Reviewing existing literature Molera and Albaladejo (2007) noted that the motivations of rural visitors may include contact with nature; experiencing space and freedom, enjoying peace and tranquility, searching for authenticity and tradition, the desire for contact with local residents, and the importance given to the cost of going on holiday. Furthermore, historical and cultural heritage become a source of relationships and spatial interdependence (local and multi-local) assigning value both to territories and entrepreneurships (Florida Richard, 2002). Previous literature has considered interactions that develop among different spatial levels (i.e. micro, meso and macro) in which normally a complex organization such as a destination articulates (Brouder & Fullerton, 2015; Gill & Williams, 2014; Ma & Hassink, 2013; Randelli, Romei, & Tortora, 2014).
Focusing her studies on brands for networks of places Pasquinelli (2011), points out that literature on place branding mainly focuses separately on cities, regions and nations, as destinations. Furthermore she reinforces Cai's (2002) perspective on the need of a cooperative approach among these destinations to encourage a single and unified sense of identity of a small and rural area with other neighbouring places. Any territory can be seen as connected to a macro level given by another destinations (Ron Boschma & Martin, 2010; Essletzbichler, 2012; Giuliani & Bell, 2005) in fact any territory is constituted by a plurality of specific local contexts but also proximity relationships (Ron Boschma, 2005). A destination is not isolated but is a

co-evolutionary component of a broader social, institutional and economic system (as the national one) that affects its evolution (Ma & Hassink, 2013; Murmann, 2003).

Since destinations are not stand-alone cases but are part of surrounding areas, the study of small destinations could benefit from studies that consider them as one dimension of a multi-destination trip. In fact, multi-destination trips refer to visiting towns that are on the way to the target destination, or visiting nearby regions during the stay at the main destination (Önder, 2017). Small destinations, whose promotional budgets are substantially limited if compared to those of larger cities, could join forces with a neighbouring wider areas to attract travelers interested in visiting both destinations (Önder, 2017)

1.4   RESEARCH QUESTIONS

Nowadays small destinations already account for a sizable share of the total tourist flows in many countries (Istat, 2019; Jordan, 2000; Sharpley, 2012; Tosun, Timothy, & Öztürk, 2003), this is why this part of the tourism industry needs special attention.

Based on literature review on the hashtags use and on small destination promotion, the following research question is formulated:

(RQ1) What are the territorial hashtags used in the small destinations' pictures capture?

Moreover, the concept of corporate versus product brand (Fetscherin & Usunier, 2012) is transferred to the destination dimension where a corporate brand can be compared to the big or neighboring destination while the product brand is represented by a small destination. Also multi-destination, travel patterns and spatial movement of travellers' literature (Lue, Crompton, & Fesenmaier, 1993) is useful to hypoithesize a relation among different levels of a destination, and thus, the following question is formulated:

(RQ2) Do the mentions of the wider area through territorial hashtags impact on small destination post's engagement?

2 RESEARCH METHODOLOGY

2.1 RESEARCH SETTING

Small destinations on Instagram are the object of this research and this makes Italy one of the best contexts for this analysis. In fact, Italy is made of thousands of medieval villages, perfectly preserved or restored, spread all over its territory. They are filled with touristic points of interest such as historic churches, archaeological sites, museums and many other cultural attractions (Ambiente, 2011; Istat, 2018). Specifically, for the aim of this research the Italian Borghi were considered. The term "Borgo" exists only in Italy and does not have a specific translation but it refers to small territories with defined features in terms of number of inhabitants and urban and architectural heritage (according to the Association "I Borghi più Belli d'Italia" they represent a prestigious assembly of territories with: a population of less than 2,000 inhabitants and a remarkable urban and architectural heritage, certified by the Superintendence of Fine Arts). This is a unique case worldwide due to the Italian history, which has endowed this country with a wealth of historical sites of tremendous beauty scattered all over the territory (Goffi & Cucculelli, 2019).

These destinations have been chosen as an applied case among thousands of small destinations in Italy, because the Borgo definition ensures a certain common structuring in the sampling.

2.2 SAMPLING AND DATA COLLECTION

In Italy the total number of Borghi is 292 (Source: Associazione I Borghi più Belli d'Italia). We first collect the list of all names then we removed from the sample the borghi:

- with a compound name (e.g.: Arquà Petrarca), to avoid different combinations of hashtags related to them;
- with a name with a common use meaning (e.g.: Cervo - meaning "deer"), to avoid the collection of posts not related to the destination;
- without an official Instagram profile, to have comparable Instagram destinations as far as the combination of Instagram post sources.

Due to this selection, the final sample is made of the 18 Borghi, distributed as follows in the Country: North 5, Center 8, South and Islands 5.

Once the Borghi were selected, the objective is to create the posts' sample. The periods of higher tourism turnout during the pre-pandemic year 2019 have been identified to extract the posts. Based on Instagram data, peak seasons are Easter holiday and Ferragosto holiday. Then, to identify the peak period for each destination the authors contacted the Municipality or the Pro Loco offices of each Borgo between November 2019 and January 2020.

A specific protocol is developed to collect and analyse data. Instagram posts containing the Borgo name hashtag in the selected specific time slots of year 2019 are downloaded through #reputAction, a platform that integrates Big Data, Business Intelligence and semantic analysis. Metadata of each post is downloaded allowing to obtain: the URL, the caption with hashtags and mentions, number of likes, and number of comments. Even if data are retrieved from Instagram, user identities remain anonymous in fact, the paper does not present names, profile photos or details on accounts.

The final sample is composed by 13,217 posts (table 1).

Table 1: The sample

Borgo name	Number of Posts with the Borgo Name Hashtag	Average Number of Like
Bettona	178	37.33
Bienno	798	48.14
Carloforte	1775	90.83
Citerna	65	103.92
Corinaldo	473	53.87
Etroubles	40	45.13
Frosolone	92	41.33
Gerace	369	51.21
Gradara	816	61.34
Norcia	1898	84.64
Offagna	129	37.39
Otranto	5415	74.92
Pacentro	134	117.24
Sabbioneta	127	40.22
Torgiano	290	35.33
Treia	201	100.91
Venzone	383	45.66

Volpedo	34	46.26
Total number of posts	13,217	

To analyse the capture, a content analysis on Instagram textual part of each post is run to verify the use of mentions about the main spatial levels of the destination area on the hashtags name (RQ1). Content analysis is used for several reasons (Ye et al., 2018): it is convenient for studies with a large sample size (Krippendorff, 2018) and it is replicable for subsequent verification or repetition under similar conditions (Hsieh & Shannon, 2005).

After detecting the main hashtags referring to territorial words used for each borgo, the impact on the engagement is analysed running linear regression models through the use of R software for statistical computing (RQ2).

To answer RQ2 the number of likes was used as dependent variable, to measure the engagement (Demmers, Weltevreden, & van Dolen, 2020; Gräve, 2019; Klassen et al., 2018; Lee, Hosanagar, & Nair, 2018; Öztamur & Karakadılar, 2014), independent variables relate to the spatial levels' hashtags for each borgo and, as control variable, the absolute number of hashtags. In particular, as far as the spatial levels are concerned, we grouped the frequency of the hashtags related to simple (#puglia) or composed (#visitpuglia) words related to the: province, region, nation and neighbouring territories. Our variables are reported in table 2.

Table 2

The Variables

| Variable	Type	Explanation
Like	Dependent	Quantity of likes received per post
N_Province	Independent	Number of hashtags referring to the province in the post
N_Region	Independent	Number of hashtags referring to the region in the post
N_Nation	Independent	Number of hashtags referring to the nation in the post
N_others	Independent	Number of hashtags referring to other neightbouring territories in the post
Hashtag	Independent	Number of hashtags (referring all the words) in the post

3 FINDINGS AND ANALYSIS

3.1 THE USE OF TERRITORIAL HASHTAGS

In order to answer to the first research question territorial hashtags are isolated and categorized based on the use of: the province, the region, the nation (Italy) and other neighbouring territories. Both single and composed words are considered.

Figure 1 represents an example of post referring to Otranto Borgo. In its caption we can find all the types of territorial hashtags we include in our study with different frequencies (e.g. for the regional level "Puglia", 3 hashtags can be counted #puglia, #volgopuglia and #portamiinpuglia).

Figure 1

A post's example including picture and caption
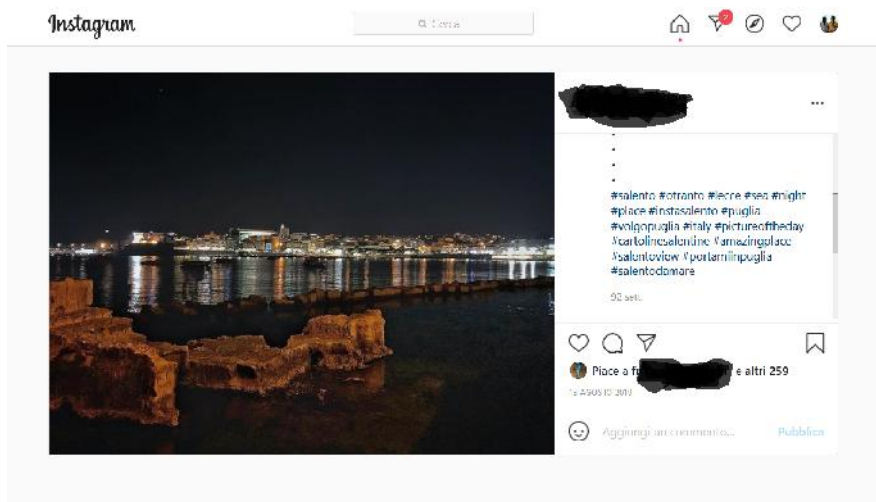
The numbers of hashtags are reported in table 3, specifying how many times they are used in posts' captions. Regional and Neighbouring Territories are the most used hashtags.

Table 3 - Number of Hashtags related to spatial levels

| | hashtags frequency | | | | | | | | | | |
Territorial level	0	1	2	3	4	5	6	7	8	9	**Total**
Neighbouring Territories (e.g. Salento)	9115	3359	462	164	46	31	36	4			**4102**
Province	11924	1228	65								**1293**
Region	7561	3936	898	366	189	62	185	11	6	3	**5656**
Nation	9286	2434	1155	341	1						**3931**

For each Borgo of the sample the first five hashtags in terms of frequencies are considered to answer our RQ1. Table 4 reports the most used hashtags (both simple and composed words are included) underlining with a line and in italics those referring to territories. Territorial hashtags result to be highly relevant. They appear as the most frequently used hashtags for each destination. Over two territorial hashtags are among the top 5 hashtags in 88.9% of the destination posts. This result is even more significant if we consider that our sample of posts refers also to specific events, so we could have expected much more hashtags referring to the name of an initiative instead those are not so frequently used.

**Table 4 -** The 5 most frequently used hashtags for each Borgo

Borgo	I	N	II	N	II	N	IV	N	V	N
Bettona	_#umbria_	111	_#perugia_	51	_#italy_	34	#ristorante	20	#assisi	18
Bienno	#mostramercatobienno	312	#mostramercato	171	_#vallecamonica_	166	_#valcamonica_	156	_#Italy_	108
Carloforte	_#Sardegna_	660	_#sardinia_	454	_#isoladisanpietro_	431	#girotonno	211	#Sea	201
Citerna	_#Umbria_	31	_#italia_	18	_#cittadicastello_	16	#instagram	13	#Mood	13
Corinaldo	_#Marche_	137	_#italy_	74	#festadeifolli	64	#borghitalia	58	#Borghipiubelliditalia	56
Etroubles	_#vda_	10	_#aostavalley_	8	_#valledaosta_	8	#veilla	7	#Mountain	5
Frosolone	_#molise_	39	#frosolove	13	_#igersmolise_	11	_#isernia_	11	_#Italy_	10

Gerace	*#calabria*	213	*#italy*	74	*#calabriadaamare*	51	*#italia*	43	#Summer	39
Gradara	*#marche*	196	#Castle	156	*#italy*	156	#gradaracastle	136	*#Italia*	93
Norcia	*#umbria*	977	*#castellucciodinorcia*	714	*#italy*	474	*#castelluccio*	432	*#Italia*	365
Offagna	*#marche*	47	#festemedievali	24	*#igersmarche*	21	*#italy*	21	*#Marchetourism*	20
Otranto	*#salento*	2896	*#puglia*	2684	*#italy*	1235	#summer	1198	#Sea	1145
Pacentro	*#abruzzo*	93	*#italy*	39	*#abruzzoinfoto*	21	*#majella*	21	#Borghipiubelliditalia	20
Sabbioneta	*#mantova*	36	*#italy*	29	*#lombardia*	18	#unesco	17	*#Casalmaggiore*	16
Torgiano	*#umbria*	120	*#perugia*	72	#wine	41	*#italy*	37	#Vino	37
Treia	*#marche*	65	*#macerata*	41	*#italy*	32	#disfidadelbracciale	18	*#Jesi*	17
Venzone	#festadellazucca	149	*#friuliveneziagiulia*	74	*#fvg*	71	*#italy*	59	#Zucca	54
Volpedo	#photography	8	#music	7	*#piemonte*	7	#anticomercatodivolpedo	6	#Duoarighe	6

3.2 THE IMPACT OF SPATIAL LEVELS HASHTAGS ON ENGAGEMENT

To perform the analysis in order to answer to RQ2, similar to prior studies (Kumar, Choi, & Greene, 2017), we log-transformed the outcome variable and the independent variable "number of hashtags". Since both number of likes and number of hashtags have some zeros, in order to avoid taking a log a zero, we added constant of 1 before taking the log-transformation.

First, we analysed the relationship between the single independent variables of interest and the quantity of like (Figure 2). Each variable impacts on the dependent variable in a positive way, even if the numbers of hashtags referring to province have relatively low-impact on the likes.

Figure 2 - The relationship between the independent variables and the quantity of like
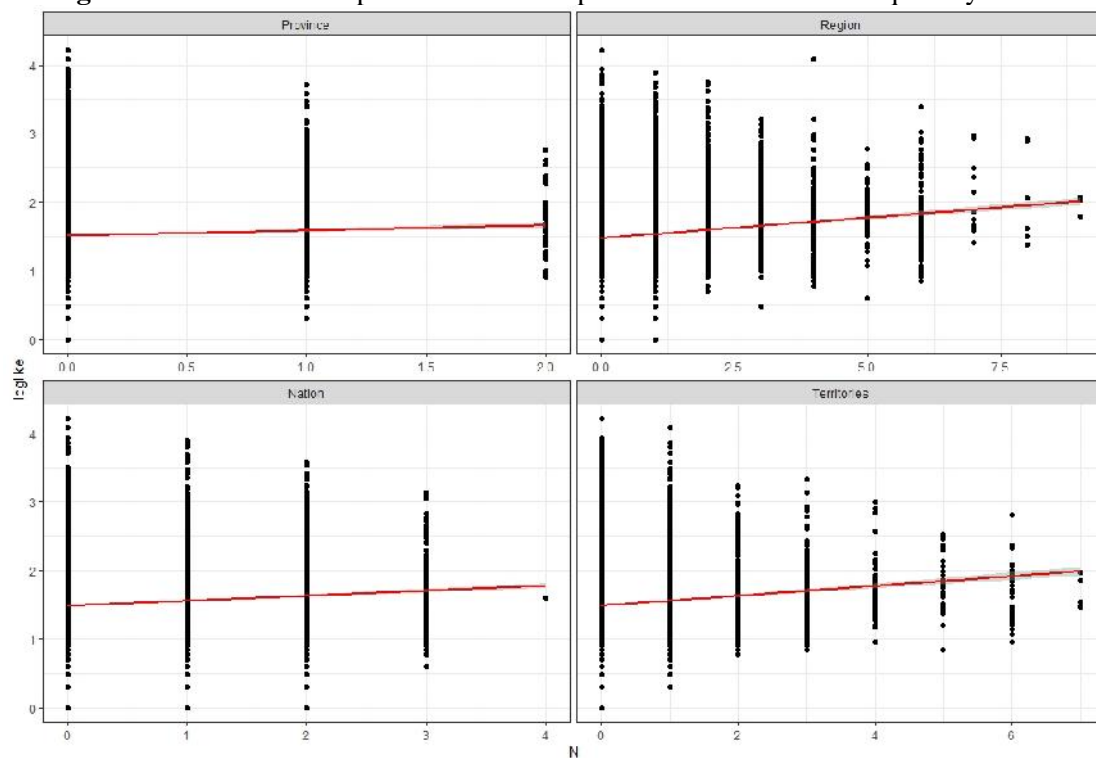
Due to these results, regression analyses were performed (table 5). To begin, we tested a first model (model 1) with the spatial level variables only. The model is significant, but as suggested by visual representation in figure 2, N_province is not significant. Thus, we performed a new model without this variable (model 2) and compared this nested model with the full model as suggested by Faraway (2005) and by Lattin et al. (2003). The F-statistic to test for the significance of the improvement, demonstrates that model 2 is preferred (full model does not improve the fit, F=1.423, p-value = 0.2328).

Since hashtags related to a special level can be combined with hastags related to another level, we analyzed the interaction effect between levels. In particular, considering nation and regional levels more important both for their awareness and for the number of occurrences than the hashtags related to neighbouring territories, we tested a model (model 3) where the number of hashtags referring to the region and to the nation interact. The F-statistic demonstrates that model 3 improves the fit (F=93.37, p-value < 0.001) compared to model 2. Finally, we added our control variable, the number of hashtags (Model 4). The model better fits the data (F = 93.37, p-value < 0.001). Moreover, compared to the other models, model 4 returned the largest values of R^2 and the lower AIC. In model 4 all the coefficients, including the interaction term coefficient, are statistically significant at a confidence level of 99.9 percent, suggesting that there is an interaction between the two predictor variables: region hashtags and nation hashtags. We also performed the test of the variance inflation factor (VIF) models for controlling the presence of multicollinearity. VIF is away from 10, that is the maximum acceptable level (Gujarati and Porter 2011). Our VIFs range from 1.22 and 3.87, thus there is an acceptable collinearity between the independent variables.

Our best model equation looks like this:

loglike = 1.26 + 0.06 * Region + 0.049 * Nation + 0.025 * Other territories + 0.20 * loghashtag -0.028 * Region * Nation

Based on the beta coefficients, we can state that adding hashtags related to the wider area improves the engagement, even if the impact is low. Moreover, the combination of hashtags of nation and hashtags related to region, decreases the effects of each territorial level hashtag (compared to the standing alone case). In fact, an increase in the hashtags mentioning the region of 1 is associated with increased loglike of 0.06 - 0.028 * Nation and an increase in hashtags mentioning the nation is associated with an increase in loglike of 0.049 - 0.028 * Region.

Table 5
The Tested Models

	Model 1	Model 2	Model 3	Model 4
Variables of interest				
N_Province	-0.015	-	0.014	
N_Region	0.037 (***)	0.036 (***)	0.085 (***)	0.060(***)
N_Nation	0.036 (***)	0.036(***)	0.089 (***)	0.049(***)
N_others	0,042 (***)	0.042 (***)	0.036 (***)	0.025(***)
N_Region*N_Nation			-0.039 (***)	-0.028(***)
Control variable				
Loghashtag				0.20 (***)
Constant	1.46 (***)	1.46 (***)	1.43 (***)	1.26 (***)

R^2	0.031	0.031	0.044	0.060
Adjust R^2	0.031	0.030	0.44	0.060
F	105.0 (***)	139.5 (***)	122.2 (***)	168.5 (***)
AIC	15,338.95	15,338.38	15,156.85	14,937.31
Number of obs.	13,217	13,217	13,217	13,217

Notes: The t-statistics are in parentheses, located below the estimates of the variables of interest and control. *Significant differences ($p<0.05$); **Very significant signal values ($p<0.01$); ***Highly significant values ($p<0.001$)

4 DISCUSSION

Scholars have analyzed factors motivating people to use the hashtag on Instagram while travelling, but they have never focused on the link between the engagement of a post and the hashtags related to national, regional or neighbouring territories. This research returns some valuable insights on the role of hashtags in 1) shaping the image of a small destination and its macro territory 2) generating engagement on the smaller destination contents thanks to the use of the name of the wider one.

Based on the textual analysis we can state that people do use hashtags referring to the wider destination area and in particular they combine the use of the region and the nation, both as single words and creating new hashtags putting together territorial words and emotions or other information (i.e. #puglialovers or #umbriatourism).

In corporate branding the use of familiar corporate brand strategy produces positive outcomes for the product brands (Fetscherin & Usunier, 2012). Based on the similar logic, in our research, the use of the name of a bigger and more famous destination - like the nation or the region - can support the outcomes of the smaller destination. In fact, results show that combining the hashtag of a small and niche destination with the hashtags of the region, of neighbouring territories or a macro destination area as the nation, can improve the engagement of the related picture in terms of number of likes. This is consistent with Swani et al (2021) findings about branding: the use of a corporate brand name in service brands' posts boosts message likes.

Using in the same post caption both the hashtag of the region and the hashtag of the nation can improve the number of likes, but the combination partially decreases the stand-alone effects of each hashtag. In other words, the interaction between these two hashtags weakens the positive effect that the two single words have – when used alone – on the number of likes. The reason is likely related to the role of hashtags itself: people use hashtags to reach specific contents and landing to the same picture using two different hashtags (nation and region) does not produce the sum of the single effects (likes) and thus the number of likes is -0,028 lower.

5 CONCLUSIONS

Previous research has demonstrated that coordination and collaboration among the variety of different players in destination marketing is becoming mandatory to compete in todays' tourism landscape. Following this perspective, this study can support the management of small destinations providing contribute to understand tourists' needs and behaviors about information searching on Instagram (S.-E. Kim, Lee, Shin, & Yang, 2017; Zeng & Gerritsen, 2014).

In particular, our study contributes to the literature about the consumers' feedback on online picture and the role of the hashtags in enhancing a picture's engagement (Messina, 2007) introducing a new and understudied variable: the territorial dimension (Brouder, 2012; Goffi & Cucculelli, 2019; OECD, 2014; Pierce et al., 2011; Richards, 2019). Our findings: 1) show a high use of territorial hashtags to describe pictures related to small destination, 2) demonstrate the importance of including a small destination in a wider territorial dimension to properly promote it 3) contribute to the literature on destination systems which are less studied because of their complexity, since these areas are composed of different clusters of destinations, in which national boundaries have a strong shielding effect in the interregional movements of

tourists (Kádár & Gede, 2021) 4) contribute to the literature on multi-destination trips (Önder, 2017) helping to see how destinations can be combined in order to create a leisure trip.

Tourists mainly search for information through social media in the travel-planning phase Leung et al. (2013). During the first stage, users get travel inspiration from everywhere and Instagram could be one of the sources. Based on their knowledge, they start searching for destinations and learning about them. In this stage small destinations should be promoted online and linked to wider and more famous destinations to be easily discovered.

From a managerial perspective, our research suggests that small destination management organizations should consider hashtags preferences in Instagram. Results suggest using hashtags related to the region, the nation and other neighboring territories in order to promote the small destination: a correct use of these hashtags increases the number of likes, thus the visibility of a small territory. Smaller destinations should analyze the effect of different spatial hashtags in enhancing the engagements of the post about them, to create joint marketing activities or travel products with other destinations.

Then, the use of hashtags could also be linked to tourists' travel preparation and could be used to avoid overcrowding by fostering a slight spatial unconcentration of visitor activities (Bauder & Freytag, 2015).

This research is subject to some limitations. First, the paper explores specific small destinations - i.e. the borghi - in only one country, i.e Italy. Therefore, future research should analyze rural or niche destinations comparing different geographical context. Moreover, the study only investigated the caption of pictures. Further studies should also put together the analysis of hashtags and images contents to reinforce the insights found in creating or enhancing engagement. Besides pictures, videos and stories are part of Instagram content as well and should be investigated. Finally, rather than considering the caption only, who posted the pictures should be taken into consideration in future models.

REFERENCES

Acuti, D., Mazzoli, V., Donvito, R., & Chan, P. (2018). An instagram content analysis for city branding in London and Florence. *Journal of Global Fashion Marketing, 9*(3), 185-204.

Agustí, D. P. (2021). The clustering of city images on Instagram: A comparison between projected and perceived images. *Journal of Destination Marketing Management, 20*, 100608.

Akehurst, G. (2009). User generated content: the use of blogs for tourism organisations and tourism consumers. *Service business, 3*(1), 51.

Ambiente, F. (2011). *Rapporto Beni Culturali 2011*. Retrieved from

Balomenou, N., Garrod, B., & Georgiadou, A. (2017). Making sense of tourists' photographs using canonical variate analysis. *Tourism Management, 61*, 173-179.

Bauder, M., & Freytag, T. (2015). Visitor mobility in the city and the effects of travel preparation. *Tourism Geographies, 17*(5), 682-700.

Boschma, R. (2005). Proximity and innovation: a critical assessment. *Regional studies, 39*(1), 61-74.

Boschma, R., & Martin, R. (2010). *The aims and scope of evolutionary economic geography*. Retrieved from

Boyd, D. (2008). Why youth (heart) social network sites: The role of networked publics in teenage social life. *Youth, identity and digital media, David Buckingham, ed., The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning, The MIT Press, Cambridge, MA*, 2007-2016.

Brouder, P. (2012). Creative outposts: Tourism's place in rural innovation. *Journal of Tourism Planning and Development, 9*(4), 383-396.

Brouder, P., & Fullerton, C. (2015). Exploring heterogeneous tourism development paths: Cascade effect or co-evolution in Niagara? *Scandinavian Journal of Hospitality, 15*(1-2), 152-166.

Cai, L. A. (2002). Cooperative branding for rural destinations. *Annals of tourism research, 29*(3), 720-742.

Cracolici, M. F., Nijkamp, P., & Rietveld, P. (2008). Assessment of tourism competitiveness by analysing destination efficiency. *Journal of Tourism Economics, 14*(2), 325-342.

Demmers, J., Weltevreden, J. W., & van Dolen, W. M. (2020). Consumer engagement with brand posts on social media in consecutive stages of the customer journey. *International Journal of Electronic Commerce, 24*(1), 53-77.

Dimitrova, R. (2019). Online Tourism Platforms and their Effect on the Participants in the Tourist Market. *, 15*(1), 119-125.

Dorsch, I. (2018). Content description on a mobile image sharing service: Hashtags on instagram. *Journal of Information Science Theory Practice, 6*(2), 46-61.

Essletzbichler, J. (2012). Generalized Darwinism, group selection and evolutionary economic geography. *Zeitschrift für Wirtschaftsgeographie, 56*(1-2), 129-146.

Fatanti, M. N., & Suyadnya, I. W. (2015). Beyond User Gaze: How Instagram Creates Tourism Destination Brand? *Procedia-Social and Behavioral Sciences, 211*, 1089-1095.

Fetscherin, M., & Usunier, J. C. (2012). Corporate branding: an interdisciplinary literature review. *European Journal of Marketing*.

Florida Richard. (2002). The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life. . *Basic Books, New York*.

Galí, N., & Donaire, J. A. (2015). Tourists taking photographs: the long tail in tourists' perceived image of Barcelona. *Current Issues in Tourism, 18*(9), 893-902.

Gill, A. M., & Williams, P. W. (2014). Mindful deviation in creating a governance path towards sustainability in resort destinations. *Tourism Geographies, 16*(4), 546-562.

Giuliani, E., & Bell, M. (2005). The micro-determinants of meso-level learning and innovation: evidence from a Chilean wine cluster. *Research policy, 34*(1), 47-68.

Goffi, G., & Cucculelli, M. (2019). Explaining tourism competitiveness in small and medium destinations: the Italian case. *Current Issues in Tourism, 22*(17), 2109-2139.

Gong, Y., Zhang, Q., & Huang, X.-J. (page 1, 2015). *Hashtag recommendation using dirichlet process mixture models incorporating types of hashtags.* Paper presented at the Proceedings of the 2015 Conference on Empirical Methods in Natural Language Processing.

Gräve, J.-F. (2019). What KPIs are key? Evaluating performance metrics for social media influencers. *Social Media+ Society, 5*(3), 2056305119865475.

Gretzel, U., & Yoo, K. H. (2008). Use and impact of online travel reviews. *Information and communication technologies in tourism 2008*, 35-46.

Grossi. (May 9, 2019). 33 statistiche Instagram marketing (aggiornamento 2019).

Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative health research, 15*(9), 1277-1288.

Ibba, S., Orrù, M., Pani, F. E., & Porru, S. (2015). *Hashtag of Instagram: From Folksonomy to Complex Network.* Paper presented at the KEOD.

Istat. (2017). *Movimento turistico in Italia anno 2017*. Retrieved from

Istat. (2018). *Movimento turistico in Italia anno 2018*. Retrieved from

Istat. (2019). *Rapporto annuale 2019 - La situazione del Paese*. Retrieved from

Jordan, P. (2000). Restructuring Croatia's coastal resorts: Change, sustainable development and the incorporation of rural hinterlands. *Journal of Sustainable Tourism, 8*(6), 525-539.

Jungselius, B., Hilman, T., & Weilenmann, A. (2014). Fishing for followers: Using hashtags as like bait in social media. *AoIR Selected Papers of Internet Research*.

Kádár, B., & Gede, M. J. A. o. T. R. (2021). Tourism flows in large-scale destination systems. *87*, 103113.

Karsten Matthew. (2019). Liked To Death: Is Instagram & Social Media Ruining Travel? In *Expert vagabond*.

Kim, S.-E., Lee, K. Y., Shin, S. I., & Yang, S.-B. (2017). Effects of tourism information quality in social media on destination image formation: The case of Sina Weibo. *Information & Management, 54*(6), 687-702.

Kim, T., Hinds, P., & Pentland, A. (2012). *Awareness as an antidote to distance: making distributed groups cooperative and consistent.* Paper presented at the Proceedings of the ACM 2012 Conference on Computer Supported Cooperative Work.

Klassen, K. M., Borleis, E. S., Brennan, L., Reid, M., McCaffrey, T. A., & Lim, M. S. (2018). What people "like": Analysis of social media strategies used by food industry brands, lifestyle brands, and health promotion organizations on Facebook and Instagram. *Journal of medical Internet research, 20*(6), e10227.

Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*: Sage publications.

Krisna, D. F., Handayani, P. W., & Azzahro, F. (2019). The antecedents of hashtag and geotag use in smart tourism: case study in Indonesia. *Asia Pacific Journal of Tourism Research, 24*(12), 1141-1154.

Kumar, V., Choi, J. B., & Greene, M. (2017). Synergistic effects of social media and traditional marketing on brand sales: capturing the time-varying effects. *Journal of the Academy of Marketing Science, 45*(2), 268-288.

Lang, J., & Wu, S. F. (2011). *Anti-preferential attachment: If I follow you, will you follow me?* Paper presented at the 2011 IEEE Third International Conference on Privacy, Security, Risk and Trust and 2011 IEEE Third International Conference on Social Computing.

Lee, D., Hosanagar, K., & Nair, H. S. (2018). Advertising content and consumer engagement on social media: Evidence from Facebook. *Management Science, 64*(11), 5105-5131.

Leung, D., Law, R., Van Hoof, H., & Buhalis, D. (2013). Social media in tourism and hospitality: A literature review. *Journal of travel & tourism marketing, 30*(1-2), 3-22.

Lo, I. S., McKercher, B., Lo, A., Cheung, C., & Law, R. (2011). Tourism and online photography. *Tourism Management, 32*(4), 725-731.

Lue, C.-C., Crompton, J. L., & Fesenmaier, D. R. (1993). Conceptualization of multi-destination pleasure trips. *Annals of tourism research, 20*(2), 289-301.

Ma, M., & Hassink, R. (2013). An evolutionary perspective on tourism area development. *Annals of tourism research, 41*, 89-109.

Månsson, M. (2011). Mediatized tourism. *Annals of tourism research, 38*(4), 1634-1652.

Martin, E. G., Lavesson, N., & Doroud, M. (2016). Hashtags and followers: An experimental study of the online social network Twitter. . *Social Network Analysis and Mining, 6*(12), 1-12. doi:10.1007/s13278-016-0320-6

Messina, A. (2007). Public relations, the public interest and persuasion: an ethical approach. *Journal of Communication Management*.

Minazzi, R. (2015). Social media marketing in tourism and hospitality. In: Springer.

Molera, L., & Albaladejo, I. P. (2007). Profiling segments of tourists in rural areas of South-Eastern Spain. *Tourism Management, 28*(3), 757-767.

Mukhina, K. D., Rakitin, S. V., & Visheratin, A. A. (2017). *Detection of tourists attraction points using Instagram profiles*. Paper presented at the ICCS.

Munar, A. M., & Jacobsen, J. K. S. (2014). Motivations for sharing tourism experiences through social media. *Tourism Management, 43*, 46-54.

Murmann, J. P. (2003). *Knowledge and competitive advantage: The coevolution of firms, technology, and national institutions*: Cambridge University Press.

Narangajavana, Y., Fiol, L. J. C., Tena, M. Á. M., Artola, R. M. R., & García, J. S. (2017). The influence of social media in creating expectations. An empirical study for a tourist destination. *Annals of tourism research, 65*, 60-70.

OECD. (2014). *Tourism and the Creative Economy.* . Retrieved from

Önder, I. J. T. M. P. (2017). Classifying multi-destination trips in Austria with big data. *21*, 54-58.

Öztamur, D., & Karakadılar, . S. (2014). Exploring the role of social media for SMEs: as a new marketing strategy tool for the firm performance perspective. *Procedia-Social behavioral sciences, 150*, 511-520.

Page, R. (2012). The linguistics of self-branding and micro-celebrity in Twitter: The role of hashtags. *Journal of Discourse Communication Methods and Measures, 6*(2), 181-201.

Palazzo, M., Vollero, A., Vitale, P., & Siano, A. (2021). Urban and rural destinations on Instagram: Exploring the influencers' role in# sustainabletourism. *Land use policy, 100*, 104915.

Pan, B., MacLaurin, T., & Crotts, J. C. (2007). Travel blogs and the implications for destination marketing. *Journal of Travel Research, 46*(1), 35-45.

Pang, B., Lee, L., & Vaithyanathan, S. (2002). *Thumbs up? Sentiment classification using machine learning techniques*. Paper presented at the Proceedings of the 2002 Conference on Empirical Methods in Natural Language Processing ({EMNLP} 2002).

Papatheodorou, A. (2002). Exploring competitiveness in Mediterranean resorts. *Tourism Economics, 8*(2), 133-150.

Pasquinelli, C. (2011). 14. Place branding and cooperation: Can a network of places be a brand? *Brands branding geographies*, 230.

Pierce, J., Martin, D. G., & Murphy, J. T. (2011). Relational place making: the networked politics of place. *Transactions of the Institute of British Geographers, 36*(1), 54-70.

Pin, E. (2016). Pinterest, Snapchat and Instagram: Why visual-based social media is growing so much faster than Facebook and Twitter.

Popescu, A., & Popescu, D. (2016). Hashtag Progress: The Digital Fingerprint of Web 2.0 on Tourism and Hospitality Industry Management—A Case Study for Romania. In *Entrepreneurship, Business and Economics-Vol. 1* (pp. 555-564): Springer.

Randelli, F., Romei, P., & Tortora, M. (2014). An evolutionary approach to the study of rural tourism: The case of Tuscany. *Land use policy, 38*, 276-281.

Richards. (2019). Creative tourism: opportunities for smaller places? *, Journal of Tourism Management Studies 15*, 7-10.

Schmallegger, D., Carson, D., & Jacobsen, D. (2010). The use of photographs on consumer generated content websites: practical implications for destination image analysis. In *Tourism informatics: Visual travel recommender systems, social communities, and user interface design* (pp. 243-260): IGI Global.

Sharpley, R. (2012). Island tourism or tourism on islands?. Tourism Recreation Research, 37 (2), 167-172. In.

Sigala, M. (2007). WEB 2.0 in the tourism industry: A new tourism generation and new e-business models.

Small, T. (2011). What the hashtag? A content analysis of Canadian politics on Twitter. *Journal of Information, communication, 14*(6), 872-895.

Small, T. A. (2011). What the hashtag? A content analysis of Canadian politics on Twitter. *Information, communication society, 14*(6), 872-895.

Stathopoulou, A., Borel, L., Christodoulides, G., & West, D. (2017). Consumer branded# hashtag engagement: can creativity in TV advertising influence hashtag engagement? *Psychology & Marketing, 34*(4), 448-462.

Tomorn, R., & Bao, Y. (2020). Thai's fascination with food: race and gender differences in Instagram hashtag use. *International Journal of Organizational Innovation, 12*(3), 190-206.

Tosun, C., Timothy, D. J., & Öztürk, Y. (2003). Tourism growth, national development and regional inequality in Turkey. *Journal of Sustainable Tourism, 11*(2-3), 133-161.

Tsur, O., & Rappoport, A. (2012). *What's in a hashtag? Content based prediction of the spread of ideas in microblogging communities.* Paper presented at the Proceedings of the fifth ACM international conference on Web search and data mining.

Volo, S., & Irimiás, A. (2020). Instagram: Visual methods in tourism research. *Annals of tourism research*, 103098.

Walker, A. L. (1989). Photo albums: Images of time and reflections of self. *Qualitative Sociology, 12*(2), 155-182.

We are social. (2021). *Digital 2021. Glòobal overview report*. Retrieved from

Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information search. *Tourism Management, 31*(2), 179-188.

Ye, Z., Hashim, N. H., Baghirov, F., & Murphy, J. (2018). Gender Differences in Instagram Hashtag Use. *Journal of Hospitality Marketing & Management, 27*(4), 386-404. doi:10.1080/19368623.2018.1382415

Zeng, B., & Gerritsen, R. (2014). What do we know about social media in tourism? A review. *Tourism management perspectives, 10*, 27-36.

Zhang, S., Yao, Y., Xu, F., Tong, H., Yan, X., & Lu, J. (2019). *Hashtag recommendation for photo sharing services.* Paper presented at the Proceedings of the AAAI Conference on Artificial Intelligence.