

This paper aims to offer insights into how place branding can promote sustainable tourism development across various European regions. This is done by studying places in Europe that went through a well-known and sought-after place branding process with a highly recognizable label, which is the acquisition of the UNESCO World Heritage Site (WHS) designation (Adie, 2017; Canale et al., 2019; Cuccia et al., 2016). Places protected by the World Heritage Convention and inscribed on the Official World Heritage List are identified by the official emblem and associated logos owned and issued by UNESCO (UNESCO, 2011). These emblems and logos, for instance, are employed in road signs, flags, websites, and various other communication channels. This utilization ensures the proper reporting and promotion of the World Heritage status both on-site and across diverse communication channels.

The analysis of the evaluation of tourists' experiences can indicate whether the WHS label is associated with a high quality of tourist experience, in terms of diversity and satisfaction. The analysis of the diversity of the activities that tourists undertake gives an indication of whether the label is associated with a specific focus of tourists on the WHS itself, or whether it stimulates tourists to explore the wider offering of products and services within a place. This is examined by analyzing user-generated content (UGC) from the platform TripAdvisor, which is collected for the entire European Union at the level of Local Administrative Units (LAU).

This paper investigates the relationship between the WHS labelling and different aspects of the tourist experience, namely the tourists' overall evaluation of the destination, the tourists' evaluation of each specific type of facility/service located in the destination and finally the diversification of the tourist offer by developing a tourist diversity index based on the TripAdvisor reviews. By employing various regression models, we find that the WHS labelling is significantly associated with a higher (better) evaluation of the overall offer, meaning that when LAUs have a WHS label, a higher overall evaluation of the facilities and/or services becomes more likely. Examining in detail the relationship between the WHS label and each specific type of services/facilities, we also find that WHS label is significantly associated with a higher evaluation of most of the service sectors, with a stronger correlation in the cultural sector. However, an opposite trend was detected for the transportation sector. Lastly, we found a positive and significant association between WHS labelling and the diversification of the tourist offer.

To the best of our knowledge, this is the first empirical test conducted on the relationship between the WHS label and tourist experiences and behavior on a local scale but covering the whole European Union. Other studies have addressed the impact of WHS labelling at the European scale using data at the regional NUTS 2 level (see, e.g., Panzera et al., 2021) or the more local NUTS 3 level for studying the impact at the national scale (see, e.g., Canale et al., 2019). This work takes into account suggestions (see, e.g., Rasoolimanesh et al., 2017) to carry out empirical studies at a more granular geographical scale and with greater coverage for comparative analysis. To do so, this paper makes use of user generated content in the form of TripAdvisor reviews collected at the local scale (LAU, also known as NUTS 4), covering many European regions.

We collected a database of all tourism facilities and services listed as “Things to Do”, “Restaurants” and “Hotels” on the TripAdvisor platform in the European Union, which gives a representation of the European tourism landscape up until March 2021. The database covers 38,902 cities and places in the European Union, with a total of 606,504 tourist facilities and services. These facilities and services are classified under 230 different categories by the TripAdvisor website. These categories have been merged into eleven macro-categories of tourist facilities and services as follows:

1. for “attractions” we created nine macro categories, being bars (e.g., nightlife), culture (e.g., museums), entertainment (e.g., theaters), landmarks (e.g., monuments), natural (e.g., parks), relax (e.g., Spas), shopping (e.g., crafts), tours (e.g., walking tours), transport (e.g., shuttle services);
2. for “restaurants” we combined all subcategories (e.g., pizzerias, fast food, etc.);
3. for “accommodations” we combined all sub-categories (e.g., hotels, B&Bs, etc.).

The collected data reflects the presence of tourist facilities and services and gives an indication of how intensely they are used by visitors (through the number of reviews and distribution of these reviews over the different categories) and how they are evaluated (through the average score of the category, which ranges between 1 to 5). The database consists of a total of 45,949,995 reviews. These reviews were collected at the level of cities and places, in total the database contained information on 38,902 cities and places in the 27 countries of the EU. We first geocoded all separate cities and places and then spatially aggregated this information to Eurostat’s Local Administrative Units (LAU). ArcGis Pro 2.9 was used for all geocoding and spatial aggregations. While doing so, we deleted from the database all provinces and regions to avoid double-counting. We chose to use LAUs as they are compatible with the NUTS-division used by the European Union and Eurostat.

The database was enriched by the list of UNESCO WHSs (1382 places) located in the European Union. This list, provided by the UNESCO office in Venice, Italy, represents the cultural and natural heritage sites inscribed in the official UNESCO World Heritage List by 2021 and takes into account single sites (e.g., Alhambra in Granada, Spain), entire cities or territories (e.g., Venice and its lagoon), and multi-location sites (e.g., the Flemish Beguinages in Belgium). Whether there was a WHS labeled site in the LAU area (or the place in its entirety was recognised as a WHS) was our main explanatory variable. We made a dummy variable that takes a value equal to one if the LAU area has a UNESCO WHS site or is recognized as such, and zero otherwise. No distinction between sub-categories (cultural like cities, buildings and monuments, temples and churches, or natural as natural parks and forests, deserts, lakes, islands, etc., or mixed as landscapes, mounts) of WHS or size (single site or an entire city) has been made in the database in order to observe the relationship with the UNESCO label as a whole.

As we investigate whether destinations with a WHS label are associated with high-quality experiences, we accordingly estimate the correlation of having the WHS label with the satisfaction of tourists. Satisfaction is measured by the average review score for the destination as a whole and for the different macro categories of facilities and/or services. These average

scores range from 1 to 5. In order to obtain efficient and unbiased results in the possible presence of nonlinearity and heteroscedasticity, derived from the highly skewed values of the dependent variable of scores, we regroup the scores into three evaluation categories: low/bad ( $<3$ ), average (3-4) and high/good ( $>4$ ). This categorization allows us to simplify the interpretation and policy implications of the results as well. Considering the ordered and categorical nature of our dependent variable (bad, average, good), we relied on the Generalized Ordered Logit Regression model (gologit).

Through a comprehensive comparison of TripAdvisor reviews in over 38,000 places across Europe, this study presented results suggesting that destinations with a WHS label are associated with an enhanced visitor's experience. The overall results align with the role that a distinctive label has for linking supply and demand, which in this case is connecting (prospective) visitors to a place and its heritage (Hereźniak, & Anders-Morawska, 2021; Gartner, 2014). In this sense, the label could be seen as a sign of approval, attracting visitors particularly interested in the local heritage. When the raised expectations are met, this could lead to enhanced experiences, hence the positive evaluations found in this study.