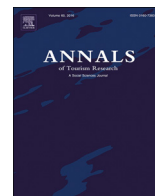


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Cultural capital and online purchase of tourism services

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ABSTRACT

Based on an original conceptual framework that links cultural capital and pro-active behaviors, this paper investigates whether individuals' cultural capital increases the probability of purchasing tourism services through the Internet.

The identification of possible direct channels through which tourism firms can address and attract consumers is particularly relevant for an industry in which re-intermediation processes by big online travel agencies have partly dampened the benefits of disintermediation along the supply chain.

Through a Heckman-corrected probit run on year 2016 microdata referred to the Italian population, evidence is found that the cultural participation is associated to individuals' higher probability to purchase tourism services online. This adds some new dimensions to the understanding of factors that have a bearing on online purchasing.

Introduction

The Internet and the rapid advancement of Information and Communication Technologies (ICTs) are significantly changing travel industry and the way tourism organizations conduct business.

The importance of online travel shopping has been widely acknowledged (Wen, 2012), for instance, in several surveys lead by Nielsen; in its most recent report (Nielsen, 2018), Nielsen observe that "travel" is the second most important category of online purchasing. In 2018, the revenues in the eTravel¹ markets amount to US\$ 757 million, mostly generated in the United States (US\$ 217 millions), and are expected to show a 7.1% global annual growth rate (CAGR) between 2018 and 2023 (Statista, 2019), proving the high potentiality of this sector.

Scholars have been paying growing attention to the possible impact of such transformation on tourism operators, transformation characterized by more effective communication ways and distribution channels (Amaro, Andreu, & Huang, 2018; Buhalis & Law, 2008), lower costs and higher speed in disseminating information to prospective customers (Buhalis & Amaranggana, 2015; Carroll &

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E-mail addresses: d.quaglione@unich.it (D. Quaglione), alessandro.crociata@gssi.it (A. Crociata), massimiliano.agovino@uniparthenope.it (M. Agovino), lea.iaia@unich.it (L. Iaia).¹ Statista (2019) defines the eTravel market as "the sale of online services and digital goods via the internet. The definition includes online travel bookings (package holidays, hotels and vacation rentals) and mobility tickets for services such as flights, long-distance bus tickets, train travel, car rentals and ride hailing services. The ticket reservation or purchase can be completed on a desktop PC or via mobile devices". See the "market definition" section at <https://www.statista.com/outlook/359/100/etravel/worldwide#market-revenue>.<https://doi.org/10.1016/j.annals.2019.102797>Received 21 March 2019; Received in revised form 17 August 2019; Accepted 15 September 2019
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Siguaw, 2003; Dale, 2003) and disintermediation (Buhalis & Law, 2008; Lu, Yang, & Yuksel, 2015; Martínez-Costa, Pladevall-Viladecans, Mas-Machuca, & Marimon, 2018). At the same time, the scientific literature has provided also evidence of possible negative impacts on the industry, in terms of online pricing transparency, fiercer price competition and reduced customer loyalty (Wen, 2009).

Since Internet provides up-to-date information – it lets the consumers compare different product categories and interact with current and previous users of different tourism products (Zhang, 2015) – the effectiveness of strategies based on online channels for tourism firms is primarily based on establishing a constructive and enduring relationship with customers (Sheth & Parvatiyar, 1995).

Several contributions in the literature have focused on the identification of further determinants of customers' online buying decisions, as their increasing dependence on the Internet to search for information, plan their travel, and purchase tourism products has produced significant behavioral changes (Jeong & Choi, 2004).

Within such context, our paper suggests that cultural capital is among the factors that affect customers' online purchase propensity. Such original conceptual framework introduces and identifies a new possible research direction in the field of tourism and hospitality. In particular, our study investigates whether individuals' participation in cultural activities play a role in increasing the probability of tourism services online purchasing. The idea underlying our research is that the participation in cultural activities can lead individuals to accumulate a form of cultural capital *à la* Throsby (Throsby, 1999, 2005) that can encourage customers to adopt more pro-active behaviors. As underlined in Tavano Blessi et al. (2014, p. 44), individuals' cultural experiences “may be important platforms for the development of individual dispositions and capabilities that may substantially expand the potential of self-determination, the strategies for the pursuit of life satisfaction, the articulation and adoption of lifestyle choices”.

In order to empirically test our hypothesis, we use 2016 microdata provided by the Italian National Institute of Statistics (Istat, 2018), through a survey concerning several aspects of Italian households' and individuals' daily life, satisfaction, and habits.

The empirical results of our analysis provide an additional marketing option for operators, especially smaller and more decentralized ones, to address consumers through online direct channels, which lessen the need for these operators to rely on traditional offline intermediation agencies and at the same time ease their dependence on new intermediation mechanisms over the Internet (in particular online travel agencies and review aggregators) to get higher and better online visibility (Martínez-Costa et al., 2018; Raguseo, Neirotti, & Paolucci, 2017; Stangl, Inversini, & Schegg, 2016).

Conceptual framework and relevant literature

The theoretical framework most commonly used to evaluate the impact of beliefs, attitudes, and social factors on online buying intentions blends both economic and psychological approaches. In general, online consumer behavior has been the subject of several theories, models and constructs. According to a recent review (Chawla, Khan, & Pandey, 2015), the scientific contributions are based on the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975), the Technology Adoption Model (TAM) (Davis, 1989; Davis, Bagozzi, & Warshaw, 1989) and the Theory of Planned Behavior (TPB) (Ajzen, 1991).

An interesting application of these theories can be found in respect of online tourism services (Liao & Shi, 2017; Pourfakhimi, Duncan, & Coetzee, 2018; Ukpabi & Karjaluoto, 2017): since the Internet enables users to easily gain tourism-related information, consumers should rationally look for tourism information in order to plan and decide all the characteristics of their travel, under their volitional control (budgets, itineraries, schedules).

Most of the studies (Jensen, 2009; Lee, Qu, & Kim, 2007; Wong & Law, 2005) focus on intentions, rather than actual behaviors. Past studies have provided grounds about the causal connection between intentions and actual behaviors, but this does not necessarily hold for online shopping, as Lee and Johnson (2002) point out in their work, since there is a large number of dropouts and also many who only browse without eventually purchasing. They are adverse to share their personal and payment information, as they do not trust online commerce (Bonsón Ponte, Carvajal-Trujillo, & Escobar-Rodríguez, 2015; Kim, Chung, & Lee, 2011; Kim, Ferrin, & Rao, 2008).

Research on what drives consumers to purchase travel online is very fragmented. A recent stream of literature on the determinants of consumers' propensity to travel and accommodation online purchasing (Agag & El-Masry, 2016; Amaro & Duarte, 2013; Sahli & Legohérel, 2016; Ukpabi & Karjaluoto, 2017) shows a lot of interdisciplinary approaches (see for instance Chawla et al., 2015; van Deursen & van Dijk, 2015), applied also to tourism and travel purchases (Buhalis & O'Connor, 2005; Garín-Muñoz & Pérez-Amaral, 2011). Among the most relevant determinants of consumers' attitude to purchase online, numerous studies focus on consumers' characteristics, namely sociodemographic features, Internet and computer literacy (Card, Chen, & Cole, 2003; Morrison, Jing, O'Leary, & Cai, 2001; Weber & Roehl, 1999).

Very recent studies have further refined the analysis by including factors related to subjective norms, highlighting in particular the importance of communicability and sociability as determinants of the intention to purchase travels online (Chawla et al., 2015). Other authors have demonstrated that attitude towards shopping through the Internet represents a determinant of intention to purchase travel online (Amaro & Duarte, 2015; Bigné, Sanz, Ruiz, & Aldás, 2010; Lee et al., 2007). Moreover, a few studies have given relevance to the personality of consumers, acknowledging that online travel purchasers tend to be innovative and more high-tech oriented (Card et al., 2003; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Kamarulzaman, 2007; Lee et al., 2007; Li & Buhalis, 2005; San Martín & Herrero, 2012).

The increasing importance attached in the literature to the role of complexity in such purchasing behaviors calls for testing the hypothesis that individuals' cultural capital might play a role. The cultural capital hypothesis was first documented by Bourdieu (1973) as a paradigm explaining a mechanism for social reproduction of the class structure, i.e. cultural capital as a sophisticated form of social segmentation. According to this approach, cultural capital is based on the accumulation of transmittable cultural goods

(objectified cultural capital); degrees and credentials (institutionalized cultural capital); and attitudes, preferences and behavior (embodied cultural capital) (Bourdieu, 1973).

In this paper we follow the cultural economics approach proposed by Throsby (1999, 2005) that splits cultural capital in two forms: 1) tangible cultural capital such as books, paintings, heritage and 2) intangible forms of cultural capital such as traditions and beliefs which are relevant for a certain community.

Our conceptual framework is based on cultural capital measured via individual cultural participation, following the cultural economics literature (DiMaggio & Mukhtar, 2004; DiMaggio & Ostrower, 1990; Lizardo, 2006; López-Sintas & Katz-Gerro, 2005) that considers visiting museums as well as attending live music, a way to increase the stock of intangible and tangible cultural capital.

Our quite novel point of view can be traced back to recent developments in cognitive psychology and neuroscience that indicate that cultural experiences as common as reading a novel, or making music or simply listening to it, may have relevant effects on brain plasticity and consequently on cognitive functions (Oatley, 2016; Särkämö, Altenmüller, Rodríguez-Fornells, & Peretz, 2016), with considerable adaptive value for various aspects of human cognition.

In that sense individual cultural participation entails both monetary and cognitive costs (Purhonen, Gronow, & Rahkonen, 2011). The following efforts measure the attitudes towards the unconventional and the unexpected, and towards the harnessing of proactive responses to problematic situations related to complex good purchasing. The more sustained is cultural participation, the more open-mindedness and curiosity emerges. That is to say cultural experiences allow consumers to expand their own knowledge and belief (e.g. Boyd, 2009) according to a mechanism that links cultural experiences and individual capability to fix a particular behavior within a cognitive set (Limayem, Hirt, & Chin, 2001).

In assuming that, we find analogies with the technology adoption theory, which individuals' propensity to purchase on the Internet has been often framed into (Parasuraman & Colby, 2001). The technology adoption cycle states that the technology characterizes individuals according to their attitudes towards the use of the technology (namely explorers, pioneers, sceptics, paranoids, and laggards). In this context, Beldona, Kline, and Morrison (2004) find that broadband users (early adopters) are more likely to buy travel products online compared to narrowband users (typically late adopters). In other words, pro-active users are more likely to purchase online travel product, and cultural goods consumption boosts pro-active behavior (Agovino, Crociata, Quaglione, Sacco, & Sarra, 2017; Quaglione, Cassetta, Crociata, Marra, & Sarra, 2018; Quaglione, Cassetta, Crociata, & Sarra, 2017).

Moreover, the decision-making process related to traveling is complex and multi-staged (Fesenmaier & Jeng, 2000). Online travel consumers self-build a complex set of information derived from several and differentiated sources. Since Internet experiences are based on the ability to process information in an effective way, the role of cultural capital can be decisive in the process of online travel purchasing because of the positive outcomes that it has on human capital accumulation (e.g. Everingham, 2003).

Another relevant feature of cultural participation is its positive relation with the community identity contributing to a more aware enforcement of social norms (Hutter, 1996). Even if carried out at an individual stage, the cultural participation is performed within a social space and consequently in a social environment, meaning that on the one hand consumption boosts sociality, on the other hand sociality boosts consumption (Jafari, Taheri, & vom Lehn, 2013).

At the basis of that, there is the concept of identity as adaptive and embedded within social contexts in line with the socially-situated theories of cognition (Schwarz, 2007). In that sense, social influences are another factor, operationalized with the concept of subjective norms, discussed in the literature as predictors of behaviors, on the theoretical basis of the Theory of Planned behavior (Ajzen, 1991). Subjective norms are defined as "the perceived social pressure to perform or not to perform the behavior" (Ajzen, 1991, p. 188). In that sense social norms influence the degree to which a person has favorable or unfavorable feelings and evaluations towards online shopping (Turan, 2012). Also within the theoretical framework of the technology adoption model (TAM), social components and social norms have been incorporated in predicting online purchasing predictor (Venkatesh & Davis, 2000).

Finally, another relevant feature of cultural good consuming choice is their nature of trust goods. Cultural participation is deeply characterized by asymmetric information since one cannot assess the quality of a cultural good before consuming it. No preventive evaluation mechanism can be adopted, exactly as typically occurs for trust goods. In the same way, the roles of trust and (perceived) risk are well established in the online buying literature. Perceived online trust has been reported to be an integral component of customer online purchase (Nunkoo, Ramkissoon, & Gursoy, 2013; Sahli & Legohérel, 2016; Thamizhvanan & Xavier, 2013) and as a factor that positively influences online travel purchasing behavior.

Empirical strategy and results of the analysis

We rely on a database provided by the Italian National Statistics Institution (ISTAT) which includes microdata related to several aspects of daily life and referred to year 2016 for > 43,000 individuals (18,500 households, approximately). See Tables 1 and 2 for the list of the variables used and the related descriptive statistics.

Microdata are available also for previous years, however we decided to focus on the 2016 wave, as 2016 is the first year showing signs of economic recovery. As is well known, a severe crisis hit the economic situation at the global level since 2008, with Italy showing below-average economic performances compared to the other industrialized countries. Thus, data referred to years within such period and until 2015 may be affected by significant disturbances, due for instance to individuals' lower disposable income or more pronounced pessimistic sentiment, with a consequent distortion of the results of the empirical analysis.² Within such a context,

² However, we ran the same econometric exercise also on 2014 and 2015 data, and the results are almost perfectly comparable to those presented in the following pages, in terms of both signs and magnitudes.

Table 1
Data and variables definitions.

| <i>Dependent variables</i> | |
|-----------------------------------|---|
| int_trav | The respondent has purchased or booked holiday travels or accommodations on the Internet over the last 12 months. 1 = Yes. Reference group: no. |
| inttempo | Respondent's Internet use in the last year. 1 = Yes. Reference group: no. |
| <i>Sociodemographic variables</i> | |
| intatt5 | The respondent has used the Internet to access services related to travels. 1 = Yes. Reference group: no. |
| gender | Gender of the respondent. 1 = male. |
| age35_54 | Age of the respondent. 1 = age between 35 and 54. Reference group: 18–34. |
| age55_ | Age of the respondent. 1 = age over 55. |
| sit_econ_good | Availability of economic resources for the needs of the family. 1 = Excellent or adequate. Reference group: scarce or totally inadequate. |
| credit_card_family | Availability of a credit card in the family. 1 = Yes. Reference group: no. |
| bachelor_degree | Education level of the respondent. 1 = University degree or postgraduate education |
| trust | The respondent says that most people can be trusted. 1 = Yes. Reference group: no. |
| smartphone | The respondent has a smartphone. 1 = Yes. Reference group: no. |
| work_role1 | Professional position: 1 = entrepreneur; executive or self-employed professional. Reference group: member of a cooperative; occasional worker. |
| work_role2 | Professional position: 1 = supervisor; employee. |
| work_role3 | Professional position: 1 = chief labourer; labourer apprentice; homemaker on behalf of firms. |
| computer_literacy | The respondent knows how to transfer files among computers or other devices. 1 = Yes. Reference group: no. |
| area_center | Central Italy. Reference group: Northern Italy. |
| area_south | Southern Italy and Islands. |
| dispcsf | Availability of a mobile broadband connection. 1 = Yes. Reference group: no. |
| broadband | Availability of a broadband connection at home. 1 = Yes. Reference group: no. |
| archoe | Archaeological sites attendance over the last 12 months. 1 = At least one time. Reference group: never. |
| museums_exhib | Museums and exhibitions attendance over the last 12 months. 1 = At least one time. Reference group: never. |
| books | Having read books over the last 12 months. 1 = Yes. Reference group: no. |
| cinema | Cinema attendance over the last 12 months. 1 = At least one time. Reference group: never. |
| opera_classic | Classic music concerts attendance over the last 12 months. 1 = At least one time. Reference group: never. |
| other_music | Other music concerts attendance over the last 12 months. 1 = At least one time. Reference group: never. |
| theater | Theaters attendance over the last 12 months. 1 = At least one time. Reference group: never. |

Table 2
Descriptive statistics.

| Variables | n. observations | Mean | Std. dev. |
|-----------------------------------|-----------------|-------|-----------|
| <i>Dependent variables</i> | | | |
| int_trav | 36,416 | 0.099 | 0.299 |
| inttempo | 36,416 | 0.620 | 0.485 |
| <i>Sociodemographic variables</i> | | | |
| gender | 36,416 | 0.476 | 0.499 |
| age35_54 | 36,416 | 0.358 | 0.479 |
| age55_ | 36,416 | 0.440 | 0.496 |
| bachelor_degree | 36,416 | 0.140 | 0.347 |
| sit_econ_good | 36,155 | 0.610 | 0.488 |
| intatt5 | 36,416 | 0.575 | 0.494 |
| broadband | 36,416 | 0.540 | 0.498 |
| dispcsf | 36,416 | 0.219 | 0.413 |
| credit_card_family | 36,416 | 0.464 | 0.499 |
| trust | 36,416 | 0.200 | 0.400 |
| area_center | 36,416 | 0.180 | 0.384 |
| area_south | 36,416 | 0.401 | 0.490 |
| smartphone | 36,416 | 0.730 | 0.444 |
| computer_literacy | 36,416 | 0.360 | 0.480 |
| work_role1 | 29,063 | 0.093 | 0.290 |
| work_role2 | 29,063 | 0.330 | 0.470 |
| work_role3 | 29,063 | 0.402 | 0.490 |
| <i>Cultural capital</i> | | | |
| cinema | 35,856 | 0.474 | 0.499 |
| theater | 35,800 | 0.184 | 0.388 |
| opera_classic | 35,744 | 0.087 | 0.282 |
| other_music | 35,714 | 0.214 | 0.410 |
| museums_exhib | 35,782 | 0.290 | 0.454 |
| archoe | 35,755 | 0.240 | 0.427 |
| books | 35,808 | 0.397 | 0.489 |

Note: all variables are dichotomic (min = 0; max = 1).

the tourism sector is no exception: as far as Italian individuals are concerned, the number of trips and of nights per trip has been steadily decreasing between 2008 and 2015, with a relevant turnaround in 2016 (+15.8% for holiday trips on 2015). Furthermore, as detailed below, in our regression exercise we take into consideration also the economic conditions of the individuals: in particular, we do so by including a variable expressing the individual's self-assessment of the adequacy of her economic resources to the needs of the family. This variable, rather than an objective one like the nominal level of income, has the advantage of embodying also the psychological element, i.e. depends also on the respondent's pessimistic/optimistic view, a dimension that is relevant in shaping consumer's demand levels.

As the purchase of tourism products online is mapped through a dichotomous variable, we rely on a probit model. However, online purchase implies that the individual uses the Internet, thus a possible selection bias problem emerges as individuals who purchase online are selected non-randomly. In order to address such self-selection issue, we correct the probit estimates through the Heckman correction procedure (Heckman, 1979), estimating two equations simultaneously: an "Internet use" equation (*selection equation*) and an "online tourism purchase" equation (*observation equation*).

Internet access equation or selection equation:

$$Pr(D_j = 1 | Z_j) = \alpha + \gamma Z_j + \varepsilon_j \quad (1)$$

Online tourism purchase equation or observation equation:

$$Pr(Y_j = 1 | X_j) = \alpha + \beta X_j + \delta C_j + u_j \quad (2)$$

where D_j is a dummy which equals 1 if the individual uses the Internet, and 0 otherwise; Z_j is the set of typical covariates (Quaglione, Agovino, Di Bernardino, & Sarra, 2018).

Y_j is a dummy that gets value 1 if the individual purchases tourism services online, and 0 otherwise; X_j is a vector of socio-demographic controls, and C_j is a vector of variables related to individual's participation to different cultural activities (which are included in a second specification of the observation equation, which we refer to as "Model 2"; see Table 3, column 3).

First, we calculate the Variance Inflation Factor (VIF) to assess whether a multicollinearity issue among regressors exists or not. Since for each variable $VIF < 10$ (the average VIF is 1.51, the highest 2.82).

Table 3 presents the outcome of the empirical analysis. The marginal effects calculated for the first-stage equation (Eq. (1)) are shown in Table 3, column 1. In detail, the probability of using the Internet decreases with the age of the respondents. In particular, people aged over 55 are much less likely to use the Internet (−41.7%) compared to respondents aged 18–34 years. People with a high level of education (i.e., university degree or postgraduate education) have a 10% higher probability of using the Internet compared to respondents with a lower degree of education. Similarly, entrepreneurs, executives, self-employed workers and employees have a higher probability (ranging between 11% and 12.7%) to use the Internet than occasional workers or members of a cooperative society. Conversely, workers and apprentices have a lower probability of using the Internet than the reference group (−4.2%). Furthermore, people who live in Central or in Southern Italy are less likely to access the Internet (−1.3% and −7% respectively) compared to respondents in Northern Italy. Finally, it is interesting to note that computer literacy is a significant determinant of Internet use (+43%).

Table 3, column 2, shows the results of the first specification of the second-stage equation (Eq. (2)), in which the socio-economic determinants are taken into account. The Wald test is statistically significant at 1%, implying that the errors in the two equations are in fact correlated and the Heckman correction procedure is needed to address the selection bias.

The results show that the online purchase of travel services is more likely among men (2.1%), among most educated respondents (9%) and among people reporting the availability of resources suited for the needs of the family (3.3%). Interestingly, age does not seem to be a relevant antecedent of the online purchase, which apparently is in contrast with the findings presented in the previous literature. The reason for such an outcome can be traced back to the adoption of the Heckman correction procedure: the estimates of the observation equation are affected by the results of the selection equation. In other words, in the second stage the estimates are adjusted after having implicitly controlled for the factors that affect the use of the Internet. The combination of the results obtained through both the stages give a more refined evidence: age is relevant for the use of the Internet but, among Internet users, age is not a significant determinant for the online purchase of tourism services. The availability of a broadband connection shows a positive relationship with online purchasing, and the magnitude of such relationship is more relevant in the case of mobile broadband (9.9%) compared to fixed broadband (5.3%). Not surprisingly, those who have used the Internet to access services related to travel show a higher probability to buy tourism products online (7.7%). In line with previous findings in the literature, trust in other people is another positive antecedent of online purchasing (4.7%). Residents in Southern Italy are the ones less likely to online tourism purchase (−5.4% compared to residents in Northern Italy), followed by residents in Central Italy (−1%).

When the second specification of the model is considered (column 3, Table 3), in which several types of participation in cultural activities are included among the regressors, further interesting evidence emerges. First of all, the signs and the statistical significance of the socio-economic determinants included in the first specification are confirmed (except for the variable *area_center*, which is now significant at 5%). At the same time, the availability of a credit card in the family becomes statistically significant and shows a positive marginal effect (4%).

As for the role played by the different types of cultural capital, a positive association emerges for all of them, with the exception of "opera and ballet" (−1.1%). The negative sign is consistent with the conceptual framework presented above, being opera and ballet the most highbrow activities among the ones here taken into account.

Table 3
Models estimates.

| Variables | (1) | (2) | (3) |
|--------------------|-------------------------------------|---|---|
| | Selection equation marginal effects | Observation equation marginal effects model 1 | Observation equation marginal effects model 2 |
| gender | 0.0143 (0.0133) | 0.0209*** (0.00498) | 0.0296*** (0.0052) |
| age35_54 | -0.0918*** (0.0115) | -0.000694 (0.00408) | -0.00693 (0.00448) |
| age55_ | -0.417*** (0.0725) | 0.0114 (0.015) | -0.0174 (0.0111) |
| bachelor_degree | 0.101*** (0.0148) | 0.0902*** (0.00283) | 0.0425*** (0.0027) |
| sit_econ_good | 0.0407*** (0.00339) | 0.0330*** (0.00304) | 0.0173*** (0.00251) |
| work_role1 | 0.109*** (0.00793) | | |
| work_role2 | 0.127*** (0.0152) | | |
| work_role3 | -0.0421** (0.0165) | | |
| computer_literacy | 0.431*** (0.054) | | |
| intatt5 | | 0.0773*** (0.00702) | 0.0538*** (0.00713) |
| broadband | | 0.0526*** (0.00131) | 0.0359*** (0.0017) |
| dispcsf | | 0.0989*** (0.0049) | 0.0637*** (0.00318) |
| credit_card_family | | 0.0355 (0.026) | 0.0403** (0.0176) |
| trust | | 0.0475*** (0.00662) | 0.0216*** (0.00249) |
| area_center | -0.0131** (0.00611) | -0.00924*** (0.00243) | -0.00537** (0.00251) |
| area_south | -0.0698*** (0.00979) | -0.0538*** (0.0109) | -0.0400*** (0.00866) |
| Cultural capital | | | |
| cinema | | | 0.0221*** (0.00266) |
| theater | | | 0.00824* (0.00499) |
| opera_classic | | | -0.0109** (0.00453) |
| other_music | | | 0.0238*** (0.00273) |
| museums_exhib | | | 0.0368*** (0.00367) |
| archo | | | 0.0653*** (0.00949) |
| books | | | 0.0260*** (0.00452) |
| Wald Test | | 27.90*** | 32.88*** |
| Log-likelihood | | -17,396.1 | -16,518.5 |
| AIC | | 34,802.3 | 33,046.99 |
| BIC | | 34,843.6 | 33,088.24 |
| Observations | 28,870 | 28,870 | 28,243 |

Standard errors in parentheses.

*** p < 0.01.

** p < 0.05.

* p < 0.1.

Visiting archaeological sites and museums increases the likelihood of online purchasing (6.5% and 3.7%, respectively) to the greatest extent, followed by reading books (2.6%), attending pop music concerts (2.4%), going to the cinema (2.2%) and going to the theater (0.9%).

Even in the case of this second specification, the need to adopt the Heckman correction procedure is confirmed by a Wald test significant at 1%. Finally, the second specification improves the fit of the estimates, given that the log-likelihood, the AIC and BIC criteria are all minimized compared to the first specification.

Discussion of the results

These findings are in line with the stream of literature considering the influence of cultural activities as a relevant determinant of individuals' pro-active behavior (Crociana, Agovino, & Sacco, 2015). Consistently with the evidence presented in other scientific contributions (Quaglione et al., 2017), the participation in certain cultural activities has a significant role in forming, reinforcing and sustaining individuals' social orientation (Furia, Crociana, & Agovino, 2018) and pro-social behavior (Crociana, Furia, & Agovino, 2017). On the other hand, highbrow cultural consumptions show a negative association with pro-active behaviors, because of their highly individualistic nature. Thus, it can be argued that more socially oriented cultural consumptions contribute to the accumulation of cultural capital, which can be seen as an engine of open-mindedness, trust in others and, therefore, behavioral change. On the contrary, highly individual and highbrow cultural activities do not show the same positive properties; rather they act as a damper on behavioral change.

From the practical point of view, the outcomes of our analysis suggest that cultural initiatives could be efficiently bonded with the proposal of online tourism services, implementing joint actions as co-marketing activities, cross-selling initiatives, which could be maximised if the marketing strategy follows an omni-channel approach. This will contribute to achieve a specific target via direct online channels with a proper offer, increasing the selling opportunities. Marketing synergies among the cultural activities and the purchase of tourism services could be achieved through shared actions that involve firms belonging to both sectors: for instance, jointly sponsored initiatives and/or buying opportunities for consumers who can take advantage of special promotions on travel services from the attendance to cultural initiatives. Besides, if these implications are valid for both private and public sectors, a collaboration among the private operators and policymakers of cultural, travel and tourism sectors could be the first step of a virtuous circle.

As for the conceptual level, the main implication of our reconstruction is that cultural capital should be considered within those theoretical framework (for instance TAM or KMV theories, see Davis, 1989; Morgan & Hunt, 1994) in which social components, trust and social norms are regarded as relevant in shaping individuals' online purchasing behavior (Venkatesh & Davis, 2000). Moreover, by moving from the recognized greater open mindedness and trust in others led by (socially oriented) cultural consumptions, the inclusion of cultural capital in the conceptual framework could be useful also in those studies that give relevance to the personality of consumers, acknowledging that online travel purchasers tend to be innovative (Escobar-Rodríguez & Carvajal-Trujillo, 2014; San Martín & Herrero, 2012).

At the same time, culture-led proactivity, as an outcome of cultural capital, should deserve more space within the approaches that focus on the causal connection between intentions and actual behaviors. In fact, we know from previous literature that where personal relationships and direct contacts with the service provider are key-factors in the value perception of the purchase decision-making process (Malhotra, Ulgado, Agarwal, & Baalbaki, 1994; Sabote-Ortiz, Frías-Jamilena, & Castañeda-García, 2016), and trust is relevant (Bonsón Ponte et al., 2015; Escobar-Rodríguez & Carvajal-Trujillo, 2014; Thamizhvanan & Xavier, 2013), individuals are deterred from purchasing on the Internet. The online purchase of tourism services makes no exception, as it is perceived as risky compared to the more traditional physical purchase modalities; furthermore, trust plays a relevant role in the choice of the channels through which individuals gather travels information (McKnight, Choudhury, & Kacmar, 2002), with online interactions being penalized. In other words, the intentions to purchase tourism products/services online might be negatively affected (Jensen, 2012; Kolsaker, Lee-Kelley, & Choy, 2004) or, even when such intentions exist, they struggle to turn into actual behaviors.

Even though the model presented can be considered as largely generalizable to other countries and contexts, it must be kept in mind that the results of our econometric exercise refer to Italy, and thus they cannot be adequately interpreted without taking account of the peculiarities and characteristic attributes of the Italian culture. In general, Italy is classified as a society characterized by a low-context, individualistic culture, as many western societies (Triandis, 1989). However, many relevant features distinguish Italy from other industrialized, western countries, features that may play a determinant role in shaping the relationships underlying behavioral patterns related to online purchasing.

First of all, as underlined in Dinev, Bellotto, Hart, Russo, & Serra (2006, pp. 60–61), “compared to the United States, the Italian society is more high-context, collectivist (Gannon 2004), low-trust society (Fukuyama 1995, Gannon 2004, Harrison and Huntington 2000), which exhibits low propensity to trust to the social group's outsiders and low government and institutional trust. Fukuyama places the U.S. and Italy at the opposite poles of Fukuyama's spectrum of trust – the first being an example of a high-trust society, and the second, a representative of a low-trust society”. According to Hofstede's studies about national cultures (Hofstede, 2003), even though Italy is included among the individualist societies, Italians show great loyalty and care for the family and close friends, especially in the south of the country. On the other hand, the level of interpersonal trust has historically been in Italy extremely low, the lowest among the other European countries (Inglehart, 1990), with further strong territorial differences between the North and the South (twice lower interpersonal trust in relative levels than the one of the Northern Italy). It is not a case, thus, that Italian travelers have been found to rely, more often than others, on family and friends rather than on the Internet, when in need to source travel information and advice on destinations or vacation decisions (Gursoy & Terry Umbreit, 2004). Hofstede (2003) underlines also that the Italian culture is characterized by low levels of indulgence, so that people have a tendency to cynicism and pessimism, and feel that their actions are restrained by social norms. In essence, we can assume that interpersonal trust, the propensity to open-mindedness, pro-activity and behavioral change are issues even more critical for Italian people, because of the low-trust, family-centered, poorly indulgent features of their culture.

Lastly, in the perspective of implementing our model to another country, it should also be kept in mind that Italian individuals are characterized by a relatively low level of digital skills, Internet use frequency and variety, which represent additional obstacles to online purchases. Since 2015, Italy has the fifth lowest position among EU28 in terms of digital economy and society development, as

measured by the Digital Economy and Society Index (DESI).³ In 2019, only 46.6% of individuals purchase goods and services online (compared to the 68.7% EU28 average), and the gap was even wider in 2016 (38.9% in Italy compared to a EU28 average of 65.3%).

Conclusions and further research

Recent developments in the fields of psychology and neuroscience identify cultural experiences as relevant factors in the development of brain plasticity and cognitive functions (Oatley, 2016; Särkämö et al., 2016), with considerable effects on the social orientation and, more in general, on the behavior of individuals. Cultural capital can be thus considered as an engine of behavioral change as it opens individuals' minds, encourages intellectual curiosity and the breach of established behavioral patterns, which is especially relevant in those cases in which the behavior is forged by factors with a non-rational nature (for instance habits, trust, social norms). On the basis of these considerations, we investigated whether the participation in cultural activities may be associated to a higher individuals' propensity to purchase tourism services online. Such link has never been investigated, even though the cultural economics literature is more and more focused on the investigation of cultural participation externalities on individuals' pro-social and pro-active behaviors (Crociata et al., 2015; Steg & Vlek, 2009).

The result of our empirical analysis confirms that the participation in (non-highbrow) cultural activities can be positively associated to a higher probability of online purchase of tourism products. Such empirical evidence is particularly interesting when framed within the debate on the effects of disintermediation and re-intermediation phenomena in the sector. Initially, much of the debate related to the diffusion of the Internet and of the ICTs in the tourism sector was focused on their possible positive impact on consumers and tourism operators. The idea was that the emergence of direct online channels opportunities would contribute to decrease firms' dependence on traditional intermediaries, the market power of which inevitably had negative consequences on both the prices paid by consumers and tourism firms' profitability. Actually, the advances in ICTs and the diffusion of the Internet have increased the complexity of the sectoral distribution system, adding additional layers of intermediation (namely the online travel agencies and the reviews aggregators) and fostering reintermediation processes (Buhalis & Law, 2008). In such context, in the absence of opportunities for attracting consumers through direct online channels, having online visibility on these new intermediation platforms is a critical factor for firms to attract and retain customers and, ultimately, generate profits. In other words, the imagined redistribution of economic power along the chain has not necessarily favored firms, rather it has given increasing power to digital platforms and online intermediaries (Raguseo et al., 2017). Even cases of anti-competitive behaviors by some of these online intermediaries have been documented, as for instance the widespread use of most favored nation clauses in the contracts imposed to hotels by Booking, which prevented operators to sell accommodation services at lower prices on other online or traditional distribution channels.

Finally, our findings could be read in terms of smart growth strategy, and they suggest to explore deeper the relationships and the synergies between cultural, tourism and ICT policies (da Graça Carvalho, 2012; European Commission, 2010; Zhang & Wang, 2017).

The results presented in this paper must be considered as a first step in the attempt to understand the nature and the extent of the relationship between cultural capital and online purchase of tourism services. We see at least two, not mutually exclusive, possible developments along this research line. The first one concerns the refinement of the understanding of the mechanisms linking cultural consumption and online purchase. If, in general, cultural capital can be assumed to enhance the open-mindedness and the trust of the participating individuals, it still must be clarified and documented why the different types of cultural activities have different impacts on consumers' online purchase propensity and, consequently, if the different types of (socially oriented) cultural activities are a substitute or a reinforcement to each other. Such task requires, firstly, that the causal relationship be empirically proven; secondly, a better understanding is needed about which features (for instance its social orientation, its cognitive scope, the persistence and the frequency over time) of the cultural activity are especially relevant in shaping its effects in terms of behavioral change. In other words, the direct relationship between the probability of purchasing tourism services through the internet and cultural consumption is likely to be conditioned by unobserved sub-relations, and further research is needed to study and evaluate the relevance of these secondary relationships. In this regard, once the theoretical mechanisms are better fleshed out, a viable option to test them empirically might be the use of analyses based on Structural Equation Modeling (SEM), through which factor analyses, regressions or path analyses can be combined to assess the role of possible latent factors (Hoyle, 1995).

These options for further empirical research are, as usual, strictly conditioned by data limitations. For instance, the lack of longitudinal data does not allow the implementation of any dynamic model. Were such limitation overcome (through panel or pseudo-panel data⁴), the adoption of a dynamic probit model would allow to assess whether the probability of purchasing tourism services through the Internet is conditioned by the past, by both unobserved heterogeneity and true state dependence. For instance, the introduction among the covariates of the lagged probability of purchasing tourism services through the internet would enable the identification of the presence and the magnitude of the state dependence phenomenon in the purchase of tourism services through the Internet (Wooldridge, 2005). The availability of longitudinal data would also allow the assessment of the possible impact of cumulative cultural consumption, in order to capture the continuing effect of cultural consumption on the probability of purchasing tourism services through the Internet, filtering off occasional effects.

³ See <https://digital-agenda-data.eu/datasets/desi/visualizations>.

⁴ Pseudo-panel methods are an alternative to using panel data for estimating fixed effects models when only independent repeated cross-sectional data are available. Pseudo-panels observe cohorts, i.e. stable groups of individuals, rather than individuals over time. Individual variables are replaced by their intra-cohort means (Gardes, Duncan, Gaubert, Gurgand, & Starzec, 2005).

Moreover, the relationship between the cultural capital and the online purchase of travel products could be interestingly investigated considering more “culture-specific” and cross-cultural elements, with the aim to understand the consumer profile of the countries under observation and the typology of tourism products bought, in the attempt to segment and better understand diversities and similarities of nationalities and to recognize which marketing elements could be standardized (Pizam & Mansfeld, 1999). As clarified in the previous section, national cultures may differ across several dimensions (for instance trust, individualism/collectivism, indulgence), thus it is possible that the model we propose needs to be calibrated and adapted for it to be applied to other national contexts.

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