*Title Page (with author details and affiliation)

Cultural capital and online purchase of tourism services

Davide Quaglione (corresponding author)
Department of Philosophical, Pedagogical and Economic-Quantitative Sciences
G. d'Annunzio University of Chieti and Pescara
viale Pindaro 42, 65127, Pescara (Italy)
Tel. (+39) 085-4537610; Fax (+39) 085-4537565
e-mail: d.quaglione@unich.it

Alessandro Crociata
GSSI - Gran Sasso Science Institute
e-mail: alessandro.crociata@gssi.it

Massimiliano Agovino
Department of Economic and Legal Studies
University of Naples "Parthenope"
e-mail: massimiliano.agovino@uniparthenope.it

Lea Iaia
Department of Management and Business Administration
G. d'Annunzio University of Chieti and Pescara
e-mail: lea.iaia@unich.it

Cultural capital and online purchase of tourism services

Highlights

- The likelihood of being involved in tourism services online purchasing is investigated
- Cultural capital is an additional driver for online purchases of tourism products
- The impact of cultural capital depends on the characteristics of the cultural goods consumed

*Manuscript (without author details, affiliations, or acknowledgements)
Click here to view linked References

Cultural capital and online purchase of tourism services

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 eTravel[1] 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 & 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 primary 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

[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.

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, Ferrin, & Rao, 2008; Kim, Chung, & Lee, 2011).

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; Morrisonn, 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 belies 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 toward 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 toward the use of the technology (namely explorers, pioneers, sceptics, paranoids, and laggards). In this context, Beldona, Kline, & 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, & Sarra, 2017; Quaglione, Cassetta, Crociata, Marra, & Sarra, 2018).

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 at 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 more than 43,000 individuals (18,500 households, approximately).

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, the tourism sector is no exception: as far as Italian individuals are concerned, the number of trips and of nights per trip have 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

[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.

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 Berardino, & 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.

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 theatre (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 an relevant determinant of individuals' pro-active behaviour (Crociata, Agovino, & Sacco, 2015). Consistently with the evidence presented in other scientific contributions (D. Quaglione et al., 2017), the participation in certain cultural activities has a significant role in forming, reinforcing and sustaining individuals' social orientation (Furia, Crociata, & Agovino, 2018) and pro-social behaviour (Crociata, 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 follow 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; Sabiote-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 Keller, & 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 behaviour 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 behavioural 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 (Steg and Vlek, 2009; Crociata et al, 2015).

The result of our empirical analysis confirm 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 and 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 favoured 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 favoured 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).

[3] See https://digital-agenda-data.eu/datasets/desi/visualizations.

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 data[4]), 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.

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.

References

Agag, G., & El-Masry, A. A. (2016). Understanding the determinants of hotel booking intentions and moderating role of habit. *International Journal of Hospitality Management*, *54*, 52–67. https://doi.org/10.1016/J.IJHM.2016.01.007

[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).

Agovino, M., Crociata, A., Quaglione, D., Sacco, P., & Sarra, A. (2017). Good Taste Tastes Good. Cultural Capital as a Determinant of Organic Food Purchase by Italian Consumers: Evidence and Policy Implications. *Ecological Economics*, *141*. https://doi.org/10.1016/j.ecolecon.2017.05.029

Ajzen, I. (1991). The theory of planned behavior. *Orgnizational Behavior and Human Decision Processes*, *50*, 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Amaro, S., Andreu, L., & Huang, S. (2018). Millenials' intentions to book on Airbnb. *Current Issues in Tourism*, *0*(0), 1–15. https://doi.org/10.1080/13683500.2018.1448368

Amaro, S., & Duarte, P. (2013). Online travel purchasing: A literature review. *Journal of Travel & Tourism Marketing*, *30*(July), 755–785. https://doi.org/10.1080/10548408.2013.835227

Amaro, S., & Duarte, P. (2015). An integrative model of consumers' intentions to purchase travel online. *Tourism Management*, *46*, 64–79. https://doi.org/10.1016/j.tourman.2014.06.006

Beldona, S., Kline, S. F., & Morrison, A. M. (2004). Utilitarian Value in the Internet. *Journal of Travel & Tourism Marketing*, *17*(2–3), 63–77. https://doi.org/10.1300/J073v17n02_06

Bigné, E., Sanz, S., Ruiz, C., & Aldás, J. (2010). Why Some Internet Users Don't Buy Air Tickets Online. In *Information and Communication Technologies in Tourism 2010* (pp. 209–221). Vienna: Springer Vienna. https://doi.org/10.1007/978-3-211-99407-8_18

Bonsón Ponte, E., Carvajal-Trujillo, E., & Escobar-Rodríguez, T. (2015). Influence of trust and perceived value on the intention to purchase travel online: Integrating the effects of assurance on trust antecedents. *Tourism Management*, *47*, 286–302. https://doi.org/10.1016/J.TOURMAN.2014.10.009

Bourdieu, P. (1973). Cultural Reproduction and Social Reproduction. In R. K. Brown (Ed.), *Knowledge, Education and Cultural Change* (pp. 71–84). London: Tavistock.

Boyd, B. (2009). *On the Origin of Stories. Evolution, Cognition, and Fiction*. Cambridge, MA: Harvard University Press.

Buhalis, D., & Amaranggana, A. (2015). Smart Tourism Destinations Enhancing Tourism Experience Through Personalisation of Services. In *Information and Communication Technologies in Tourism 2015* (p. 377.389). https://doi.org/10.1016/S0160-7383(01)00012-3

Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet-The state of eTourism research. *Tourism Management*, *29*(4), 609–623. https://doi.org/10.1016/j.tourman.2008.01.005

Buhalis, D., & O'Connor, P. (2005). Information Communication Technology Revolutionizing Tourism. *Tourism Recreation Research*, *30*(3), 7–16. https://doi.org/Article

Card, J. A., Chen, C.-Y., & Cole, S. T. (2003). Online Travel Products Shopping: Differences between Shoppers and Nonshoppers. *Journal of Travel Research*, *42*(2), 133–139. https://doi.org/10.1177/0047287503257490

Carroll, B., & Siguaw, J. (2003). The evolution of electronic distribution: Effects on hotels and intermediaries. *The Cornell Hotel and Restaurant Administration Quarterly*, *44*(4), 38–50. https://doi.org/10.1016/S0010-8804(03)90257-6

Chawla, M., Khan, M. N., & Pandey, A. (2015). Online Buying Behaviour : a Brief Review and Update. *AIMA Journal of Management & Research*, *9*(2/4).

Crociata, A., Agovino, M., & Sacco, P. L. (2015). Recycling waste: Does culture matter? *Journal of Behavioral and Experimental Economics* , *55*, 40–47. https://doi.org/10.1016/j.socec.2015.01.005

Crociata, A., Furia, D., & Agovino, M. (2017). The Cognitive Determinants of Social Capital. Does Culture Matter? In E. Bucciarelli, S.-H. Chen, & J. M. Corchado (Eds.), *Decision Economics: In the Tradition of Herbert A. Simon's Heritage* (pp. 105–113). Cham: Springer. https://doi.org/10.1007/978-3-319-60882-2_13

da Graça Carvalho, M. (2012). EU energy and climate change strategy. *Energy*, *40*(1), 19–22. https://doi.org/10.1016/j.energy.2012.01.012

Dale, C. (2003). The competitive networks of tourism e-mediaries: New strategies, new

advantages. *Journal of Vacation Marketing*, *9*(2), 109–118. https://doi.org/10.1177/135676670300900201
Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3), 319. https://doi.org/10.2307/249008
Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. *Management Science*, *35*(8), 982–1003. https://doi.org/10.2307/2632151
DiMaggio, P., & Mukhtar, T. (2004). Arts participation as cultural capital in the United States, 1982–2002: Signs of decline? *Poetics*, *32*(2), 169–194. https://doi.org/10.1016/j.poetic.2004.02.005
DiMaggio, P., & Ostrower, F. (1990). Participation in the Arts by Black and White Americans. *Social Forces*, *68*(3), 753. https://doi.org/10.2307/2579352
Dinev, T., Bellotto, M., Hart, P., Russo, V., & Serra, I. (2006). Internet Users' Privacy Concerns and Beliefs About Government Surveillance. *Journal of Global Information Management*, *14*(4), 57–93. https://doi.org/10.4018/jgim.2006100103
Escobar-Rodríguez, T., & Carvajal-Trujillo, E. (2014). Online purchasing tickets for low cost carriers: An application of the unified theory of acceptance and use of technology (UTAUT) model. *Tourism Management*, *43*, 70–88. https://doi.org/10.1016/J.TOURMAN.2014.01.017
European Commission. Europe 2020. A European strategy for smart, sustainable and inclusive growth. Communication from the Commission. COM(2010) 2020. (2010). Brussels.
Everingham, C. (2003). *Social Justice and the Politics of Community*. London: Ashgate.
Fesenmaier, D. R., & Jeng, J.-M. (2000). Assessing Structure in the Pleasure Trip Planning Process. *Tourism Analysis*, *5*(1), 13–27.
Fishbein, M., & Ajzen, I. (1975). *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*. (M. Fishbein & I. Ajzen, Eds.). Reading, Massachusetts: Addison-Wesley.
Furia, D., Crociata, A., & Agovino, M. (2018). Voluntary work and cultural capital: an exploratory analysis for Italian regional data. *Economia Politica*, *35*(3), 789–808. https://doi.org/10.1007/s40888-017-0070-6
Gardes, F., Duncan, G. J., Gaubert, P., Gurgand, M., & Starzec, C. (2005). Panel and Pseudo-Panel Estimation of Cross-Sectional and Time Series Elasticities of Food Consumption. *Journal of Business & Economic Statistics*, *23*(2), 242–253. https://doi.org/10.1198/073500104000000587
Garín-Muñoz, T., & Pérez-Amaral, T. (2011). Internet usage for travel and tourism: The case of Spain. *Tourism Economics*, *17*(5), 1071–1085. https://doi.org/10.5367/te.2011.0080
Gursoy, D., & Terry Umbreit, W. (2004). Tourist information search behavior: Cross-cultural comparison of European union member states. *International Journal of Hospitality Management*, *23*(1), 55–70. https://doi.org/10.1016/j.ijhm.2003.07.004
Heckman, J. J. (1979). Sample Selection Bias as a Specification Error. *Econometrica*, *47*(1), 153–161. https://doi.org/10.3982/ECTA8640
Hofstede, G. (2003). *Culture's consequences : comparing values, behaviors, institutions, and organizations across nations*. Sage Publications.
Hoyle, R. H. (1995). *Structural equation modeling : concepts, issues, and applications*. Thousand Oaks, CA: Sage Publications.
Hutter, M. (1996). The Impact of Cultural Economics on Economic Theory. *Journal of Cultural Economics*, *20*, 263–268.
Inglehart, R. (1990). *Culture shift in advanced industrial society*. Princeton University Press.
Jafari, A., Taheri, B., & vom Lehn, D. (2013). Cultural consumption, interactive sociality, and the museum. *Journal of Marketing Management*, *29*(15–16). https://doi.org/10.1080/0267257X.2013.811095
Jensen, Jan Moller. (2012). Shopping orientation and online travel shopping: The role of travel experience. *International Journal of Tourism Research*, *14*(1), 56–70.

https://doi.org/10.1002/jtr.835
Jensen, Jan Møller. (2009). Travellers' Intentions to Purchase Travel Products Online: The Role of Shopping Orientation. In *Advances in Tourism Economics* (pp. 203–215). Heidelberg: Physica-Verlag HD. https://doi.org/10.1007/978-3-7908-2124-6_13
Jeong, M., & Choi, J. (2004). Effects of Picture Presentations on Customers' Behavioral Intentions on the Web. *Journal of Travel & Tourism Marketing*, *17*(2–3), 193–204. https://doi.org/10.1300/J073v17n02_15
Kamarulzaman, Y. (2007). Adoption of travel e- shopping in the UK. *International Journal of Retail & Distribution Management*, *35*(9), 703–719. https://doi.org/10.1108/09590550710773255
Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, *44*(2), 544–564. https://doi.org/10.1016/J.DSS.2007.07.001
Kim, M.-J., Chung, N., & Lee, C.-K. (2011). The effect of perceived trust on electronic commerce: Shopping online for tourism products and services in South Korea. *Tourism Management*, *32*(2), 256–265. https://doi.org/10.1016/J.TOURMAN.2010.01.011
Kolsaker, A., Lee-Kelley, L., & Choy, P. C. (2004). The reluctant Hong Kong consumer: purchasing travel online. *International Journal of Consumer Studies*, *28*(3), 295–304. https://doi.org/10.1111/j.1470-6431.2004.00373.x
Lee, H. Y., Qu, H., & Kim, Y. S. (2007). A study of the impact of personal innovativeness on online travel shopping behavior - A case study of Korean travelers. *Tourism Management*, *28*(3), 886–897. https://doi.org/10.1016/j.tourman.2006.04.013
Lee, M., & Johnson, K. K. P. (2002). Exploring differences between Internet apparel purchasers, browsers and non- purchasers. *Journal of Fashion Marketing and Management*, *6*(2), 146–157. https://doi.org/10.1108/13612020210429485
Li, L., & Buhalis, D. (2005). Predicting Internet Usage for Travel Bookings in China. In *Information and Communication Technologies in Tourism 2005* (pp. 429–439). Vienna: Springer-Verlag. https://doi.org/10.1007/3-211-27283-6_39
Liao, Z., & Shi, X. (2017). Web functionality, web content, information security, and online tourism service continuance. *Journal of Retailing and Consumer Services*, *39*(June), 258–263. https://doi.org/10.1016/j.jretconser.2017.06.003
Limayem, M., Hirt, S., & Chin, W. (2001). Intention Does Not Always Matter: The Contingent Role of Habit on IT Usage Behavior. In *Global Co-Operation in the New Millennium* (pp. 274–286). Bled, Slovenia, Slovenia: The 9th European Conference on Information Systems.
Lizardo, O. (2006). How Cultural Tastes Shape Personal Networks. *American Sociological Review*, *71*(5), 778–807. https://doi.org/10.1177/000312240607100504
López-Sintas, J., & Katz-Gerro, T. (2005). From exclusive to inclusive elitists and further: Twenty years of omnivorousness and cultural diversity in arts participation in the USA. *Poetics*, *33*(5), 299–319. https://doi.org/10.1016/j.poetic.2005.10.004
Lu, Q., Yang, Y., & Yuksel, U. (2015). The impact of a new online channel: An empirical study. *Annals of Tourism Research*, *54*, 136–155. https://doi.org/10.1016/j.annals.2015.06.006
Malhotra, N. K., Ulgado, F. M., Agarwal, J., & Baalbaki, I. B. (1994). A Comparative Evaluation of the Dimensions of Service Quality between developed and developing countries. *International Marketing Review*, *11*(2), 5–15.
Martínez-Costa, C., Pladevall-Viladecans, J., Mas-Machuca, M., & Marimon, F. (2018). Behavioral Profiles of Consumers of Online Travel Agencies. *International Journal for Quality Research*, *12*(3), 703–722.
McKnight, D. H., Choudhury, V., & Kacmar, C. (2002). Developing and Validating Trust Measures for e-Commerce: An Integrative Typology. *Information Systems Research*, *13*(3), 334–359. https://doi.org/10.1287/isre.13.3.334.81
Morgan, R. M., & Hunt, S. D. (1994). The Commitment-Trust Theory of Relationship

Marketing. *Journal of Marketing*, *58*(3), 20–38. https://doi.org/10.1177/002224299405800302
Morrisonn, A. M., Jing, S., O'Leary, J. T., & Cai, L. A. (2001). Predicting Usage of the Internet for Travel Bookings: An Exploratory Study. *Information Technology & Tourism*, *4*(1), 15–30. https://doi.org/10.3727/109830501108750868
Nielsen. (2018). *Connected Commerce*. New York.
Nunkoo, R., Ramkissoon, H., & Gursoy, D. (2013). Use of Structural Equation Modeling in Tourism Research. *Journal of Travel Research*, *52*(6), 759–771. https://doi.org/10.1177/0047287513478503
Oatley, K. (2016). Fiction: Simulation of Social Worlds. *Trends in Cognitive Sciences*, *20*(8), 618–628. https://doi.org/10.1016/J.TICS.2016.06.002
Parasuraman, A. P., & Colby, C. (2001). *Techno-Ready Marketing: How and Why Your Customers Adopt Technology*. New York: The Free Press.
Pizam, A., & Mansfeld, Y. (Yoel). (1999). *Consumer behavior in travel and tourism*. Haworth Hospitality Press.
Pourfakhimi, S., Duncan, T., & Coetzee, W. (2018). A Synthesis of Technology Acceptance Research in Tourism & Hospitality. In *Information and Communication Technologies in Tourism 2018* (pp. 143–155). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-72923-7_12
Purhonen, S., Gronow, J., & Rahkonen, K. (2011). Highbrow culture in Finland: Knowledge, taste and participation. *Acta Sociologica*, *54*(4), 385–402. https://doi.org/10.1177/0001699311422092
Quaglione, D., Cassetta, E., Crociata, A., & Sarra, A. (2017). Exploring additional determinants of energy-saving behaviour: The influence of individuals' participation in cultural activities. *Energy Policy*, *108*. https://doi.org/10.1016/j.enpol.2017.06.030
Quaglione, D., Agovino, M., Di Berardino, C., & Sarra, A. (2018). Exploring additional determinants of fixed broadband adoption: policy implications for narrowing the broadband demand gap. *Economics of Innovation and New Technology*, *27*(4), 307–327. https://doi.org/10.1080/10438599.2017.1350358
Quaglione, D., Cassetta, E., Crociata, A., Marra, A., & Sarra, A. (2018). An assessment of the role of cultural capital on sustainable mobility behaviours: Conceptual framework and empirical evidence. *Socio-Economic Planning Sciences*, *Online Fir*, 1–11. https://doi.org/10.1016/J.SEPS.2018.07.005
Raguseo, E., Neirotti, P., & Paolucci, E. (2017). How small hotels can drive value their way in infomediation. The case of 'Italian hotels vs. OTAs and TripAdvisor.' *Information and Management*, *54*(6), 745–756. https://doi.org/10.1109/IECON.2016.7793014
Sabiote-Ortiz, C. M., Frías-Jamilena, D. M., & Castañeda-García, J. A. (2016). Overall Perceived Value of a Tourism Service Delivered via Different Media. *Journal of Travel Research*, *55*(1), 34–51. https://doi.org/10.1177/0047287514535844
Sahli, A. B., & Legohérel, P. (2016). The tourism Web acceptance model: A study of intention to book tourism products online. *Journal of Vacation Marketing*, *22*(2), 179–194. https://doi.org/10.1177/1356766715607589
San Martín, H., & Herrero, Á. (2012). Influence of the user's psychological factors on the online purchase intention in rural tourism: Integrating innovativeness to the UTAUT framework. *Tourism Management*, *33*(2), 341–350. https://doi.org/10.1016/J.TOURMAN.2011.04.003
Särkämö, T., Altenmüller, E., Rodríguez-Fornells, A., & Peretz, I. (2016). Editorial: Music, Brain, and Rehabilitation: Emerging Therapeutic Applications and Potential Neural Mechanisms. *Frontiers in Human Neuroscience*, *10*, 103. https://doi.org/10.3389/fnhum.2016.00103
Schwarz, N. (2007). Attitude Construction: Evaluation in Context. *Social Cognition*, *25*(5), 638–656. https://doi.org/10.1521/soco.2007.25.5.638
Sheth, J. N., & Parvatiyar, A. (1995). The evolution of relationship marketing. *International*

Business Review, *4*(4), 397–418. https://doi.org/10.1016/0969-5931(95)00018-6
Smith, E. R., & Semin, G. R. (2004). Socially Situated Cognition: Cognition in its Social Context. *Advances in Experimental Social Psychology*, *36*, 53–117. https://doi.org/10.1016/S0065-2601(04)36002-8
Smith, E. R., & Semin, G. R. (2007). Situated Social Cognition. *Current Directions in Psychological Science*, *16*(3), 132–135. https://doi.org/10.1111/j.1467-8721.2007.00490.x
Stangl, B., Inversini, A., & Schegg, R. (2016). Hotels' dependency on online intermediaries and their chosen distribution channel portfolios: Three country insights. *International Journal of Hospitality Management*, *52*, 87–96. https://doi.org/10.1016/j.ijhm.2015.09.015
Statista. (2019). eTravel - worldwide | Statista Market Forecast. Retrieved January 16, 2019, from https://www.statista.com/outlook/359/100/etravel/worldwide?currency=usd
Steg, L., & Vlek, C. (2009). Encouraging pro-environmental behaviour: An integrative review and research agenda. *Journal of Environmental Psychology*, *29*(3), 309–317. https://doi.org/10.1016/j.jenvp.2008.10.004
Tavano Blessi, G., Grossi, E., Sacco, P. L., Pieretti, G., & Ferilli, G. (2014). Cultural Participation , Relational Goods and Individual Subjective Well-Being : Some Empirical Evidence. *Review of Economics and Finance*, 33–46.
Thamizhvanan, A., & Xavier, M. J. (2013). Determinants of customers' online purchase intention: an empirical study in India. *Journal of Indian Business Research*, *5*(1), 17–32. https://doi.org/10.1108/17554191311303367
Throsby, D. (1999). Cultural Capital. *Journal of Cultural Economics*, *23*(1/2), 3–12. https://doi.org/10.1023/A:1007543313370
Throsby, D. (2005). *On the Sustainability of Cultural Capital* (Macquarie economics research papers No. 10/2005). Sidney.
Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review*, *96*, 506–520.
Turan, A. H. (2012). Internet Shopping Behavior of Turkish Customers: Comparison of Two Competing Models. *Journal of Theoretical and Applied Electronic Commerce Research*, *7*, 77–93. https://doi.org/10.4067/S0718-18762012000100007
Ukpabi, D. C., & Karjaluoto, H. (2017). Consumers' acceptance of information and communications technology in tourism: A review. *Telematics and Informatics*, *34*(5), 618–644. https://doi.org/10.1016/J.TELE.2016.12.002
van Deursen, A. J. A. M., & van Dijk, J. A. G. M. (2015). Toward a Multifaceted Model of Internet Access for Understanding Digital Divides: An Empirical Investigation. *The Information Society*, *31*(5), 379–391. https://doi.org/10.1080/01972243.2015.1069770
Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*, *46*(2), 186–204. https://doi.org/10.1287/mnsc.46.2.186.11926
Weber, K., & Roehl, W. S. (1999). Profiling People Searching for and Purchasing Travel Products on the World Wide Web. *Journal of Travel Research*, *37*(3), 291–298. https://doi.org/10.1177/004728759903700311
Wen, I. (2009). Factors affecting the online travel buying decision: a review. *International Journal of Contemporary Hospitality Management*, *21*(6), 752–765. https://doi.org/10.1108/09596110910975990
Wen, I. (2012). An Empirical Study of an Online Travel Purchase Intention Model. *Journal of Travel & Tourism Marketing*, *29*(1), 18–39. https://doi.org/10.1080/10548408.2012.638558
Wong, J., & Law, R. (2005). Analysing the intention to purchase on hotel websites: a study of travellers to Hong Kong. *International Journal of Hospitality Management*, *24*(3), 311–329. https://doi.org/10.1016/J.IJHM.2004.08.002
Wooldridge, J. M. (2005). Simple solutions to the initial conditions problem in dynamic, nonlinear panel data models with unobserved heterogeneity. *Journal of Applied Econometrics*, *20*(1), 39–54. https://doi.org/10.1002/jae.770

Zhang, L. (2015). Online Reviews: The Impact of Power and Incidental Similarity. *Journal of Hospitality Marketing & Management*, *24*(6), 633–651. https://doi.org/10.1080/19368623.2014.929550

Zhang, X., & Wang, Y. (2017). How to reduce household carbon emissions: A review of experience and policy design considerations. *Energy Policy*, *102*(December 2016), 116–124. https://doi.org/10.1016/j.enpol.2016.12.010

Cultural capital and online purchase of tourism services

Statement of contribution

1. What is the contribution to knowledge, theory, policy or practice offered by the paper?
Our paper contributes to the recent theoretical and empirical literature focusing on the identification of the determinants of customers' online buying decisions, and provides an original conceptual framework according to which the participation to cultural activities is associated to individuals' higher propensity to purchase tourism services online. Such relationship is also empirically tested.

2. How does the paper offer a social science perspective / approach?
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 that encourages customers to adopt more pro-active behaviors. 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 such sense, the paper builds on a strong and scientifically well-grounded social science perspective: the cultural capital hypothesis, firstly documented by Bourdieu (1973), as a paradigm explaining a mechanism for social reproduction of the class structure; the cultural economics approach proposed by Throsby (1999, 2005).

Table 1. Data and variables definitions

Dependent variables	
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.
Sociodemographic variables	
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; homeworker 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.
dispcesf	Availability of a mobile broadband connection. 1 = Yes. Reference group: no.
broadband	Availability of a broadband connection at home. 1 = Yes. Reference group: no.
archeo	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	Theatres attendance over the last 12 months. 1 = At least one time. Reference group: never.

Table 2. Descriptive statistics

Variables	n. observations	Mean	Std. Dev.
Dependent variables			
int_trav	36,416	0.099	0.299
inttempo	36,416	0.620	0.485
Sociodemographic variables			
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
dispcesf	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
Cultural capital			
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
archeo	35,755	0.240	0.427
books	35,808	0.397	0.489

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

Table 3. Models estimates

Variables	(1) Selection Equation Marginal Effects	(2) Observation Equation Marginal Effects Model 1	(3) Observation Equation Marginal Effects Model 2
gender	0.0143	0.0209***	0.0296***
	-0.0133	-0.00498	-0.0052
age35_54	-0.0918***	-0.000694	-0.00693
	-0.0115	-0.00408	-0.00448
age55_	-0.417***	0.0114	-0.0174
	-0.0725	-0.015	-0.0111
bachelor_degree	0.101***	0.0902***	0.0425***
	-0.0148	-0.00283	-0.0027
sit_econ_good	0.0407***	0.0330***	0.0173***
	-0.00339	-0.00304	-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***	0.0538***
		-0.00702	-0.00713
broadband		0.0526***	0.0359***
		-0.00131	-0.0017
dispcesf		0.0989***	0.0637***
		-0.0049	-0.00318
credit_card_family		0.0355	0.0403**
		-0.026	-0.0176
trust		0.0475***	0.0216***
		-0.00662	-0.00249
area_center	-0.0131**	-0.00924***	-0.00537**
	-0.00611	-0.00243	-0.00251
area_south	-0.0698***	-0.0538***	-0.0400***
	-0.00979	-0.0109	-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
archeo			0.0653***
			-0.00949
books			0.0260***
			-0.00452
Wald Test		27.90***	32.88***
Log-likelihood		-17396.1	-16518.5

AIC		34802.3	33046.99
BIC		34843.6	33088.24
Observations	28,870	28,870	28,243

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1