Reciprocity and commitment in online travel communities

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Abstract

Purpose—With social exchange theory as a basis, this article seeks a better understanding of advice processes in online travel communities, which offer crucial advice for travelers' decisions. It also predicts that relational capital variables (commitment, reciprocity perceptions) moderate the main relationships.

Design/methodology/approach—Data from a web survey of 456 users of online travel communities affirm the scale's validity and provide the input for structural equation modeling and multisample analyses of the hypotheses.

Findings—Higher levels of commitment reinforce the effect of following past advice on passive and active participation intentions. Users' perceptions of reciprocity in the community strengthen the influence of following past advice on active participation. However, a high level of reciprocity causes users following past advice to reduce their intentions to continue following that advice.

Practical implications—Management tactics should specify active and passive participation in online travel communities. Specifically, to encourage the creation of high-quality new content, community managers should create interactive environments marked by high levels of reciprocity and commitment.

Originality/value—This research elucidates the role of relational capital variables in advice processes and advances understanding of online travel communities.

Keywords—online travel community, advice, active participation, passive participation, relational capital, moderation analysis

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1. Introduction

Online travel communities such as TripAdvisor are incomparable in their ability to facilitate exchanges of knowledge among consumers (e.g., Casaló et al., 2011; Lee et al., 2014; Sigala, 2012). Travelers share their travel experiences and offer advice and assistance (Bilgihan et al., 2014); other consumers can readily read these contents using internal search engines and effective content categorization (e.g., price category, kind of traveler), often for free. Therefore, each visitor can read all others' comments, as well as participate in and contribute to the community by creating new content and sharing experiences that may guide other members' travel decisions.

Previous studies confirm that online review sites provide important information for tourism product purchases and that advice shared within these communities increasingly affects customer spending (Casaló et al., 2015; Hsiao et al., 2013; Liu and Park, 2015). The online travel communities represent a helpful, interactive reference group that consumers can turn to when they need to obtain and share valuable information (Guo and Zhou, 2017; Malinen, 2015). Loyalty to online communities also influences members' travel decisions (Casaló et al., 2011; Kim et al., 2004). Thus online travel communities are critical for both travel inspiration and planning (Google, 2016), and an astounding 95% of consumers read reviews before booking (Travel Statistics for Tour Operators, 2017), while 59% of travelers say online sites exert the most influence over their decisions (Deloitte, 2015). In turn, research attention has centered on the role of technologies and social media in the online travel and tourism sector (for reviews, see Law *et al.,* 2014; Serra and Salvi, 2014; Ukpabi and Karjaluoto, 2017).

Yet unlike brand communities—which establish structured relationships among the admirers of a brand (Muniz and O'Guinn, 2001)—or social commerce applications that rely on social media to facilitate e-commerce transactions and activities (Liang and Turban, 2011), online travel communities are unique, in that users' interest in a particular consumption activity is what gives sense to the community. Consumers on these advice-sharing platforms prefer informal, personal communication sources, rather than formal and organizational sources (Bansal and Voyer, 2000), because they consider their peers more objective (Kozinets, 2002), with nothing to gain from directing the consumer's subsequent actions (Schiffman and Kanuk, 1997). However, if high quality contents are not available, the survival of such communities would be questionable (Zhu et al., 2016).

Therefore, to extend prior studies that focus on how reviews influence consumers' travel decisions (Ukpabi and Karjaluoto, 2017), this article explores the social exchange process that causes users to function as passive or active participants in the community, which ultimately may help ensure community success. According to social exchange theory (Blau, 1964), the decision to interact with others stems from a utilitarian assessment of how to maximize rewards and minimize the costs of social interactions (Shiau and Luo, 2012). This theory can explain users' behaviors on online social platforms, such as adding new friends in Facebook (Sheldon, 2015), participating in group buying (Shiau and Luo, 2012), or playing social games (Huang et al., 2018). Notably, the rewards derived from social exchanges are not necessarily extrinsic or economic but also may be intrinsic and symbolic (e.g., praise, respect, self-esteem) (Blau, 1964; Cropanzano and Mitchell, 2005). Because the value of an online travel community can be obtained only through interactions with others, users' participation represents a form of social behavior, based on mutual reinforcement (Cook and Rice, 2003). The resulting system of communal relationships rests on group gains, rather than dyadic,

interpersonal exchanges (Cropanzano and Mitchell, 2005). As a communal relationship, travel communities provide value and support users' individual welfare non-contingently, with the hope that recipients of value similarly would be responsive and behave communally if others' needs arise in the future (Clark and Mills, 2011).

Moreover, advice sharing in such communities is never static, such that it evolves according to social dynamics and information cascades (Liu et al., 2016). A user looking at reviews of a hotel in Booking may find a complaint and the hotel's response; after staying at the hotel, the user might add to the discussion by contributing his or her opinion. In the absence of formal norms regulating these exchanges (Cropanzano and Mitchell, 2005), users' past experiences with and perceptions of community dynamics and social practices likely determine their future actions toward that community (Wan et al., 2017), including their intentions to follow or give advice.

To clarify this process, the current study considers relational capital, or the affective nature of the relationships that link a social group (Wasko and Faraj, 2005). Relational capital is a fundamental asset of online communities (Zhao et al., 2012), but previous studies have not established a clear pattern of its influence on users' participation. Some authors argue that perceived reciprocity directly affects levels of participation in a community (e.g., Wang and Fesenmaier, 2004); other works fail to find this direct effect empirically (e.g., Wasko and Faraj, 2005; Wiertz and De Ruyter, 2007). Analogously, some studies indicate a positive link between commitment and participation (e.g., Wiertz and De Ruyter, 2007; Xiang et al., 2018), but others assert a non-significant relationship (e.g., Wasko and Faraj, 2005). Noting these contradictory results, and with social exchange theory as a basis, perceived reciprocity and commitment may exert moderating rather than direct causal effects on participation. Considering the relevance of maintaining

social activity and updated information in an online travel community, to attain the value of relational capital, this study pursues two main research objectives:

- To clarify the relationship between users' decision to follow the advice of the online travel community in the past and future intentions to follow advice (passive participation) or give advice (active participation).

- To evaluate the possible moderating effects of relational capital (i.e., commitment to and perceived reciprocity in the community) in these relationships.

Accordingly, the next section presents the hypotheses formulation. The subsequent section describes the data collection process and methodology. After detailing the main findings, this article outlines their managerial implications, limitations, and lines for further research.

2. Literature review and hypotheses development

2.1 Direct effects: Following advice from the community

Social exchange theory states that behavior that generates positive consequences is likely to be repeated (Cook and Rice, 2003). Content in online travel communities is a valuable resource that benefits users by granting them information about a relevant consumption experience from peers, who generally represent trustworthy information sources (Kozinets, 2002; Zhu et al., 2016). Peer consumers usually have similar views of the world, value systems, consumption preferences and experiences, expectations of satisfaction, and behavioral patterns (Silys, 2010). Consumers who base their purchase decisions on information generated by fellow consumers in online communities perceive these recommendations as valuable (Kozinets, 2002; Janrai and Blue Research, 2013; Zhu et al., 2016), and thus, they continue to consume content from the community. In addition, a behavioral pattern based on task repetition, such as continually following the advice of an online community, leads to future intentions to replicate that behavior (Belanche et al.,

2017). Thus, consumers who have followed advice before should continue following advice they obtain in future visits to the online travel community. Accordingly,

> *H1: Following past advice of the online travel community to follow advice positively influences members' intentions to follow advice in the future.*

Similar to other online networks (e.g., open source communities, Casaló *et al.*, 2009), travel communities rely on social exchange systems that provide for group gains (Cropanzano and Mitchell, 2005). The benefits (e.g., advice, information) get combined into a single common "pot" that users may visit to get the resources they need, regardless of their particular contributions (Cropanzano and Mitchell, 2005). The ubiquity and accessibility of online platforms also means that a single piece of advice, which involves minimal costs (e.g., writing a short review, clicking on star ratings), may be of tremendous help for many peers. According to social exchange theory, users recognize the value of obtaining advice from the community and thus respond with gratitude (Cropanzano and Mitchell, 2005), such that the previous interaction with the community serves as a relational cue (Cook and Rice, 2003). Users also likely are aware of the potential benefits they could obtain from future participation in the community, including helping others make good decisions, contributing to a community that has previously benefitted the user, and being recognized for their contributions—all elements that previous research identifies as motives for users to share their experiences in online tourism communities (e.g., Munar and Jacobsen, 2014). Thus, even if giving advice invokes costs (e.g., time and effort to write a comment), the benefits of it may encourage users to contribute to the group gain.

> *H2: Following past advice of an online travel community positively influences members' intentions to give advice in the future.*

2.2 Moderating Effects of Commitment and Perceived Reciprocity

Relational capital is an element of social capital, referring to identification and social processes that provide networking motivations (Dholakia et al., 2004). These group processes appear in both tightly and loosely bounded communities, because of the existence of indirect interrelationships (i.e., a favor does not need to be returned to the same person but instead may benefit the community; Anagnostakis and Greenwald, 2004; Zghaibeh and Harmantzis, 2007), sometimes among heterogeneous or anonymous agents (Aggarwal et al., 2016; Kobayashi, 2010). Social capital in turn has important effects on behavior within a community, because its sustainability depends on the development and maintenance of long-term relationships (Wiertz and De Ruyter, 2007). Although based on personal and group gains (Gillies and Edwards, 2006), social capital also needs to be reinforced in the absence of formal norms or coercive power regulating an exchange (Cook and Rice, 2003). Previous literature proposes two general approaches to measure relational capital: (1) an individual perspective, represented by the importance that an individual member assigns to his or her relationships with the other members and attachment to the community, conventionally measured as *commitment to the community*; and (2) a group perspective, represented by general expectations that the group is willing to help other members, usually measured as *perceived reciprocity in the community* (Wasko and Faraj, 2005; Wiertz and De Ruyter, 2007). In accordance with this categorization, the current study focuses on these two variables to explain the process by which users following advice decide on their future participation in the online community. Commitment is a psychological force or attachment between parties, which leads to a desire to maintain a relationship (Nusair et al., 2013); reciprocity refers to a sense of mutual indebtedness (Wasko and Faraj, 2005), such that that people "should help those who have helped them by returning equivalent benefits" (Wiertz and De Ruyter, 2007, p.352).

Previous literature further suggests that highly committed members to an online community develop stronger intentions to visit it subsequently (e.g., Belanche et al., 2010). In repeated, utilitarian social exchanges (Cook and Rice, 2003), committed members likely return to the same online travel community after obtaining and following advice from it previously, with less consideration or attention paid to other alternatives. In this version of loyal behavior toward the online travel community (Nusair et al., 2013), more committed users remember following the advice in the past, then likely consider following the advice from that community in the future, more so than would less committed members.

In addition, highly committed members are more motivated to work for the community's survival and assign more importance to the value they gain from the community. They have developed knowledge about the costs and benefits of social exchanges in that community, so these members work to ensure that the shared benefits of mutual advice do not disappear in the future (Cook and Rice, 2003). Similar to commitment to organizations (Cropanzano and Mitchell, 2005), their previous experience leads committed users to recognize the intrinsic benefits of contributing to the community. Their contributions likely take the form of expending time and effort to create content for the online travel community—that is, giving advice to other members. Because greater levels of commitment might reinforce the links proposed in H1 and H2, a moderating hypothesis follows:

H3: *The positive effects of following past advice on future intentions to (a) follow advice and (b) give advice are greater for users with greater commitment than for users with lesser commitment to the online travel community.*

Reciprocity also is a key dimension to understand and stimulate social exchanges (Cropanzano and Mitchell, 2005). In the absence of clear transactional norms, perceptions

of reciprocity offer inferred moral rules that guide interdependent behaviors across users (Cropanzano and Mitchell, 2005). Greater reciprocity might take the form of increased activity to exchange information among members (Casaló, 2008). The environment created by an online tourism community helps users learn from existing questions and answers, comments, and responses, which motivates people to use and contribute to the relationship-based community (Zaglia, 2013). In contrast with commercial or transaction-based relationships, information exchanges in communities exhibit a communal orientation, such that users feel responsible for others' welfare (Hatfield and Rapson, 2012). A positive experience by participants who have followed advice in the past gets reinforced if they also observe higher levels of reciprocity in the community, because increased availability of helpful information serves to benefit all members. Perceptions of greater reciprocity thus could signal a higher level of collectivism by the group, relative to other communities that reveal lower levels of reciprocity. Thus, users who start to connect to the community and perceive a higher level of reciprocity should tend to heighten their intentions to participate in the future, by both following and giving advice.

Although reciprocity is a universally accepted principle, the degree to which it gets applied varies, especially in communal relationships in which returning a favor is not a contingent exchange (Clark and Mills, 2011). Social exchange theory predicts that people's perceptions of reciprocity shape their expectations and willingness to cooperate in relational exchanges (Cotterell et al., 1992). The principle of reciprocity, if perceived as relevant, may induce a sense of moral obligation (Cotterell et al., 1992), or how one *should* behave to benefit the community (Clark and Mills, 2011; Cropanzano and Mitchell, 2005). If motivated by higher perceptions of reciprocity, members who have obtained valuable information in the past should tend to share their own advice in the community if they have the chance. Therefore, the last hypothesis predicts:

H4: *The positive effects of following past advice on future intentions to (a) follow advice and (b) give advice are greater when perceived reciprocity in the online travel community is higher than when perceived reciprocity is lower.*

Figure 1 summarizes the proposed model.

INSERT FIGURE 1

3. Method

3.1 Data Collection

A web survey collected the data for this study, following common practices in research on online communities (e.g., Bagozzi and Dholakia, 2006; Flavián and Guinalíu, 2006; Leung et al., 2015). Suggestions proposed by Illum *et al.* (2010) informed the development of the web survey, to make the most of the benefits of this method (e.g., reduced length, anonymity guarantees).

To obtain responses, several posts appeared on heavily trafficked online travel communities, with links to the research website. This approach produced 456 valid questionnaires (after eliminating atypical cases, repeated responses, and incomplete questionnaires). Most respondents were between the ages of 25 and 34 years (42.7%), 35 and 44 years (21.9%), or 24 years or younger (21.7%). The gender composition was 48.2% male and 51.8% female, and 69.5% of the total sample had completed at least some university education.

In line with Roberts *et al*.'s (2003) calls for investigations of actual behaviors, respondents could choose the online travel community they would analyze. The only requirement was that they had used this community in the past year; all the communities selected represented online consumption communities, rather than brand communities, and provided tools for members to write and read content about travel and tourism-related activities (e.g., Tripadvisor, Thorn Tree, Travellerspoint). Next, respondents answered

the questionnaire. All scales (see the Appendix) are based on self-reported measures and use seven-point Likert-type response formats (1 = "completely disagree" to 7 = "completely agree").

3.2 Measure Validation

The initial set of items to measure the latent constructs came from an in-depth review of relevant literature pertaining to e-marketing, tourism, and online communities. The measures were inspired by previous scales that assess people's behaviors in online travel communities, such as following advice (Casaló et al., 2011) and intentions to contribute information (i.e., give advice in the future) or consume others' content (i.e., follow advice in the future) (Belanche et al., 2010; Ridings et al., 2002), and commitment to and perceived reciprocity in the community (Wiertz and De Ruyter, 2007). An extensive review helped ensure the content validity of the scales.

To confirm the dimensional structure of the scales, this study used confirmatory factor analysis in the statistical software EQS 6.1. According to the check of the standardized coefficients, which must be greater than 0.7 (Henseler et al., 2010), only one item from the future intentions to follow advice scale needed to be eliminated. The levels of convergence, R-square values, and model fit were acceptable (χ^2 = 143.991, 55 d.f., p < 0.000; Satorra-Bentler scaled chi-square = 72.5287, 55 d.f., p = 0.05672; normed fit index [NFI] = 0.979; non-normed fit index [NNFI] = 0.993; confirmatory fit index [CFI] = 0.993; incremental fit index [IFI] = 0.995; root mean square error of approximation [RMSEA] = 0.026; 90% confidence interval [CI] [0.000, 0.042]). To assess construct reliability, this study used a composite reliability (CR) indicator (Jöreskog, 1971), for which the values were above the suggested minimum of 0.65 (Steenkamp and Geyskens, 2006), as Table 1 shows. The test for convergent validity checked that (1) the factor loadings of the confirmatory model were statistically significant (at 0.01) and higher than

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0.5 (Steenkamp and Geyskens, 2006) and (2) the items that compose a scale contained less than 50% error variance and converged on only one construct (Fornell and Larcker, 1981), such that the average variance extracted (AVE) values were greater than 0.5 (Table 1). The test for discriminant validity (Table 1) revealed that each construct shared more variance with its own measures than with the other constructs in the model (Wiertz and De Ruyter, 2007).

Table 1. Construct Reliability, Convergent Validity, and Discriminant Validity

Construct	(1)	(2)	(3)	(4)	(5)	CR	AVE
Following past advice (1)	**0.893**					0.940	0.797
Future intentions to follow advice (2)	0.585	**0.930**				0.927	0.865
Future intentions to give advice (3)	0.625	0.626	**0.836**			0.820	0.699
Commitment to the community (4)	0.680	0.356	0.505	**0.920**		0.917	0.847
Perceived reciprocity (5)	0.801	0.425	0.558	0.739	**0.867**	0.901	0.752

Note: Diagonal elements (in bold) are the square roots of the AVE (variance shared between the constructs and their measures). Off-diagonal elements are the correlations among constructs. To ensure discriminant validity, diagonal values should be greater than off-diagonal ones (Fornell and Larcker, 1981).

4. Results

The tests of the hypotheses relied on a structural equation model. The results confirm H1 and H2 at the 0.01 significance level: Following past advice from the online travel community positively affects intentions to follow advice ($\gamma = 0.601$, $p < 0.01$) and give advice ($\gamma = 0.662$, $p < 0.01$) in the future. The model fit is acceptable ($\chi^2 = 116.241$, 18 d.f., $p < 0.000$; Satorra-Bentler scaled $\chi^2 = 58.5652$, 18 d.f., $p < 0.000$; NFI = 0.972; NNFI = 0.970; CFI = 0.980; IFI = 0.980; RMSEA = 0.070; 90% CI [0.051, 0.091]), except for the χ^2 statistic. This issue is common in marketing research that uses structural

equation modeling, because the χ^2 statistic suffers potential problems (e.g., sample size effect) when it comes to evaluating model fit (Bagozzi et al., 1991).

To assess H3a and H3b (moderating role of commitment), a multisample analysis divided the total sample into two groups, according to their level of commitment to the online travel community, at the arithmetic mean (García *et al.*, 2008). Around this mean, some cases (±½ standard deviation) were eliminated. Other methods also are available to test for moderation (e.g., orthogonalization, Little et al., 2007), but multisample analysis is used frequently to evaluate differences across groups that form on the basis of respondents' perceptions, to facilitate comparisons among parameters (e.g., Algesheimer *et al.*, 2005; Bagozzi and Dholakia, 2006; García *et al.*, 2008). For this study, the first group consisted of 105 respondents who indicated lower commitment to the online travel community; the second group was composed of 192 members who were highly committed. By generating an individual structural solution for each group, it was possible to identify significant differences between the groups at the 0.05 level for all relationships considered (see Table 2). Following advice affected intentions to both follow advice and give advice in the future more strongly if the respondents showed greater commitment to the online travel community, in support of H3a and H3b.

Table 2. Multisample Analysis: Commitment to the Community

| Constraints | Estimated Coefficients | | df | χ^2 Difference | Probability |
	Low Commitment	High Commitment			
Following past advice → Future intentions to follow advice	0.436[a]	1.013[a]	1	7.501	0.006

	Estimated Coefficients				
Following past advice → Future intentions to give advice	0.617[a]	1.051[a]	1	4.425	0.035

The assessments of H4a and H4b (moderating role of perceived reciprocity) used the same procedure, with a second multisample analysis. The first group consisted of 137 respondents who perceived lower levels of reciprocity in the online travel community, and the second group contained 174 respondents who perceived higher levels of reciprocity. The results in Table 3 indicate significant differences between the groups at the 0.01 level, such that the effect of following advice on future intentions to give advice is stronger for members who perceive higher levels of reciprocity, in line with social exchange theory and H4b. However, contrary to expectations, the effect of following advice on intentions to follow advice in the future is not any stronger among users with higher levels of reciprocity; instead, it is stronger among the low reciprocity group, in contrast with H4a. It appears that users who perceive higher levels of reciprocity stop following advice, perhaps because they prefer not to be related to a highly reciprocal community. Users who perceive low levels of reciprocity instead tend to continue taking advice, which may suggest that information obtained from a website with low reciprocity could be regarded as an informational source that everybody can take advantage of for free.

Table 3. Multisample Analysis: Perceived Reciprocity

	Estimated Coefficients				
Constraints	Low Commitment	High Commitment	df	χ^2 Difference	Probability

Following past advice → Future intentions to follow advice	0.790[a]	0.433[a]	1	7.597	0.006
Following past advice → Future intentions to give advice	0.350[b]	1.057[a]	1	11.005	0.001

[a] Coefficients significant at 0.01.

[b] Coefficients significant at 0.05.

5. Discussion

5.1 Conclusions

Unlike previous work that has sought to determine the influence of online communities on travel decisions (Casaló et al., 2015; Liu and Park, 2015), this article aims to extend academic knowledge by focusing on social processes that are fundamental to the survival of such communities. Accordingly, this study explains the principal motives for active and passive participation (Munar and Jacobsen, 2014), but it also offers theoretical and empirical explanations of the kind of relationships between these variables. By applying social exchange theory, this study can address how relational capital influences advice dynamics, highlighting the moderating roles of perceived reciprocity and commitment. In so doing, this article establishes several notable findings.

First, when a member has used an online travel community in the past to obtain advice, his or her intentions to follow advice in the future also grow. Consumers trust others like themselves (e.g., friends, family, online peers) and seek to learn from the valuable experiences of these similar others through online consumption communities. With this information, consumers can form more precise perceptions and adjust their expectations of a possible accommodation, travel service, or destination. The benefits of following advice from peer travelers may motivate them to continue using that advice in

the future. After obtaining advice, the user also tends to contribute more to the community by sharing her or his personal experiences, in the form of new content, motivated by feelings of gratitude and the intrinsic benefits of giving advice to the community (e.g. help others, being recognized). Therefore, once a consumer has followed advice obtained in an online travel community, his or her intentions to create new content in order to give advice to others in the future may increase too.

Second, commitment to the community and perceived reciprocity seem to strengthen the effect of previous advice following from an online travel community on future intentions to give advice. The direction of these two moderating effect is explained by social exchange theory and the nature of these two relational capital variables, oriented to maintain the relationship and reciprocate respectively.

Higher levels of user's commitment enhance the influence of experienced users on their future intentions to follow the advice in the future. Therefore, commitment may help develop a critical mass of frequent users guaranteeing the survival of the community (e.g., Casaló et al., 2011) However, and against our predictions, higher levels of reciprocity damage the effect of following past advice on future intentions to follow the advice, revealing that perceived reciprocity thus might be a factor damaging users' future linkage to the community. In a highly reciprocal network-wide system of generalized exchange (Wang and Fesenmaier, 2004), following advice in a high extent involves obtaining a greater outcome from the group, which may induce perceptions of being over-benefited (Steenhaut and Van Kenhove, 2005). Abundant literature explains how individuals sometimes avoid social exchanges that are highly reciprocal because they do not want to establish a relationship or to avoid social exclusion for not returning favors or not participating afterwards (Cotterell et al., 1992). Because of reciprocity is determined by expectations, people sometimes seek to "get even", that is, to avoid being highly benefited

or damaged in the exchange (Cropanzano and Mitchell, 2005). In line with this line of reasoning, our findings about the role of reciprocity may be explained by moral cleansing (e.g., Carlsmith et al., 1969) which proposes that a person performs compensatory behaviors when moral self-worth is below acceptable levels. A high level of perceived reciprocity might lead to compensatory, moral cleansing behaviors such as creating new content or reducing the use of the community for personal benefit to reduce imbalance. This finding agrees with results on exchange-based platforms (i.e. Torrent, eMule) indicate that reciprocal exchange systems increase cooperative incentives, but the absence of give-and-take systems leads to more opportunistic behaviors (Zghaibeh and Harmantzis, 2007).

5.2 Managerial Implications

From an economic view, online travel communities are valuable for consumers, who gain the benefits of improved decisions, but also for firms, which attain broader diffusion among potential clients. Recognizing this promise, previous research describes communities sponsored by firms as "social dollars" (Manchanda et al., 2015) and seeks to specify the economic value of a review, with the recognition that each specific comment could have multiplicative effects (Hofmann et al., 2017). The current research also might inform such measures of the contributions of relational capital to value creation, according to an economic approach. As well, from a teaching perspective that usually focuses on how contents stimulate consumer reactions, further attention should be paid to social exchange and relational capital variables to help explain the social dynamics in online communities.

The results also suggest that encouraging content creation by users is crucial to ensure continuous use of the community (Sibona et al., 2017). This finding is relevant, considering research that indicates consumers are not as active online as might have been

assumed (Heinonen, 2011). The presence of valuable resources in an online travel community (e.g., online reviews about different options; Bilgihan et al., 2014) affects its success likelihood (e.g., readers may be willing to visit the community in the future and read useful content, as well as create new content). Online travel communities constitute experience goods, and sometimes it is difficult to assess their value. User-friendly tools thus should be included in community designs, to ensure that visitors can access the contents easily and understand the structure of the community website, to assess its real value. Similarly, opinion-sharing platforms should facilitate users' active participation by simplifying or eliminating registration processes or asking for reviews at consumers' convenience and from different devices.

To manage relational capital, community managers should create interactive environments with high levels of reciprocity and commitment, which they might do by promoting the contents (e.g., placing links in other social networks), encouraging the creation of high-quality and new content (e.g., offering prizes, organizing games for contributors), or granting more visibility to members who contribute more to the community (e.g., rating the usefulness of online reviews). Travel communities could apply segmentation criteria that reflect users' commitment and reciprocity levels, which already is a common strategy adopted by online travel services (Wu et al., 2016). The positive effects of commitment in particular suggest that community managers should seek to develop affective links by increasing the interactions and communication among members. Some initiatives even could promote physical, rather than just virtual, meetings to encourage members to talk about and share their travel experiences. Such efforts have proved effective in brand communities, which reproduce and transmit the meaning of the community through rituals and traditions, online and offline (Muñiz and O'Guinn, 2001). Allowing users to share content with other customers on different social networking sites

also might help attract friends to the online travel community, increasing the ties and links across community members. However, a perception of high reciprocity may result in a decrease in the community's traffic and attractiveness. This phenomenon may entail a kind of natural process, by which less active users leave the community on their own, especially when they perceive prominent or strong interrelationships among other members. As in other social organizations, this effect could be compensated for by commitment to the community.

The contents provided in online consumption communities usually offer high quality, including very detailed reviews, so managers in travel and hospitality industries should continuously analyze the content generated. The communities may serve as a valuable information source, providing insights into what consumers think about the strengths and weaknesses of a given hotel. They also could reveal the characteristics of potential consumers, which may produce more appropriate segmentation and communication strategies to gain more visitors (Wu et al., 2016).

5.3 Further Research and Limitations

Despite these interesting contributions, this work has some limitations that suggest lines for further research. First, it focuses on relational capital in online travel communities (measured as commitment and perceived reciprocity); it would be interesting to analyze the role of other travel community features (e.g., reputation, rating systems) that also could affect members' subsequent behaviors. Factors other than group processes, such as personality traits (Chen et al., 2016), also may motivate users' participation in online communities (e.g., Malinen, 2015). Second, researchers should study the interaction of commitment and reciprocity, as a mechanism to create value for online travel communities. The social and psychological mechanisms guiding members' behavior in an online community may be more complex than those studied herein (e.g.,

Yoo and Gretzel, 2008). Along these lines, it would be interesting to replicate this study in emerging tourism subsectors that prioritize equity or relational capital norms (e.g., ecotourism, religious tourism, sex tourism).

Appendix. Scales

FOLLOWING PAST ADVICE	
PRE_ADVICE1	I usually behaved according to the advice I obtained in this online travel community.
PRE_ADVICE2	In general, I took into account the information posted by other members in this online travel community.
PRE_ADVICE3	I usually based my travel decisions on the information generated by other members in this online travel community.
PRE_ADVICE4	In general, I followed the information posted by other members in this online travel community.
FUTURE INTENTIONS TO FOLLOW ADVICE	
INT_FOLLOW1	I have the intention to get support from this online travel community to base my travel decisions in the future.
INT_FOLLOW2	I have the intention to read information in this online travel community to plan my travels more efficiently when I need it.
INT_FOLLOW3	*I have the intention to obtain advice regarding my travels from this online travel community in the future.*
FUTURE INTENTIONS TO GIVE ADVICE	
INT_GIVE1	I have the intention to share my travel knowledge in this online travel community when I have the chance.
INT_GIVE2	I have the intention to give advice about travels and tourism-related activities in this online travel community in the future.
COMMITMENT TO THE COMMUNITY	
COMM1	The relationship I have with this online travel community deserves my effort to maintain.
COMM2	The relationship I have with this online travel community is one I intend to maintain indefinitely.
PERCEIVED RECIPROCITY	
REC1	Members usually return favors in this online travel community.
REC2	When I receive help in this online travel community, I feel it is only right to give back and help other members.
REC3	The principle of give and take is important in this online travel community.

Note: Italics indicate an item that was eliminated during the measurement validation process.

References

Aggarwal, S., Rai, S., Jaiswal, M.P. and Sorensen, H. (2016), "Norm of Reciprocity–Antecedent of Trustworthiness in Social Media", in *Proceeding of the Conference on e-Business, e-Services and e-Society*. Springer International Publishing, pp. 411-418.

Algesheimer, R., Dholakia, U. and Herrmann, A. (2005), "The social influence of brand community: Evidence from European car clubs", *Journal of Marketing*, Vol. 69, pp. 19-34.

Anagnostakis, K.G. and Greenwald, M.B. (2004), "Exchange-based incentive mechanisms for peer-to-peer file sharing", in *Proceedings of the 24th IEEE International Conference on Distributed Computing Systems*, pp. 524-533.

Bagozzi, R.P. and Dholakia, U.M. (2006), "Open source software user communities: a study of participation in Linux user groups", *Management science*, Vol. 52 No. 7, pp. 1099-1115.

Bagozzi, R.P., Yi, Y. and Phillips, L.W. (1991), "Construct validity in organizational research", *Administrative Science Quarterly*, Vol. 36 No. 3, pp. 421-458.

Bansal, H.S. and Voyer, P.A. (2000), "Word-of-mouth processes within a services purchase decision context", *Journal of Service Research*, Vol. 3 No. 2, pp. 166-177.

Belanche, D., Casaló, L.V., Flavián, C. and Guinalíu, M., (2010), "Online social networks in the travel sector", *International Journal of Electronic Marketing and Retailing*, Vol. 3 No. 4, pp. 321-340.

Belanche, D., Flavián, C. and Pérez-Rueda, A. (2017), "User adaptation to interactive advertising formats: The effect of previous exposure, habit and time urgency on ad skipping behaviors", *Telematics & Informatics*, Vol. 34 No. 7, pp. 961-972.

Bilgihan, A., Peng, C. and Kandampully, J. (2014), "Generation Y's dining information seeking and sharing behavior on social networking sites: An exploratory study", *International Journal of Contemporary Hospitality Management*, Vol. 26 No. 3, pp. 349-366.

Blau, P. (1964), *Power and exchange in social life*, New York, J Wiley & Sons.

Carlsmith, J.M. and Gross, A.E. (1969), "Some effects of guilt on compliance", *Journal of personality and social psychology,* Vol. 11 No. 3, pp. 232-239.

Casaló, L.V. (2008) Antecedentes y Consecuencias de la Participación del Consumidor en Redes Sociales Virtuales: El Caso del Sector Turismo, Unpublished Doctoral Thesis, University of Zaragoza, Spain.

Casaló, L.V., Cisneros, J., Flavián, C. and Guinalíu, M. (2009), "Determinants of success in open source software networks", *Industrial Management & Data Systems*, Vol. 109 No. 4, pp. 532-549.

Casaló, L.V., Flavián, C. and Guinalíu, M. (2011), "Antecedents and consequences of consumer participation in on-line communities: The case of the travel sector", *International Journal of Electronic Commerce*, Vol. 15 No. 2, pp. 137-167.

Casaló, L.V., Flavián, C., Guinalíu, M. and Ekinci, Y., (2015), "Avoiding the dark side of positive online consumer reviews: Enhancing reviews' usefulness for high risk-averse travelers", *Journal of Business Research*, Vol. 68 No. 9, pp. 1829-1835.

Chen, X., Pan, Y. and Guo, B. (2016), "The influence of personality traits and social networks on the self-disclosure behavior of social network site users", *Internet Research*, Vol. 26 No. 3, pp. 566-586.

Clark, M.S. and Mills, J.R. (2011), "A theory of communal (and exchange) relationships", *Handbook of theories of social psychology*, Vol. *2*, pp. 232-250.

Cook, K.S. and Rice, E. (2003), "Social Exchange Theory", In *Handbook of social psychology*. Kluwer Academic/Plenum Publishers, New York.

Cotterell, N., Eisenberger, R. and Speicher, H. (1992), "Inhibiting effects of reciprocation wariness on interpersonal relationships", *Journal of Personality and Social Psychology*, Vol. *62 No.* 4, pp. 658-668.

Cropanzano, R. and Mitchell, M. S. (2005), "Social exchange theory: An interdisciplinary review", *Journal of Management*, Vol. 31 No. 6, pp. 874-900.

Deloitte (2015), "Travel Consumer 2015. Engaging the empowered holidaymaker", available at: https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/consumer-business/deloitte-uk-travel-consumer-2015.pdf (accessed 5 March 2018).

Dholakia, U.M., Bagozzi, R.P. and Pearo, L.K. (2004), "A social influence model of consumer participation in network-and small-group-based virtual communities", *International Journal of Research in Marketing*, Vol. 21 No. 3, pp. 241-263.

Flavián, C. and Guinalíu, M. (2006), "Consumer trust, perceived security and privacy policy", *Industrial Management & Data Systems*, Vol. 106 No. 5, pp. 601-620.

Fornell, C. and Larcker, D. (1981), "Structural equation models with unobserved variables and measurement error", *Journal of Marketing Research*, Vol. 18, pp. 39-50.

García, N., Sanzo, M.J. and Trespalacios, J.A. (2008), "Can a good organizational climate compensate for a lack of top management commitment to new product development?", *Journal of Business Research*, Vol. 61, pp. 118-131.

Gillies, V. and Edwards, R. (2006), "A qualitative analysis of parenting and social capital: comparing the work of Coleman and Bourdieu", *Qualitative Sociology Review*, Vol. *2* No. 2, pp. 42-60.

Google (2016), "Travel trends 2016: Data reveals hot spots and new consumer insights", available at: https://www.thinkwithgoogle.com/advertising-channels/mobile/travel-trends-2016-data-consumer-insights/, (accessed 5 March 2018).

Guo, B. and Zhou, S. (2017), "What makes population perception of review helpfulness: an information processing perspective", *Electronic Commerce Research*, Vol. 17 No. 4, pp. 1-24.

Hatfield, E. and Rapson, R.L. (2012), "Equity theory in close relationships", in P.A.M. Van Lange, A.W. Kruglanski, E.T. Higgins (Eds.), *Handbook of Theories of Social Psychology,* Vol. 2. Thousand Oaks, CA: Sage, pp. 200-217.

Heinonen, K. (2011), "Consumer activity in social media: Managerial approaches to consumers' social media behavior", *Journal of Consumer Behaviour*, Vol. 10, pp. 356-364.

Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2010), "The use of partial least squares path modeling in international marketing", In R.R. Sinkovics P.N. Ghauri (Eds.), *New Challenges to International Marketing, Advances in International Marketing*, Vol. 20, Emerald Group Publishing Limited, pp. 277-319.

Hofmann, J., Clement, M., Völckner, F. and Hennig-Thurau, T. (2017), "Empirical generalizations on the impact of stars on the economic success of movies", *International Journal of Research in Marketing*, Vol. 34 No. 2, pp. 442-461.

Hsiao, K.L., Lu, H.P. and Lan, W.C. (2013), "The influence of the components of storytelling blogs on readers' travel intentions", *Internet Res*earch, Vol. 23 No. 2, pp. 160-182.

Huang, H.C., Cheng, T.C.E., Huang, W.F. and Teng, C.I. (2018), "Impact of online gamers' personality traits on interdependence, network convergence, and continuance intention: Perspective of social exchange theory", *International Journal of Information Management*, Vol. 38 No. 1, pp. 232-242.

Illum, S.F., Ivanov, S.H. and Liang, Y. (2010), "Using virtual communities in tourism research", *Tourism Management*, Vol. 31, pp. 335-340.

Janrai and Blue Research (2013), "The value of social login solving the engagement gap. insights from consumer research", available at: http://janrain.com/resources/industry-research/2013-consumer-research-value-of-social-login/thank-you/ (accessed 12 June 2017).

Jöreskog, K. (1971), "Statistical analysis of sets of congeneric tests", *Psychometrika*, Vol. 36, pp. 109-133.

Kim, W.G., Lee, C. and Hiemstra, S.J. (2004), "Effects of an online virtual community on customer loyalty and travel product purchases", *Tourism Management*, Vol. 25, pp. 343-355.

Kobayashi, T. (2010), "Bridging social capital in online communities: Heterogeneity and social tolerance of online game players in Japan", *Human Communication Research*, Vol. 36 No. 4, pp. 546-569.

Kozinets, R.V. (2002), "The field behind the screen: Using netnography for marketing research in online communities", *Journal of Marketing Research*, Vol. 39, pp. 61-72.

Law, R., Buhalis, D. and Cobanoglu, C. (2014), "Progress on information and communication technologies in hospitality and tourism", *International Journal of Contemporary Hospitality Management*, Vol. 26 No. 5, pp. 727-750.

Lee, H., Reid, E. and Kim, W.G. (2014), "Understanding knowledge sharing in online travel communities: antecedents and the moderating effects of interaction modes", *Journal of Hospitality & Tourism Research*, Vol. 38 No. 2, pp. 222-242.

Leung, X.Y., Bai, B. and Stahura, K.A. (2015), "The marketing effectiveness of social media in the hotel industry: A Comparison of Facebook and Twitter", *Journal of Hospitality & Tourism Research*, Vol. 39 No. 2, pp. 147-169.

Liang, T.P. and Turban, E., (2011), "Introduction to the special issue, social commerce: a research framework for social commerce", *International Journal of Electronic Commerce*, Vol. 16 No. 2, pp. 5-14.

Liu, Q., Huang, S. and Zhang, L. (2016), "The influence of information cascades on online purchase behaviors of search and experience products", *Electronic Commerce Research*, Vol. 16 No. 4, pp. 553-580.

Liu, Z. and Park, S. (2015), "What makes a useful online review? Implication for travel product websites", *Tourism Management*, Vol. 47, pp. 140-151.

Malinen, S. (2015), "Understanding user participation in online communities: A systematic literature review of empirical studies", *Computers in Human Behavior*, Vol. 46, pp. 228-238.

Manchanda, P., Packard, G. and Pattabhiramaiah, A. (2015), "Social dollars: The economic impact of customer participation in a firm-sponsored online customer community", *Marketing Science*, Vol. 34 No. 3, pp. 367-387.

Little, T. D., Card, N. A., Bovaird, J. A., Preacher, K. J., & Crandall, C. S. (2007). "Structural equation modelling of mediation and moderation with contextual factors." In T. D. Little, J. A. Bovaird, & N. A. Card (Eds.), *Modeling contextual factors in longitudinal studies*. Mahwah, NJ: Lawrence Erlbaum Associates, pp. 207-230.

Munar, A.M. and Jacobsen, Kr.S. (2014), "Motivations for sharing tourism experiences through social media", *Tourism Management*, Vol. 43, pp. 46-54.

Muñiz, A.M. and O'Guinn, T.C. (2001), "Brand Community", *Journal of Consumer Research*, Vol. 27 No. 4, pp. 412-432.

Nusair, K., Bilgihan, A., Okumus, F. and Cobanoglu, C. (2013), "Generation Y travelers' commitment to online social network websites", *Tourism Management*, Vol. 35, pp. 13-22.

Ridings, C.M., Gefen, D. and Arinze, B. (2002), "Some antecedents and effects of trust in virtual communities", *The Journal of Strategic Information Systems*, Vol. 11 No. 3-4, pp. 271-295.

Roberts, K., Varki, S. and Brodie, R. (2003), "Measuring the quality of relationships in consumer services: An empirical study", *European Journal of Marketing*, Vol. 37, pp. 169-196.

Schiffman, L.G. and Kanuk, L.L. (1997), *Consumer behavior*, Upper, Saddle River, NJ, Prentice Hall.

Serra, A. and Salvi, F. (2014), "New consumer behavior: A review of research on eWOM and hotels", *International Journal of Contemporary Hospitality Management*, Vol. 36, pp. 41-51.

Sheldon, P. (2015), "Understanding students' reasons and gender differences in adding faculty as Facebook friends", *Computers in Human Behavior*, Vol. 53, pp. 58–62.

Shiau, W.L. and Luo, M.M. (2012), "Factors affecting online group buying intention and satisfaction: A social exchange theory perspective", *Computers in Human Behavior*, Vol. 28 No. 6, pp. 2431-2444.

Sibona, C., Cummings, J. and Scott, J. (2017), "Predicting social networking sites continuance intention through alternative services", *Industrial Management & Data Systems*, Vol. 117 No. 6, pp. 1127-1144.

Sigala, M. (2012), "Social networks and customer involvement in new service development (NSD): The case of www.mystarbucksidea.com", *International Journal of Contemporary Hospitality Management*, Vol. 24, pp. 966-990.

Silys, L. (2010), "Analysing online consumer communities with the aim of broadening marketing possibilities of branded consumer goods". Master Thesis, Aarhus School of Business, Aarhus University, Aarhus, Denmark.

Steenhaut, S. and Van Kenhove, P. (2005), "Relationship commitment and ethical consumer behavior in a retail setting: The case of receiving too much change at the checkout", *Journal of Business Ethics*, Vol. 56, pp. 335-353.

Steenkamp, J.B. and Geyskens, I. (2006), "How country characteristics affect the perceived value of a website", *Journal of Marketing*, Vol. 70, pp. 136-150.

Travel Statistics for Tour Operators (2017), "A compilation of statistics for the Tours & Activities Sector" Rezdy, available at: https://www.rezdy.com/resource/travel-statistics-for-tour-operators/ (accessed 2 October 2017).

Ukpabi, D.C. and Karjaluoto, H. (2017), "Consumers' acceptance of information and communications technology in tourism: A review", *Telematics & Informatics*, Vol. 34 No. 5, pp. 618-644.

Wan, Y., Ma, B. and Pan, Y. (2017), "Opinion evolution of online consumer reviews in the e-commerce environment", *Electronic Commerce Research*, pp. 1-21.

Wang, Y. and Fesenmaier, D.R. (2004), "Towards understanding members' general participation in and active contribution to an online travel community", *Tourism Management*, Vol. 25, pp. 709-722.

Wasko, M. and Faraj, S. (2005), "Why should I share? Examining social capital and knowledge contribution in electronic networks of practice", *MIS Quarterly*, Vol. 29, 35-57.

Wiertz, C. and De Ruyter, K. (2007), "Beyond the call of duty: Why consumers contribute to firm-hosted commercial online communities", *Organization Studies*, Vol. 28 No. 3, pp. 347-376.

Wu, C.H., Ho, G.T.S., Lam, C.H.Y., Ip, W.H., Choy, K.L. and Tse, Y.K. (2016), "An online niche-market tour identification system for the travel and tourism industry", *Internet Research*, Vol. 26 No. 1, pp. 167-185.

Xiang, L., Zheng, X., Zhang, K.Z.K. and Lee, M.K.O. (2018), "Understanding consumers' continuance intention to contribute online reviews", *Industrial Management & Data Systems*, Vol. 118 No. 1, pp. 22-40.

Yoo, K. and Gretzel, U. (2008), "What motivates consumers to write online travel reviews?", *Information Technology & Tourism*, Vol. No. 4, pp. 283-295.

Zaglia, M.E. (2013), "Brand communities embedded in social networks", *Journal of Business Research*, Vol. 66 No. 2, pp. 216-223.

Zghaibeh, M. and Harmantzis, F.C. (2007), "An "S-string" scheme for business-oriented peer-to-peer networks", *Electronic Commerce Research*, Vol. 7 No. 3, pp. 381-398.

Zhao, L., Lu, Y., Wang, B., Chau, P.Y. and Zhang, L. (2012), "Cultivating the sense of belonging and motivating user participation in virtual communities: A social capital perspective", *International Journal of Information Management*, Vol. 32 No. 6, pp. 574-588.

Zhu, D.H., Chang, Y.P. and Luo, J.J. (2016), "Understanding the influence of C2C communication on purchase decision in online communities from a perspective of information adoption model", *Telematics & Informatics*, Vol. 33 No. 1, pp. 8-16.

Figure 1. Research model
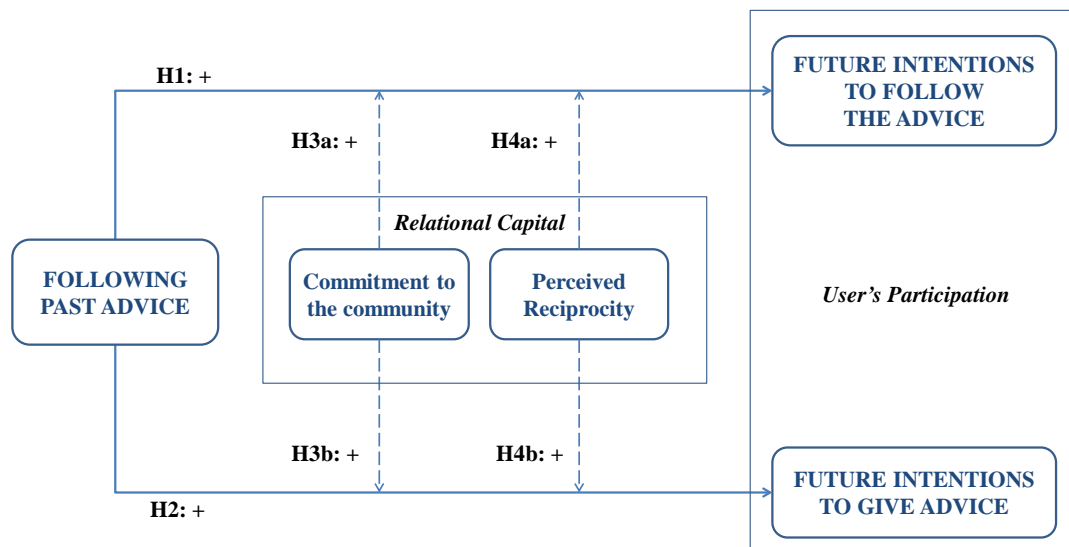
Note: Dashed lines represent moderating effects.