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Knowledge sharing among tourists via social media: A comparison between Facebook and TripAdvisor

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Knowledge sharing among tourists via social media: A comparison between Facebook and TripAdvisor

ABSTRACT

This paper examines tourists' knowledge sharing behavior in social media. Based on social capital theory, we aim to examine the effects of three dimensions of social capital—structural (social interaction ties), cognitive (shared vision), and relational (trust)—for two different types of social media: Facebook and TripAdvisor. We propose a structural model that connects an antecedent (homophily) and a consequence (knowledge sharing through posting) of these main dimensions of social capital. An online survey is conducted with 1200 Spanish consumers. Based on the full sample, our structural equation modeling supports most of the hypothesized paths, while trust does not affect either social interaction ties or knowledge sharing. Examining the difference between Facebook and TripAdvisor, our multigroup analysis finds that neither trust nor shared vision drives knowledge sharing on TripAdvisor, while shared vision affects knowledge sharing in Facebook. In both media, social interaction ties play an important role in motivating users to post comments. The effects of homophily on social interaction ties and on shared vision were statistically greater in TripAdvisor than in Facebook. Homophily did not affect trust in either media. In closing, both theoretical and managerial implications are discussed, important limitations are recognized, and future research directions are suggested.

Keywords: Social capital, Social media, Homophily, Knowledge sharing

Knowledge sharing among tourists via social media: A comparison between Facebook and TripAdvisor

1. Introduction

During the past decade, we have witnessed growing interests in the application of social media to the hospitality and tourism domain (Ayeh, Au, & Law, 2013). Among various forms of social media, the two most popular are travel review sites and social networking sites (SNSs). An SNS is a platform that enables users to create personal profiles and to connect with others. The world's most popular social SNS, Facebook, has been used actively in tourism promotion. For example, many hotel brands integrate Facebook into their rewards programs, awarding hotel loyalty points to guests who check into a hotel via Facebook (Ernst & Young, 2013). In contrast, a travel review site is a platform that allows consumers to search for information and post comments. For example, the world's largest online travel review site, TripAdvisor, recorded revenues of \$1,492 million in 2015, up from \$637 million in 2011, while achieving more than 350 million unique monthly visitors (TripAdvisor, 2015).

This significant shift toward the use of social media in tourism was parallel to the emergence of Web 2.0, which encompassed both SNSs and travel review sites (Sotiriadis & van Zyl, 2013). Web 2.0 can be characterized as interactive information sharing, interoperability, user-centered design, and collaboration (Campbell, Pitt, Parent, & Berthon, 2011). Since Web 2.0 enhances the openness and transparency of user-generated content (O'Reilly, 2007), global brands yearn for permanent, mutually beneficial interactions with their customers via the Internet. Yet, while numerous studies have examined these media in recent years (e.g., Bronner & de Hoog, 2011; Fotis, Buhalis, & Rossides, 2012), little attention has been paid to knowledge sharing activities in tourism-related social media settings. A recent study on

1
2
3 seniors' revisit intention to social network sites for tourism-related purposes suggests that
4
5 only limited research has applied social capital theory to SNSs (Kim, Lee, & Bonn, 2016).
6
7 Knowledge sharing involves "a set of behaviors that aid the exchange of acquired knowledge"
8
9 (Chow & Chan, 2008, p. 458). In a tourism context, knowledge sharing via social media
10
11 means that tourists post comments to share their travel experiences during or after the trip
12
13 (Kim & Kerstetter, 2016). According to Travel Weekly's survey (Chipkin, 2012), half of all
14
15 leisure travelers seek out the opinions of other consumers posted on travel review sites. Of
16
17 those who use travel review websites, nearly all said that these opinions have at least "some
18
19 influence," and just over 1 in 5 said they have "very much influence" on their travel choices.
20
21 Cathay Pacific's 2011 Around the World in 80 Days competition, which was run on Facebook,
22
23 offered users a chance to win a trip to 12 countries. "The company took its fan base, which at
24
25 the time was 124,000 fans, to amplify [the competition] to 29 million of their friends" (Tnooz,
26
27 2013).
28
29
30
31
32 Tourism literature offers relatively little information on knowledge sharing activities in social
33
34 media settings (Lee, Reid, & Kim, 2014). With a few exceptions (e.g., Wang & Fesenmaier,
35
36 2004; Nusair, Bilgihan, & Okumus, 2013), much of the research focuses on the prediction of
37
38 business outcomes, including travel purchase or information acquisition, and less so on the
39
40 social dynamics of online communities, specifically, sharing and communicating in social
41
42 media. However, the success of social media, such as TripAdvisor, is in part attributable to
43
44 the active participation of online community members in providing detailed reviews of their
45
46 previous travel experiences. Such participation would be a major driver in attracting people to
47
48 visit the site, which in turn results in the financial success of the business model (Chung &
49
50 Buhalis, 2008). Thus, social media offering stimulating platforms for travel communities are
51
52 quickly becoming a vital prerequisite for the feasibility of online travel businesses, since more
53
54 and more tourists use such communities as travel references (Shen, Yu, & Khalifa, 2010).
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1
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3 Based on this background, the objective of this study is to explore factors affecting tourists'
4 knowledge sharing activities in two types of social media, Facebook and TripAdvisor. Given
5 the social nature of the travel community, our conceptual model draws upon social capital
6 theory. Social capital is defined as "a valuable asset that stems from access to resources made
7 available through social relationships" (Villena, Revilla, & Choi, 2011, p. 562). For example,
8 social capital offers privileged access to information channels ("who you know") that affects
9 information benefits ("what you know") within networks of relationships (Nahapiet &
10 Ghoshal, 1998). We attempt to analyze how social capital encourages travelers to participate
11 in and exchange knowledge via social media, and how these effects differ when travelers use
12 Facebook and TripAdvisor in travel planning and execution. In the tourism literature, our
13 study extends a stream of research on tourism experience sharing through social media (Boley,
14 Magnini, & Tuten, 2013; Munar & Jacobsen, 2014; Kim, Lee, & Bonn, 2016).

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TripAdvisor and Facebook were chosen for analysis because of their overwhelming presence in virtual travel planning. TripAdvisor is the fourth most popular travel website in the US, with as many as 60% of U.S. consumers using TripAdvisor to select accommodations. As of April 2014, its mobile application for iPhone and Android has been downloaded 100 million times, suggesting the influence of the TripAdvisor community's reviews and opinions (Travel and Tour World, 2014; TripAdvisor, 2014). Facebook is the most popular social networking site among travelers, with 29% using this platform for holiday inspiration, ahead of Twitter (6%) and Pinterest (4%) (European Commission, 2013). In fact, a 2011 survey by Skyscanner reveals that more than half of Facebook users book a trip to places inspired by their friends' vacation pictures, demonstrating its role in "promoting recommendations from friends and relatives as well as 'virtual strangers'" (*Tourism Economics*, 2013, p. 13). These data are indicative of the importance of these two social media platforms in tourism.

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3 The remainder of this article is organized in the following manner. We first explain our
4
5 conceptual framework and formulate research hypotheses. Then, we describe our method and
6
7 the results, based on which we draw major implications from both theoretical and managerial
8
9 perspectives. In closing, we recognize important limitations and make suggestions for future
10
11 research.
12

13 14 **2. Theoretical framework**

15 16 *2.1. Social capital theory: definition and dimensions*

17
18 As primary theoretical rationale, this study draws upon social capital theory. Social capital
19
20 theory has received considerable attention across multiple research disciplines over the last
21
22 few decades (Liu et al., 2014). Bourdieu (1986) defined social capital as “the aggregate of the
23
24 actual or potential resources which are linked to possession of a durable network of more or
25
26 less institutionalized relationships of mutual acquaintance or recognition” (p. 248). This
27
28 definition was expanded theoretically by Coleman (1988), who argues:
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30

31
32 Social capital is defined by its function. It is not a single entity but a variety of different
33
34 entities, with two elements in common: they all consist of some aspect of social structures,
35
36 and they facilitate certain actions of actors—whether persons or corporate actors—within the
37
38 structure. Like other forms of capital, social capital is productive, making possible the
39
40 achievement of certain ends that in its absence would not be possible. (p. S98)

41
42 Social capital received greater attention when Putnam (1993) popularized a notion of social
43
44 capital, referring to “features of social organization such as networks, norms, and social trust
45
46 that facilitate coordination and cooperation for mutual benefit” (p. 226). Since then, the term
47
48 has been applied to a number of academic fields, including tourism. Table 1 shows selected
49
50 definitions of social capital in tourism, marketing, and advertising.
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54 (Insert Table 1)
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2
3 Nahapiet and Ghoshal (1998) conceptualize social capital as a set of three separate
4
5 dimensions: structural, cognitive, and relational. The *structural dimension* rests on “the
6
7 existence of connections and their configurations within a social structure” (Villena, Revilla,
8
9 & Choi, 2011, p. 563). It refers to the intertwining connection patterns between network
10
11 members, clarifying who you know and how you reach them (Butt, 1992). It describes the
12
13 “impersonal configuration of linkages between people or units” (Nahapiet & Ghoshal, 1998,
14
15 p. 244) and can be analyzed from the perspective of social interaction ties (Inkpen & Tsang,
16
17 2005). These social interaction ties may enable the connected people to access valuable
18
19 information (Coleman, 1990). The *cognitive dimension* refers to “the resources providing
20
21 shared representations, interpretations and systems of meaning among parties” (Nahapiet &
22
23 Ghoshal, 1998, p. 244). It provides a shared vision that facilitates a common understanding of
24
25 the collective goals and aspirations of the members in a social system. The *relational*
26
27 *dimension* refers to respect, trust, understanding, friendship, and faith in each other that actors
28
29 have developed through interactions over time (Granovetter, 1985; Nahapiet & Ghoshal,
30
31 1998). Trust has been pointed out as one of the key aspects of relational social capital
32
33 (Coleman, 1990). This research is drawn upon the three dimensions of social capital
34
35 conceptualized by Nahapiet and Ghoshal (1998).
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40 2.2. Social capital within an online context

41
42 The creation of social capital can occur in both offline and online contexts. Nie (2001) argued
43
44 that Internet use diminishes from face-to-face time with others, which might reduce an
45
46 individual’s social capital. However, the advancement of the computer-mediated environment,
47
48 especially Web 2.0, has significantly facilitated the generation of social capital through “its
49
50 ability to connect people from disparate geographical locations, from different age groups,
51
52 and with diverse interests who can offer help and advice on a variety of topics” (Jin & Phua,
53
54 2014, p. 182). A study on the role of the social network site (i.e. Facebook) for the creation of
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1
2
3 social capital concluded that online interactions “do not necessarily remove people from their
4
5 offline world but may indeed be used to support relationships and keep people in contact”
6
7 (Ellison, Steinfield & Lampe, 2007, p. 1165).
8

9
10 In an online context, several studies have focused on social capital as a driver of knowledge
11
12 sharing. For instance, Wasko and Faraj (2005), who investigated an online network linking
13
14 members of a legal professional association in the United States, found that online social
15
16 capital can stimulate knowledge exchange. Similarly, Chiu, Hsu, and Wang (2006) concluded
17
18 that tie strength, reciprocity, and identification all enhanced the quality of knowledge shared,
19
20 while trust only had a positive impact on the quality of knowledge contributed to a
21
22 professional online community. Mathwick, Wiertz, and de Ruyter (2008) took a different
23
24 outcome focus. They studied the impact of social capital on the values derived for the
25
26 members of a peer-to-peer problem-solving community, and how those benefits in turn
27
28 influenced their commitment toward the group. Vock, van Dolen, and de Ruyter (2013) found
29
30 that social capital impact members’ willingness to pay membership fees, either directly or
31
32 indirectly. This research extends this line of research and explores how social capital could be
33
34 developed and affected by a series of factors related to social networking sites.
35
36

37 38 **3. Research hypotheses**

39
40 Our research model is shown in Fig. 1.

41
42 (Insert Figure 1)

43 44 *3.1. Social media as a travel-related knowledge-sharing tool*

45
46 Previous research highlights the theoretical importance of social capital within social
47
48 networking sites (Kim, Kee, & Bonn, 2016; Vock, van Dolen, & de Ruyter, 2013). With the
49
50 rising popularity of user-generated media, a number of scholars have noted the paramount
51
52 importance of social media for information search in travel planning (see for a review, Leung,
53
54 Law, van Hoof, & Buhalis, 2013). Furthermore, social media play an important role in the
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3 post-travel phase, serving as venues for the posting of travel-related information. Pan,
4
5 MacLaurin, and Crotts (2007) found that sharing life experiences and social interaction are
6
7 two major factors motivating bloggers to generate online content.
8

9
10 Xiang and Gretzel (2010) demonstrate that social media serve as an important hub for
11
12 travelers' information search and play a critical role in the travel planning process. Thus, they
13
14 suggested that tourism marketers pay more attention to using social media as a marketing tool
15
16 to better promote their products to online travelers. In fact, SNSs are social media applications
17
18 frequently used by tourism practitioners. An SNS is a platform that enables users to publicize
19
20 personal information and to connect with others who have similar interests (Dippelreiter,
21
22 Grün, Pöttler, Seidel, & Berger, 2008). Among all existing SNSs, Facebook is currently the
23
24 largest one in cyberspace, accommodating 11.5% of the global population (Internet World
25
26 Stats, 2012). Gil-Or (2010) examined how a viral message transfer on Facebook can increase
27
28 the number of members of a restaurant's Facebook page. Using an experiment, the study
29
30 indicated that viral marketing through Facebook messages has a strong effect on increasing
31
32 the number of members. On the other hand, TripAdvisor is a travel review site that allows
33
34 consumers to write and search for information related to the tourism industry (Papathanassis
35
36 & Knolle, 2011). A person who sets up a user account with TripAdvisor is able to write a
37
38 recommendation about a hotel, restaurant, attraction, or vacation rental.
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43 In tourism research, *knowledge sharing* has been defined as "a travel member's willingness to
44
45 share their expertise or experiences with other members" (Qu & Lee, 2011, p. 1263). The
46
47 extent to which people seek information may vary considerably, since some are more passive
48
49 (i.e., just seeking travel information and tips), while others are more active (i.e., sharing their
50
51 knowledge and fostering relationships with people). However, the more the travel community
52
53 evolves, the more likely it is that its main activity shifts from information seeking to
54
55 information sharing, thus the greater the range, richness, reliability, and timeliness of
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3 information the community members expect (Koka & Prescott, 2002; Wang & Fesenmaier,
4
5 2004). As a result, the members become more willing to share their knowledge and resources,
6
7 while readily covering other members' information needs or providing emotional support (Qu
8
9 & Lee, 2011; Wang, Yu, & Fesenmaier, 2002). Consequently, considering both types of
10
11 social media, SNS and travel review sites, we hypothesize that:
12

13
14 **H1.** The use of social media for information search in travel planning positively influences
15
16 usage intention of social media for knowledge sharing.
17

18 3.2. *Factors affecting travel-related knowledge sharing*

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20
21 In exploring factors affecting travel-related knowledge sharing in social media, this study
22
23 partially draws upon the notion of social capital proposed by Chiu, Hsu, and Wang (2006),
24
25 who viewed it as “the network of relationships possessed by an individual or a social network
26
27 and the set of resources embedded within it” (p. 1873). The authors posited that individuals’
28
29 knowledge sharing behavior in virtual communities is a product of their social network, which
30
31 is driven by a series of subdimensions associated with structural (social interaction ties),
32
33 cognitive (trust, norm of reciprocity, and identification), and relational dimensions (shared
34
35 language and shared vision). This study closely follows their logic, but highlights the most
36
37 relevant factors that would influence knowledge sharing in both Facebook and TripAdvisor.
38
39 The structural dimension of social capital can be represented by *social interaction ties*. Social
40
41 interaction ties are channels for information and resource flows. Depending on the level of tie
42
43 strength, an actor may or may not gain access to other actors' resources (Tsai & Ghoshal,
44
45 1998). Granovetter (1973) described tie strength as a combination of the amount of time, the
46
47 emotional intensity, the level of intimacy (mutual confiding), and the reciprocal services that
48
49 characterize the tie. According to Chiu et al. (2006), social interaction ties represent “the
50
51 strength of the relationships, the amount of time spent, and communication frequency among
52
53 members of virtual communities” (p. 1877). In sum, structural social capital recognizes the
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3 advantages derived from the configuration of the network of contacts within a given social
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5 structure.

6
7 In the context of social media, the extent of social relationship tie (i.e. weak versus strong tie)
8
9 could moderate the relationship between knowledge sharing and its antecedents (San José-
10
11 Cabezudo & Camarero-Izquierdo, 2012). However, the present research posits it as a direct
12
13 antecedent because we envisage social interaction tie as a reflection of structural social
14
15 capital, which has been found to be a major drive of knowledge sharing (Chiu et al., 2006).

16
17 Thus, we hypothesize:

18
19
20 **H2.** Social interaction ties in social media positively influence usage intention of social media
21
22 for knowledge sharing.

23
24 The relational dimension of social capital can be represented by *trust*. In the management
25
26 literature, trust has been viewed as a set of specific beliefs dealing primarily with the integrity,
27
28 benevolence, and ability of another party (Chiu et al., 2006). In online community research,
29
30 interpersonal trust is the major driving force behind “how users communicate and interact in
31
32 the community” (Hung, Li, & Tse, 2011, p. 101). Trust is a type of expectation that alleviates
33
34 the fear that one’s exchange partner will act opportunistically (Bradach & Eccles, 1989).

35
36
37 When trust is built through repeated transactions, decision makers tend to be less concerned
38
39 about the selfish or even unethical behavior of others, even when they try to take advantage of
40
41 circumstances (Jarillo, 1988). They are more willing to engage in open communication and
42
43 show greater behavioral transparency. In the context of social media for travel and tourism
44
45 purposes, we define trust as specific beliefs dealing with an expectation that the exchange
46
47 partner will act in a benevolent way and, therefore, will not act opportunistically. Therefore,
48
49 we hypothesize:

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51
52 **H3.** Trust, in the context of social media, positively influences (a) social interaction ties of
53
54 social media and (b) usage intention of social media for knowledge sharing.
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3 The cognitive dimension of social capital can be represented by *shared vision*. Shared vision
4 is viewed as “a bonding mechanism that helps different parts of an organization to integrate or
5 to combine resources” (Tsai & Ghoshal, 1998, p. 467). Parties with a similar shared vision
6 expedite desirable actions and impede undesirable actions in pursuit of the collective interests
7 (Coleman, 1988). It is a set of formalized rules and norms that guides their behavior and
8 facilitates common actions within a social structure (Gulati, Nohria, & Zaheer, 2000). These
9 rules and norms encourage people to pursue uniform interests and inhibit egocentric
10 behaviors, which in turn lowers monitoring costs and strengthens the level of commitment
11 (Ouchi, 1980). When organization members share a vision, they are likely to become partners,
12 develop trust, and exchange their resources (Tsai & Ghoshal, 1998). In virtual communities,
13 prior research finds that a shared vision strengthens and cements the members’ network
14 bonds, enabling cooperative actions and benefiting organizations through more frequent and
15 active communication among members (Cohen & Prusak, 2001).

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32 A stronger commitment leads to a deeper understanding of why the relationship among
33 members exists and how they can achieve compatible goals. Furthermore, seeking the
34 attainment of common goals can minimize the likelihood of conflicts (Jap, 1999), while
35 enhancing the parties’ ultimate joint returns, due to the synergistic potential of the relationship
36 (Tsai & Ghoshal, 1998). In the context of our study, we envisage shared vision as the
37 establishment by concerned parties of a bonding mechanism that contributes to common
38 goals, interests, and sentiments to the benefit of others. The establishment of a shared vision
39 can guide the nature, direction, and magnitude of the efforts of the parties, thus eventually
40 leading to a trusted relationship (Jap & Anderson, 2003). Consequently, the trusted parties are
41 likely to become partners, sharing or exchanging their information and resources (Chiu et al.,
42 2006). On this basis, we hypothesize that:

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3 **H4.** Shared vision in social media positively influences (a) trust in social media and (b) usage
4
5 intention of social media for knowledge sharing.
6

7 3.3. *Homophily in social media*

9
10 Our model incorporates *homophily* as the antecedent of social capital dimensions. Rogers
11 (1983) defines homophily as the extent to which individuals are similar in terms of certain
12 attributes. Brown, Broderick, and Lee (2007), however, observed that recent
13
14 conceptualizations of homophily in the online environment refer more predominantly to
15
16 shared interest and shared mindset. Research on homophily has suggested that people tend to
17
18 interact with similar others, an observation termed the “like-me” principle (Laumann, 1966).
19
20 Given the subjective nature of online opinions, the proposed model incorporates perceptual
21
22 homophily, also known as “perceptual affinity” (Gilly, Graham, Wolfenbarger, & Yale, 1998).
23
24 Perceptual homophily concerns the similarities among people regarding their likes, dislikes,
25
26 values, and experiences (De Bruyn & Lilien, 2008). People often regard others who are
27
28 similar to themselves as credible sources. In online settings, Wang, Walther, Pingree, &
29
30 Hawkins (2008) found that the perception of homophily regarding people in an online support
31
32 group yields influence on credibility perceptions. Earlier, Wright (2005) had reported that
33
34 perceptions of similarity among online support group users might be correlated with source
35
36 credibility. Prior research in other contexts has also found credibility perceptions to be
37
38 influenced by other aspects of homophily, such as gender similarity (Pearson, 1982) and
39
40 language intensity similarity (Aune & Kikuchi, 1993), among others.
41
42

43
44 In the context of social media use for travel planning, this perception can be understood from
45
46 four perspectives. First, users may consider their viewpoint to be similar to that of social
47
48 media contributors, compared to other sources of travel information, because information
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50 originates from travelers who share a similar vision in terms of their values and goals. Second,
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52 as a result, they consider the posted opinions as being “from their own side,” hence they deem
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3 social media platforms to be more trustworthy sources of information. The literature has been
4
5 consistent in affirming trustworthiness as an advantage of consumer-generated content over
6
7 traditional media in terms of persuasion and communication effectiveness (Lawrence,
8
9 Fournier, & Brunel, 2013). Third, users with similar viewpoints may be more willing to
10
11 initiate interactions with each other through checking each other's reviews, hitting "Likes,"
12
13 endorsing reviews as helpful, or sending comments or queries. Fourth, users with similar
14
15 viewpoints may perceive social media as a logical platform for sharing opinions, thus they are
16
17 more willing to seek opinions and advice from travelers with similar experiences.
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20 Accordingly, we hypothesize that:

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22 **H5.** Homophily positively influences (a) shared vision of social media, (b) trust in social
23
24 media, (c) social interaction ties of social media, and (d) usage intention of social media for
25
26 information search in travel planning.
27
28

29 3.4. *Personal versus public social media*

30
31 Based on the preceding discussions, it seems reasonable to posit that there are important
32
33 differences in the proposed relationships between Facebook and TripAdvisor. For example,
34
35 the interaction ties, homophily, and shared vision of Facebook and TripAdvisor would
36
37 necessarily be different, due to distinct user motivations, perceived benefits, or perceived
38
39 risks. The underlying reasons can be explained by the inherent difference in social presence
40
41 related to these social media. *Social presence* can be defined as the "degree of salience of the
42
43 other person in the interaction and the consequent salience of the interpersonal relationships"
44
45 (Short, Williams, & Christie, 1976, p. 65). According to Gunawardena and Zittle (1997),
46
47 intimacy and immediacy are two concepts associated with social presence. *Intimacy* is closely
48
49 associated with nonverbal factors, such as physical distance, eye contact, and smiling. In
50
51 contrast, *immediacy* is a "measure of the psychological distance that a communicator puts
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3 between himself or herself and the object of his/her communication” (Gunawardena & Zittle,
4
5 1997, p. 9).

6
7 We believe that intimacy and immediacy serve as the main divides between Facebook and
8
9 TripAdvisor. Facebook is a *personal social media*, which is a profile-based platform whose
10
11 members appreciate greater levels of intimacy and immediacy (Zhu & Chen, 2015). Often, the
12
13 network members may know each other directly or indirectly. The objective of their
14
15 communication is to shorten physical distance and increase emotional contacts by creating a
16
17 virtual network. According to Ellison, Steinfield and Lampe (2007, p. 1143), Facebook
18
19 “enables its users to present themselves in an online profile, accumulate ‘fiends’ who can post
20
21 comments on each other’s pages, and view each other’s profiles”. Facebook users engage in
22
23 “searching” for people with whom they have an offline connection more than they “browse”
24
25 for complete strangers to meet (Lampe, Ellison, & Steinfield, 2006). In doing so, Facebook
26
27 allows users to adjust privacy settings according to the level of desired intimacy. In contrast,
28
29 TripAdvisor is a *public social media*, which is a content-based platform where anyone can
30
31 participate (Zhu & Chen, 2015). The users are essentially heterogeneous in nature, from
32
33 different socioeconomic backgrounds, while privacy settings are not adjustable. As a result,
34
35 the level of intimacy and immediacy at TripAdvisor is considerably lower than that of
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37 Facebook. We expect that the difference between personal versus public social media in terms
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39 of intimacy and immediacy should be reflected in their knowledge sharing behavior. Yet,
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41 because of a lack of sufficient information regarding such a difference, we formulate the
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43 following research question:
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49 **RQ:** Are there any differences in the proposed relationships among the constructs between
50
51 Facebook and TripAdvisor?
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53 54 **4. Research method** 55 56 57 58 59 60

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3 An online survey was conducted with general consumers, recruited through a professional
4 marketing firm. Each participant was paid approximately 10 euros for the completion of the
5 questionnaire. All respondents were screened to ensure that they are active users of
6
7 TripAdvisor or Facebook. In total, 1200 consumers participated in the survey, with 600
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9 respondents being assigned to each type of social media—TripAdvisor (public social media)
10
11 and Facebook (personal social media).
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16 The questionnaire consisted of two parts. The first part included demographic questions, along
17 with questions about Web usage experience and frequency. The second part included the
18 items of the proposed constructs for the model validation. With regard to the demographics,
19
20 approximately 51% of the respondents were female, while 49% were male. The majority were
21
22 office workers (57.4%) who connect to the Internet with a PC (79.8%) and who had at least
23
24 four years of usage experience (83.5%).
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29 Questionnaire items used in this study are listed in Appendix A. All constructs were measured
30
31 by 7-point scales anchored by “strongly disagree”/“strongly agree.” *Usage intention of social*
32
33 *media for information search* in travel planning was measured by an original one-item scale.
34
35 Similarly, *usage intention of social media for knowledge sharing* was measured by an original
36
37 one-item scale. *Social interaction ties*, *trust*, and *shared vision* were measured by the scales
38
39 proposed by Chiu et al. (2006). The wordings of these scales were adapted to our study.
40
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43 *Homophily* was measured by a 4-item scale inspired by Brown et al. (2007).
44

45 **5. Results**

46 *5.1. Measurement model assessment*

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48 We tested the normality assumption of the data according to Kline’s (2011) widely accepted
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50 guidelines. Kline (2011) suggests that, in assessing the univariate skewness of each variable,
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52 as long as the z-values are less than 3.0, we could assume that the data are multivariate
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54 normal. Our analysis of kurtosis statistics indicates that only three out of 19 variables
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3 exceeded 3.0 in their z-values. Thus, we assumed that the multivariate normality was
4 indirectly confirmed. Appendix B provides relevant data of kurtosis statistics.
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7 Before examining the structural model, we first tested a measurement model by running a
8 confirmatory factor analysis (CFA) with four multi-item constructs, both with a full sample
9 and with each group separately. The maximum likelihood method was used with AMOS19.0.
10
11 The results are summarized in Table 2. As can be seen clearly, the loadings and fit indexes are
12 very similar among three analyses. All items loaded significantly on the hypothesized
13 constructs, while all fit indexes exceeded the cutoff values (Hair, Tatham, Anderson, & Black,
14 2006). Thus, convergent validity was established. Covariances between the constructs are
15 shown in Appendix B.
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25 (Insert Table 2)

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27 On this basis, we then proceeded to the calculation of composite reliability (CR) and average
28 variance extracted (AVE) based on the full sample results. The CR offers a better estimate of
29 variance shared by the respective indicators, while the AVE serves as an even stricter
30 indicator of internal consistency (Hair et al., 2006). Table 3 summarizes the results. All scores
31 exceeded a benchmark of .70 and .50 for the CR and AVE, respectively. Discriminant validity
32 was assessed by comparing the square roots of the AVE with the correlations between the
33 constructs. According to Fornell and Larcker (1981), the average variance shared between a
34 construct and its measures should be greater than the variance shared between the construct
35 and other constructs in the model. As shown in Table 3, this assumption was met, thus,
36 discriminant validity was satisfied.
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49 (Insert Table 3)

50 51 52 *5.2. Structural model assessment*

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54 Next, we tested our hypotheses by examining the structural model with a full sample. The
55 results are summarized in Table 4.
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3 (Insert Table 4)

4
5 H1 posits that the use of social media for information search is positively associated with the
6 use of social media for knowledge sharing. Our findings indicate that the standardized
7 coefficient for this path was statistically significant ($\beta = .36, p < .001$). Thus, H1 was
8 supported by our data.

9
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14 In H2, we contemplate that social interaction ties positively affect social media for knowledge
15 sharing. The standardized coefficient of this path was .28, which was statistically significant
16 at $p < .001$. Thus, H2 was also supported.

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21 H3 hypothesizes that trust determines (a) social interaction ties and intention to use (b) social
22 media for knowledge sharing. To our surprise, neither path was statistically significant, thus
23 both H3a and H3b were rejected.

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28 In H4, shared vision is expected to positively influence (a) trust and (b) social media for
29 knowledge sharing. Our findings show that this is true for both paths. Thus, both H4a and
30 H4b were supported.

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34 H5 predicts that homophily positively influences (a) shared vision of social media, (b) trust in
35 social media, (c) social interaction ties of social media, and (d) social media for information
36 search. Our findings show all these paths to be statistically significant, with varying
37 magnitudes of standardized coefficients. The path from homophily to social interaction ties
38 shows the greatest coefficient, whereas the path from homophily to trust shows the least.

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43 Thus, H5a, H5b, H5c, and H5d were all supported.

44 45 46 47 *5.3. Multigroup analysis*

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49 In an attempt to respond to our research question, the differences in the strengths of the paths
50 between Facebook and TripAdvisor were examined by performing multigroup structural
51 equation modeling. The simultaneous estimation of the two models confirmed a significant
52 difference in chi-square values ($\chi^2_{17} = 87.18, p < .05$), justifying further examination of the
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3 differences in each structural path. We calculated z-values for the differences in two paths
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5 between Facebook and TripAdvisor to test statistical significance. Table 5 shows these z-
6
7 values for all combinations of the paths. Also, we conducted individual estimation for each
8
9 model to obtain the actual coefficients for comparative purposes. Fig. 2 shows the results.

10
11 (Insert Table 5)

12
13 (Insert Figure 2)

14
15
16 With regard to the path from social media for information search to social media for
17
18 knowledge sharing (H1), the coefficient was statistically greater in TripAdvisor than in
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20 Facebook. This seems to make sense, since one of the main objectives in travel review sites is
21
22 to find out the other users' opinion (information search) and provide one's own feedback
23
24 (knowledge sharing). In contrast, the main objective of an SNS is networking, and
25
26 information search and knowledge sharing are not major goals, per se. In contrast, in the path
27
28 from social interaction ties to social media for knowledge sharing (H2), there was little
29
30 statistical difference in the coefficients between Facebook and TripAdvisor.

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32
33 In terms of the path from trust to social interaction ties (H3a), TripAdvisor exhibits a greater
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35 coefficient, compared with Facebook. Our interpretation is that trust plays a central role in
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37 knowledge sharing in a public social media platform (such as TripAdvisor). Yet, in a personal
38
39 social media platform (such as Facebook), the users were already filtered or were intentionally
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41 chosen before entering the network, thus trust may not be important. Trust has no effect on
42
43 social media for knowledge sharing in either Facebook or TripAdvisor (H3b).

44
45
46 In the path from shared vision to trust (H4a), the coefficients were statistically similar in
47
48 Facebook and TripAdvisor. However, the path from shared vision to social media for
49
50 knowledge sharing (H4b) was only significant in Facebook. It may be that, on the one hand,
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52 in a personal social media platform such as Facebook, the users are willing to post comments
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54 on specific topics only when they think it is of common interest for the network members. On
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3 the other hand, in a public social media platform such as TripAdvisor, shared vision is taken
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5 for granted (otherwise one would not access such media), thus no relation was found with
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7 social media for knowledge sharing.
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10 Finally, for the paths from homophily to shared vision (H5a), trust (H5b), social interaction
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12 ties (H5c), and social media for information search (H5d), there were notable differences in
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14 all except H5b. In regard to the relationship between homophily and shared vision (H5a), the
15
16 coefficient was statistically greater in TripAdvisor than in Facebook. The same was found in
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18 the coefficient for the relationship between homophily and social interaction ties (H5c). Our
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20 interpretation is that, because the majority of the users in a public social media platform may
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22 not know each other, homogeneity of activities, interests, and lifestyles may be an important
23
24 driver for their interactions. By the same token, the more similar the activities, interests, and
25
26 lifestyles, the more likely it is for users to engage in information search using that media
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28 platform. In contrast, the members of Facebook may know each other, directly or indirectly,
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30 thus similarities are not a necessary prerequisite.
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33 34 **6. Implications**

35 36 *6.1. Theoretical implications*

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38 Our study examined two of the most widely used social media: Facebook and TripAdvisor.
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40 The primary focus of this study is based on the question of how consumers create social
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42 capital through knowledge sharing.
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46 Theoretically, this study extends research on tourism experience sharing from the perspective
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48 of knowledge sharing. The theoretical base draws upon social capital theory. Some may argue
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50 that Facebook and TripAdvisor are two fundamentally different forms of media, in terms of
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52 their origins, purposes, and functions. Yet, we strongly believe that, despite being obvious,
53
54 such differences still need to be empirically and theoretically examined for advances in our
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56 scholarly knowledge.
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3 In a way, on the one hand, our findings clearly suggest that both Facebook and TripAdvisor
4 are useful tools for stimulating the structural, cognitive, and relational dimensions of social
5 capital. On the other hand, our model was found to fit TripAdvisor better, compared with
6 Facebook. TripAdvisor may not be quite appropriate in reinforcing the relational dimension,
7 as users' sense of homophily is somewhat loose. Members are not concerned about network
8 creation. In contrast, Facebook is a closed network where, to some extent, most of the
9 members are connected through interaction ties. Such differences would be reflected in the
10 way information is disseminated or transmitted among users.

11
12 Our findings indicate that knowledge sharing in search of social capital does explain
13 experience sharing among TripAdvisor users, but does not account for the behavior of
14 Facebook users. It seems extremely interesting that trust is not a direct determinant of either
15 social interaction ties or social media for knowledge sharing in Facebook. This may mean that
16 trust is already "built in" in Facebook when users join someone's network, since, if he or she
17 is not trusted, no invitation would be sent or received in the first place. In contrast, in
18 TripAdvisor, trust does affect social interaction ties and leads to knowledge sharing only
19 through this construct. It may be that, since the users are usually unknown to each other, they
20 may first hit "Likes" or send personal queries and responses. Knowledge sharing occurs only
21 after these interactions are deemed comfortable.

22
23 One of the most surprising results has been the insignificant effect of homophily on trust in
24 social media in both Facebook and TripAdvisor. This is rather contradictory to the literature,
25 and may imply that *tourism* knowledge sharing may be different from *general* knowledge
26 sharing. That is, posting general comments may be related to, and encouraged by similar
27 characteristics or communication patterns (homophily), while posting comments on a specific
28 activity, such as tourism, may require more problem-solving and learning capabilities (shared
29 vision). Our findings seem to corroborate this interpretation. In fact, shared vision seems to be
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3 a firm determinant of trust in both Facebook and TripAdvisor.

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5 What are discerned across these two social media platforms are the effects of shared vision on
6
7 knowledge sharing. While shared vision exercises a direct impact on knowledge sharing, for
8
9 the users of TripAdvisor, sharing similar opinions or having a shared vision is not required for
10
11 their knowledge sharing behavior. This may be attributed to the very nature of travel review
12
13 sites, as the users are quite heterogeneous. These social media have transformed mere
14
15 interactive online communications into participative online communications, and have
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17 especially affected marketing within the tourism industry (Sotiriadis & van Zyl, 2013).
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20 21 *6.2. Managerial implications*

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23 Hospitality and tourism choices are high-involvement purchases that cannot be evaluated
24
25 prior to their consumption. Social media facilitate users' sharing of opinions and information
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27 about travel-related experiences, which in turn helps others make more informed decisions
28
29 about travel purchases. That is why consumers rely heavily on comments posted by other
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31 travelers in social media. Marketers have realized the profound impact of knowledge sharing
32
33 through SNSs or travel review sites, and thus now focus on strategies for stimulating customer
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35 interactions through these media (Litvin, Goldsmith, & Pan, 2008).
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39 Our findings suggest that businesses should stimulate social interaction in both Facebook and
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41 TripAdvisor via homophily. This may be an easy task for Facebook, since the users connected
42
43 within the SNS fundamentally know each other through their own or their friends' network.
44
45 On the other hand, in TripAdvisor, businesses may want to create special sections for those
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47 who share common interests, activities, or lifestyles so that the users can be segmented
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49 effectively into more homogeneous groups. It will be not only interesting but also effective
50
51 for businesses to conduct this type of segmentation within TripAdvisor, because the users in
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53 each segment may then see postings that better fit their own needs or preferences. Such
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55 segmented postings may thus serve as a more convincing resource for their travel planning.
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3 Furthermore, although trust does not exercise any direct effect on knowledge sharing, it does
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5 affect knowledge sharing indirectly through social interaction ties. That may be a warning
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7 signal for businesses, since trust building may be neglected in travel review sites due to an
8
9 increasing number of fraudulent actions. According to a study by the National Fraud
10
11 Intelligence Bureau (2013), as much as 99% of fraud bookings in the UK took place online.
12
13 Social media users should be keen to post both trustworthy and honest reviews based on true
14
15 experiences. The power of this trustworthiness factor cannot be overestimated, especially
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17 when there are increasing social concerns over a slew of unreliable or ill-natured comments
18
19 on travel review sites that may even result in legal actions (Cochrane, 2011). Our findings
20
21 clearly suggest that this issue could become one of the major obstacles in this form of social
22
23 media. One suggestion can be that companies could identify opinion leaders who could
24
25 moderate such annoying incidents. The challenging part is, however, that those opinion
26
27 leaders should not be monitored or controlled by companies, since users tend to be very
28
29 sensitive to the commercial use of referrals or word-of-mouth recommendations.
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34 **7. Limitations and directions for future research**

35
36 To make our findings more objective, several important limitations should be recognized.
37
38 First, our study examined only one component for each of three social capital dimensions
39
40 (structural, cognitive, and relational). However, as Chiu et al. (2006) suggest, these constructs
41
42 have been proposed as multidimensional. Thus, our future research should include other
43
44 components that may make up these dimensions. Second, a single indicator was used to
45
46 measure usage intention of social media for information search in travel planning and usage
47
48 intention of social media for knowledge sharing. The structural equation modeling literature
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50 consistently suggests the use of multiple item scales to capture the full theoretical meaning of
51
52 the underlying construct (Steenkamp & Baumgartner, 2000). Thus, future replication should
53
54 adopt multiple indicators. Third, our model contemplates an antecedent of knowledge sharing,
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3 as this psychological concept explains why people who trust others in SNS tend to share
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5 knowledge. However, this construct may act as a mediator, not as a direct predictor, if some
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7 additional external variables—such as gender, social class or attitudes—are considered. Yet,
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9 this issue was far beyond the current research setting, and thus should be addressed in the
10
11 future. Finally, while we collected the data in Spain, Spanish tourists' online behavior in SNS
12
13 may be different from, for example, their U.S. counterparts. However, this study did not take
14
15 into account any cultural factors that may have affected the results.

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18 Besides overcoming these limitations, the present research can be extended in several ways in
19
20 the future. It would be interesting to test the moderation of socioeconomic variables (such as
21
22 age, gender, occupation, etc.) and social media usage patterns (such as usage frequency,
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24 number of prior postings, etc.). In addition, future research should introduce other social
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26 media types, such as Twitter (as an SNS) and Booking (as a travel review site). Twitter
27
28 especially has been receiving much attention as a new tool of electronic word-of-mouth (see,
29
30 for example, Jin & Phua, 2014), thus it may be interesting to examine possible differences in
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32 knowledge sharing behavior. By the same token, it also may be interesting to examine not
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34 only positive but also negative knowledge sharing, regardless of the media type. For example,
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36 tourism operators and marketers may significantly benefit from a study examining negative
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38 knowledge sharing associated with service failures, dissatisfaction, or poor customer handling.
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Appendix A. Questionnaire items used in this study

Social media for information search (original score):

I use Facebook/TripAdvisor to search information for my travel planning.

Social media for knowledge sharing (original score):

I use Facebook/TripAdvisor after my travel for posting travel-related information.

Social interaction ties (Chiu et al., 2006):

I maintain close social relationships with some members in Facebook/TripAdvisor.

I spend a lot of time interacting with some members in Facebook/TripAdvisor.

I know some members in Facebook/TripAdvisor on a personal level.

I have frequent communication with some members in Facebook/TripAdvisor.

Trust (Chiu et al., 2006):

Members in Facebook/TripAdvisor will not take advantage of others even when the opportunity arises.

Members in Facebook/TripAdvisor will always keep the promises they make to one another.

Members in Facebook/TripAdvisor would not knowingly do anything to disrupt the conversation.

Members in Facebook/TripAdvisor behave in a consistent manner.

Members in Facebook/TripAdvisor are truthful in dealing with one another.

Shared vision (Chiu et al., 2006):

Members in Facebook/TripAdvisor share the vision of helping others solve their professional problems.

Members in Facebook/TripAdvisor share the same goal of learning from each other.

Members in Facebook/TripAdvisor share the same value of helping others.

Homophily (Brown et al., 2007):

Members in Facebook/TripAdvisor share similar characteristics.

Members in Facebook/TripAdvisor share similar interests.

Members in Facebook/TripAdvisor use similar communication patterns.

Members in Facebook/TripAdvisor seek similar information.

Note: Means, standard deviations, composite reliability, and average variance extracted for each construct are reported in Table 3.

Appendix B. Covariances and normality indicators

Constructs		Covariances	SE	z-value	p
Trust	<--> Social interaction ties	0.17	0.05	3.40	***
Shared vision	<--> Social interaction ties	0.23	0.06	4.03	***
Homophily	<--> Social interaction ties	0.73	0.08	8.67	***
Social interaction ties	<--> SM for information search	-0.27	0.06	-4.30	***
Social interaction ties	<--> SM for knowledge sharing	0.35	0.09	3.76	***
Shared vision	<--> Trust	0.58	0.06	9.04	***
Homophily	<--> Trust	0.40	0.06	6.56	***
Trust	<--> SM for information search	0.20	0.05	4.25	***
Trust	<--> SM for knowledge sharing	0.31	0.07	4.35	***
Homophily	<--> Shared vision	0.62	0.07	8.60	***
Shared vision	<--> SM for information search	0.48	0.06	7.91	***
Shared vision	<--> SM for knowledge sharing	0.72	0.09	8.11	***
Homophily	<--> SM for information search	0.17	0.07	2.50	.012
Homophily	<--> SM for knowledge sharing	0.73	0.11	6.88	***
SM for information search	<--> SM for knowledge sharing	0.85	0.10	8.95	***

Note: SM = social media, SE = standard error.

Assessment of normality

Variable	min	max	kurtosis	z-value
USO5	1.00	7.00	-0.60	-2.97
USO2	1.00	7.00	1.74	8.69
SIT4	1.00	7.00	0.33	1.65
SIT3	1.00	7.00	-0.20	-1.01
SIT2	1.00	7.00	-0.51	-2.54
SIT1	1.00	7.00	-0.49	-2.47
TRUST5	1.00	7.00	-0.20	-1.02
TRUST4	1.00	7.00	-0.45	-2.26
TRUST3	1.00	7.00	-0.65	-3.24
TRUST2	1.00	7.00	-0.35	-1.76
TRUST1	1.00	7.00	-0.61	-2.00
SHARED4	1.00	7.00	-0.25	-1.26
SHARED3	1.00	7.00	-0.40	-2.01
SHARED2	1.00	7.00	-0.22	-1.09
SHARED1	1.00	7.00	-0.19	-0.94
HOM4	1.00	7.00	-0.57	-2.85
HOM3	1.00	7.00	-0.61	-3.00
HOM2	1.00	7.00	-0.58	-2.88
HOM1	1.00	7.00	-0.72	-3.58

References

- Aune, R. K., & Kikuchi, T. (1993). Effects of language intensity similarity on perceptions of credibility, relational attributions, and persuasion. *Journal of Language and Social Psychology, 12*(3), 224–238.
- Ayeh, J. K., Au, N., & Law, R. (2013). ‘Do we believe in TripAdvisor?’ Examining credibility perceptions and online travelers’ attitude toward using user-generated content. *Journal of Travel Research, 52*(4), 437–452.
- Boley, B. B., Magnini, V. P., & Tuten, T. L. (2013). Social media picture posting and souvenir purchasing behavior: Some initial findings. *Tourism Management, 37*, 27–30.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York, NY: Greenwood Press.
- Bradach, J. L., & Eccles, R. G. (1989). Price, authority, and trust: From ideal types to plural forms. *Annual Review of Sociology, 15*(1), 97–118.
- Bronner, F., & de Hoog, R. (2011). Economizing behaviour during travel: Strategies and information sources used. *Journal of Vacation Marketing, 17*(3), 185–195.
- Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of Interactive Marketing, 21*(3), 2–20.
- Butt, R. S. (1992). *Structural holes*. Cambridge, MA: Harvard University Press.
- Campbell, C., Pitt, L. F., Parent, M., & Berthon, P. R. (2011). Understanding consumer conversations around ads in a Web 2.0 world. *Journal of Advertising, 40*(1), 87–102.
- Casanueva, C., Gallego, A., & Sancho, M. (2013). Network resources and social capital in airline alliance portfolios. *Tourism Management, 36*, 441–453.
- Chipkin, H. (2012, July 31). Consumer Trends 2012: Review websites—When making travel plans, most say review websites do play a role. *Travel Weekly*. Retrieved on August 1, 2014 from <http://www.travelweekly.com/Travel-News/Online-Travel/Consumer-Trends-2012-Review-websites/>
- Chiu, C. M., Hsu, M. H., & Wang, E. T. G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems, 42*(3), 1872–1888.
- Chow, W. S., & Chan, L. S. (2008). Social network, social trust and shared goals in organizational knowledge sharing. *Information & Management, 45*(7), 458–465.
- Chung, J. Y., & Buhalis, D. (2008). Information needs in online social networks. *Information Technology & Tourism, 10*(4), 267–281.
- Cochrane, K. (2011, January 24). Why TripAdvisor is getting a bad review. *The Guardian*. Retrieved on August 1, 2014 from <http://www.theguardian.com/travel/2011/jan/25/tripadvisor-duncan-bannatyne>
- Cohen, D., & Prusak, L. (2001). *In good company: How social capital makes organizations work*. Boston, MA: Harvard Business School Press.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*(1), S95–S120.
- Coleman, J. S. (1990). *Foundations of social theory*. Cambridge, MA: Harvard University Press.
- De Bruyn, A., & Lilien, G. L. (2008). A multi-stage model of word-of-mouth influence through viral marketing. *International Journal of Research in Marketing, 25*(3), 151–163.
- Dippelreiter, B., Grün, C., Pöttler, M., Seidel, I., & Berger, H. D. M. (2008). Online tourism communities on the path to Web 2.0: An evaluation. *Information Technology and Tourism, 10*(4), 329–353.

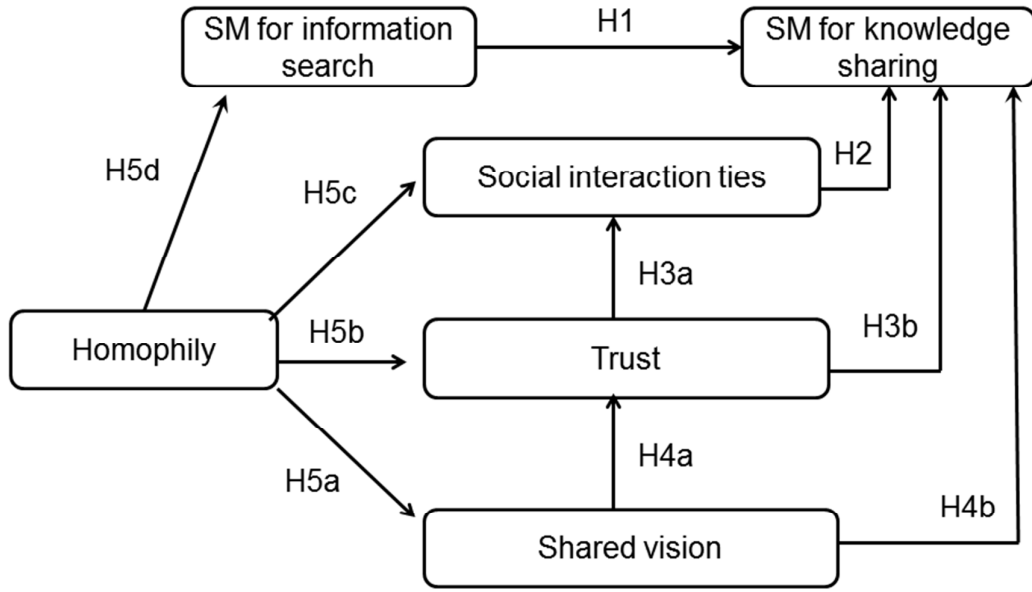
- 1
2
3 Dwyer, P. (2007). Measuring the value of electronic word of mouth and its impact in
4 consumer communities. *Journal of Interactive Marketing*, 21(2), 63–79.
- 5 Ellison, N.B., Steinfield, C., & Lampe, C. (2007). The benefits of Facebook “friends:” social
6 capital and college students’ use of online social network sites. *Journal of Computer-*
7 *Mediated Communication*, 12, 1143-1168.
- 8 Ernst & Young. (2013). *Global hospitality insights: Top thoughts for 2013*. Retrieved on
9 November 23, 2014 from [http://www.ey.com/GL/en/Industries/Real-Estate/Global-](http://www.ey.com/GL/en/Industries/Real-Estate/Global-Hospitality-Insights---Top-Thoughts-for-2013)
10 [Hospitality-Insights---Top-Thoughts-for-2013](http://www.ey.com/GL/en/Industries/Real-Estate/Global-Hospitality-Insights---Top-Thoughts-for-2013)
- 11 European Commission. (2013). *Online travel market*. Tourism business portal, Enterprise and
12 industry. Retrieved on November 23, 2014 from
13 [http://ec.europa.eu/enterprise/sectors/tourism/tourism-business-](http://ec.europa.eu/enterprise/sectors/tourism/tourism-business-portal/documents/business/clients/online-travel-market.pdf)
14 [portal/documents/business/clients/online-travel-market.pdf](http://ec.europa.eu/enterprise/sectors/tourism/tourism-business-portal/documents/business/clients/online-travel-market.pdf)
- 15 Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables
16 and measurement error: Algebra and statistics. *Journal of Marketing Research*, 18(1), 382–
17 388.
- 18 Fotis, J., Buhalis, D., & Rossides, N. (2012). Social media use and impact during the holiday
19 travel planning process. In M. Fuchs, F. Ricci, & L. Cantoni (Eds.), *Information and*
20 *communication technologies in tourism 2012* (pp. 13–24). Vienna, Austria: Springer-Verlag.
- 21 Gibson, H. J., Walker, M., Thapa, B., Kaplanidou, K., Geldenhuys, S., & Coetzee, W. (2014).
22 Psychic income and social capital among host nation residents: A pre–post analysis of the
23 2010 FIFA World Cup in South Africa. *Tourism Management*, 44, 113–122.
- 24 Gilly, M. C., Graham, J. L., Wolfenbarger, M. F., & Yale, L. J. (1998). A dyadic study of
25 interpersonal information search. *Journal of the Academy of Marketing Science*, 26(2), 83–
26 100.
- 27 Gil-Or, O. (2010). The potential of Facebook in creating commercial value for service
28 companies. *Advances in Management*, 3(2). Retrieved on November 23, 2014 from
29 [http://www.researchgate.net/publication/46560071_The_Potential_of_Face_Book_in_Creatin](http://www.researchgate.net/publication/46560071_The_Potential_of_Face_Book_in_Creating_Commercial_Value_for_Service_Companies)
30 [g_Commercial_Value_for_Service_Companies](http://www.researchgate.net/publication/46560071_The_Potential_of_Face_Book_in_Creating_Commercial_Value_for_Service_Companies)
- 31 Granovetter, M. (1985). Economic action and social structure: The problem of
32 embeddedness. *American Journal of Sociology*, 91(3), 481–510.
- 33 Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6),
34 1360–1380.
- 35 Gulati, R., Nohria, N., & Zaheer, A. (2000). Guest editors’ introduction to the special issue:
36 Strategic networks. *Strategic Management Journal*, 21(3), 199–201.
- 37 Gunawardena, C. N., & Zittle, F. J. (1997). Social presence as a predictor of satisfaction
38 within a computer-mediated conferencing environment. *American Journal of Distance*
39 *Education*, 11(3), 8–26.
- 40 Hair, J. F., Tatham, R. L., Anderson, R. E., & Black, W. (2006). *Multivariate data*
41 *analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- 42 Hung, K., Li, S. Y., & Tse, D. K. (2011). Interpersonal trust and platform credibility in a
43 Chinese multibrand online community. *Journal of Advertising*, 40(3), 99–112.
- 44 Hung, K., Xiao, H., & Yang, X. (2013). Why immigrants travel to their home places: Social
45 capital and acculturation perspective. *Tourism Management*, 36, 304–313.
- 46 Inkpen, A. C., & Tsang, E. W. (2005). Social capital, networks, and knowledge
47 transfer. *Academy of Management Review*, 30(1), 146–165.
- 48 Internet World Stats. (2012). Internet world stats—Usage and population statistics. Retrieved
49 on November 23, 2014 from <http://www.internetworldstats.com/>
- 50 Jap, S. D. (1999). Pie-expansion efforts: Collaboration processes in buyer-supplier
51 relationships. *Journal of Marketing Research*, 36(4), 461–475.
- 52
53
54
55
56
57
58
59
60

- 1
2
3 Jap, S. D., & Anderson, E. (2003). Safeguarding interorganizational performance and
4 continuity under ex post opportunism. *Management Science*, 49(12), 1684–1701.
- 5 Jarillo, J. C. (1988). On strategic networks. *Strategic Management Journal*, 9(1), 31–41.
- 6 Jin, S. A., & Phua, J. (2014). Following celebrities' tweets about brands: The impact of
7 Twitter-based electronic word-of-mouth on consumers' source credibility perception, buying
8 intention, and social identification with celebrities. *Journal of Advertising*, 43(2), 181–195.
- 9 Kim, J., & Kerstetter, D. L. (2016) Multisensory Processing Impacts on Destination Image
10 and Willingness to Visit. *International Journal of Tourism Research*, 18: 52–61.
11 doi: 10.1002/jtr.2032.
- 12 Kim, M.J., Lee, C.-K., & Bonn, M. (2016). The effect of social capital and altruism on
13 seniors' revisit intention to social network sites for tourism-related purposes. *Tourism
14 Management*, 53: 96-107.
- 15 Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New
16 York, NY: Guilford Press.
- 17 Koka, B. R., & Prescott, J. E. (2002). Strategic alliances as social capital: A multidimensional
18 view. *Strategic Management Journal*, 23(9), 795–816.
- 19 Lampe, C., Ellison, N., & Steinfield, C. (2006). A Face(book) in the crowd: Social searching
20 vs. social browsing. *Proceedings of the 2006 20th Anniversary Conference on Computer
21 Supported Cooperative Work* (pp. 167-170). New York: ACM Press.
- 22 Laumann, E. O. (1966). *Prestige and association in an urban community: An analysis of an
23 urban stratification system*. Indianapolis, IN: Bobbs-Merrill.
- 24 Lawrence, B., Fournier, S., & Brunel, F. (2013). When companies don't make the ad: A
25 multimethod inquiry into the differential effectiveness of consumer-generated advertising.
26 *Journal of Advertising*, 42(4), 292–307.
- 27 Lee, H., Reid, E., & Kim, W. G. (2014). Understanding knowledge sharing in online travel
28 communities: Antecedents and the moderating effects of interaction modes. *Journal of
29 Hospitality & Tourism Research*, 38(2), 222–242.
- 30 Leung, D., Law, R., van Hoof, H., & Buhalis, D. (2013). Social media in tourism and
31 hospitality: A literature review. *Journal of Travel & Tourism Marketing*, 30(1–2), 3–22.
- 32 Litvin, S. W., Goldsmith, R. E., & Pan, B. (2008). Electronic word-of-mouth in hospitality
33 and tourism management. *Tourism Management*, 29(3), 458–468.
- 34 Liu, J., Qu, H., Huang, D., Chen, G., Yue, X., Zhao, X., & Liang, Z. (2014). The role of social
35 capital in encouraging residents' pro-environmental behaviors in community-based
36 ecotourism. *Tourism Management*, 41, 190–201.
- 37 Mathwick, C., Wiertz, C., & de Ruyter, K. (2008). Social capital production in a virtual P3
38 community. *Journal of Consumer Research*, 34 (6), 832-849.
- 39 Munar, A. M., & Jacobsen, J. K. S. (2014). Motivations for sharing tourism experiences
40 through social media. *Tourism Management*, 43, 46–54.
- 41 Nahapiet, J., & Ghoshal, S. (1998). Social capital, intellectual capital, and the organizational
42 advantage. *Academy of Management Review*, 23(2), 242–266.
- 43 National Fraud Intelligence Bureau. (2013). *Avoiding payment fraud within the UK travel
44 industry—Risk factors: A case study to help eliminate credit card charge-backs*. National
45 Fraud Intelligence Bureau. Retrieved on August 1, 2014 from
46 [http://www.finetwork.co.uk/attachments/Master%20Edition%20-](http://www.finetwork.co.uk/attachments/Master%20Edition%20-%20Travel%20Fraud%20Case%20Study%20v%201%201.pdf)
47 [%20Travel%20Fraud%20Case%20Study%20v%201%201.pdf](http://www.finetwork.co.uk/attachments/Master%20Edition%20-%20Travel%20Fraud%20Case%20Study%20v%201%201.pdf)
- 48 Nie, N.H. (2001). Sociability, interpersonal relations, and the Internet: Reconciling conflicting
49 findings. *American Behavioral Scientist*, 45(3), 420-435.
- 50 Nusair, K., Bilgihan, A. & Okumus, F. (2013). The Role of Online Social Network Travel
51 Websites in Creating Social Interaction for Gen Y Travelers. *International Journal of Tourism
52 Research*, 15: 458–472. doi: 10.1002/jtr.1889.
- 53
54
55
56
57
58
59
60

- O'Reilly, T. (2007). What is Web 2.0: Design patterns and business models for the next generation of software. *Communications and Strategies*, 65(1), 17–37.
- Ouchi, W. G. (1980). Markets, bureaucracies, and clans. *Administrative Science Quarterly*, 25(1), 129–141.
- Pan, B., MacLaurin, T., & Crotts, J. C. (2007). Travel blogs and the implications for destination marketing. *Journal of Travel Research*, 46(1), 35–45.
- Papathanassis, A., & Knolle, F. (2011). Exploring the adoption and processing of online holiday reviews: A grounded theory approach. *Tourism Management*, 32(2), 215–224.
- Park, D. B., Lee, K. W., Choi, H. S., & Yoon, Y. (2012). Factors influencing social capital in rural tourism communities in South Korea. *Tourism Management*, 33(6), 1511–1520.
- Pearson, J. C. (1982, November). *The role of gender in source credibility*. Paper presented at the meeting of the Speech Communication Association, Louisville, KY.
- Putnam, R. (1993). The prosperous community: Social capital and public life. *The American Prospect*, 13(Spring), 35–42. Retrieved on August 11, 2014, from <http://www.prospect.org/print/vol/13>
- Qu, H., & Lee, H. (2011). Travelers' social identification and membership behaviors in online travel community. *Tourism Management*, 32(6), 1262–1270.
- Rogers, E. M. (1983). *Diffusion of innovations*. New York, NY: Free Press.
- San José-Cabezudo, R., & Camarero-Izquierdo, C. (2012). Determinants of opening-forwarding e-mail messages. *Journal of Advertising*, 41(2), 97–112.
- Shen, K. N., Yu, A. Y., & Khalifa, M. (2010). Knowledge contribution in virtual communities: Accounting for multiple dimensions of social presence through social identity. *Behaviour & Information Technology*, 29(4), 337–348.
- Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. London, UK: John Wiley.
- Sotiriadis, M. D., & van Zyl, C. (2013). Electronic word-of-mouth and online reviews in tourism services: The use of Twitter by tourists. *Electronic Commerce Research*, 13(1), 103–124.
- Steenkamp, J. B. E., & Baumgartner, H. (2000). On the use of structural equation models for marketing modeling. *International Journal of Research in Marketing*, 17(2), 195–202.
- Tnooz. (2013, January 23). Facebook: Travel is behind other sectors with social marketing, but some brands have nailed it. Retrieved on August 1, 2014 from <http://www.tnooz.com/article/facebook-travel-is-behind-other-sectors-with-social-marketing-but-some-brands-have-nailed-it/#sthash.Gt70L9Gt.ioCPz1z1.dpuf>
- Tourism Economics. (2013). *The impact of online content on European tourism*. Oxford, UK: Author. Retrieved on November 23, 2014 from: http://sete.gr/_fileuploads/entries/Online%20library/GR/131204_The%20Impact%20of%20Online%20Content%20on%20European%20Tourism.pdf
- Travel and Tour World. (2014, April 16). TripAdvisor touches mark of 100 million downloads for free app for iPhone and Android. Retrieved on November 23, 2014 from <http://www.travelandtourtworld.com/news/article/tripadvisor-touches-mark-100-million-downloads-free-app-iphone-android/>
- TripAdvisor. (2014). TripAdvisor is now the world's most popular travel app: The most downloaded travel app according to Distimo reaches 100 million downloads milestone [Press release]. Retrieved on November 23, 2014 from http://www.tripadvisor.com/PressCenter-i6704-c1-Press_Releases.html
- TripAdvisor (2015), 2015 Annual Report. Retrieved on June 12, 2016 from <http://ir.tripadvisor.com/secfiling.cfm?filingID=1564590-16-12862&CIK=1526520>
- Tsai, W., & Ghoshal, S. (1998). Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41(4), 464–476.

- 1
2
3 Villena, V. H., Revilla, E., & Choi, T. Y. (2011). The dark side of buyer–supplier
4 relationships: A social capital perspective. *Journal of Operations Management*, 29(6), 561–
5 576.
- 6 Vock, M.; van Dolen, W., & de Ruyter, K. (2013). Understanding willingness to pay for
7 social network sites. *Journal of Service Research*, 16(3), 311-325.
- 8 Wang, Y., & Fesenmaier, D. R. (2004). Towards understanding members' general
9 participation in and active contribution to an online travel community. *Tourism*
10 *Management*, 25(6), 709–722.
- 11 Wang, Y., Yu, Q., & Fesenmaier, D. R. (2002). Defining the virtual tourist community:
12 Implications for tourism marketing. *Tourism Management*, 23(4), 407–417.
- 13 Wang, Z., Walther, J. B., Pingree, S., & Hawkins, R. P. (2008). Health information,
14 credibility, homophily, and influence via the Internet: Web sites versus discussion
15 groups. *Health Communication*, 23(4), 358–368.
- 16 Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and
17 knowledge contribution in electronic networks of practice. *Management Information Systems*
18 *Quarterly*, 29(1), 35–57.
- 19 Wright, K. B. (2005). Researching Internet-based populations: Advantages and disadvantages
20 of online survey research, online questionnaire authoring software packages, and Web survey
21 services. *Journal of Computer-Mediated Communication*, 10(3), 00. doi: 10.1111/j.1083-
22 6101.2005.tb00259.x
- 23 Xiang, Z., & Gretzel, U. (2010). Role of social media in online travel information
24 search. *Tourism Management*, 31(2), 179–188.
- 25 Zhu, Y.Q., & Chen, H.G. (2015). Social media and human need satisfaction: Implications for
26 social media marketing. *Business Horizons*, 58(3), 335-345.
- 27
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Fig. 1. Research model.

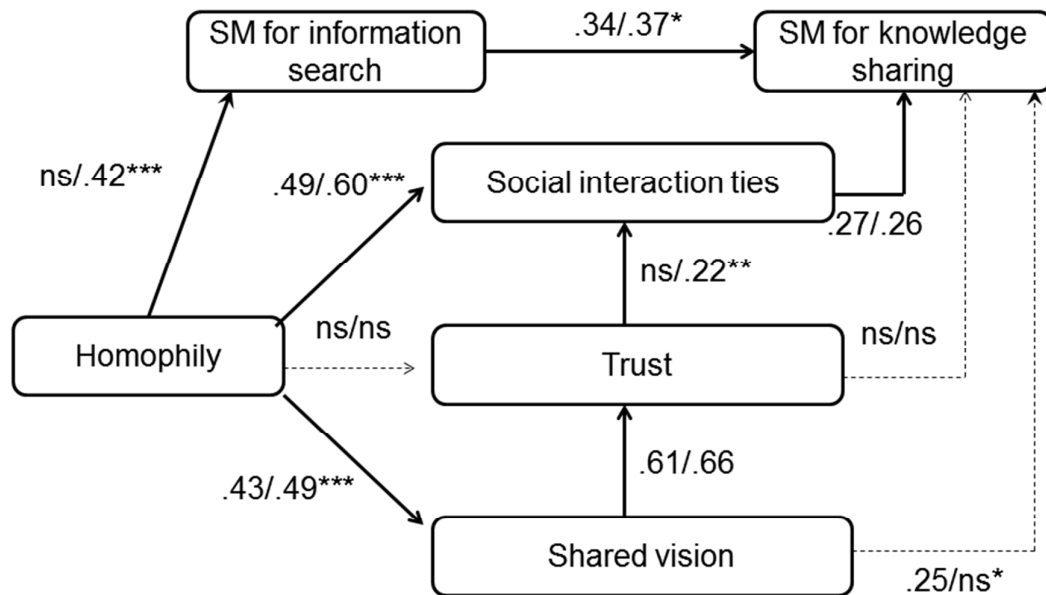


Note: SM = social media; H = hypothesis.

Peer Review

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Fig. 2. Multigroup analysis results.



Note: SM = social media. Based on individual estimation with the maximum likelihood method. Two standardized beta coefficients are juxtaposed for Facebook and TripAdvisor, respectively, by slash. Asterisk indicates statistical significance for multigroup analysis. * $p < .05$, ** $p < .01$, *** $p < .001$, ns = nonsignificant. For example, “.34/.37*” means the standardized beta coefficient of Facebook was .34 and that of TripAdvisor was .37 and the difference was statistically significant at $p < .05$. The dotted line indicates that one or both of the paths were statistically insignificant.

Table 1
Definitions of social capital.

Authors	Definitions	Context
Wasko and Faraj (2005)	“Resources embedded in a social structure that are accessed and/or mobilized in purposive action” (p. 38).	Knowledge contribution of one electronic network supporting a professional legal association.
Chiu, Hsu, and Wang (2006)	“The network of relationships possessed by an individual or a social network and the set of resources embedded within it” (p. 1873).	Knowledge sharing in virtual communities.
Dwyer (2007)	“The value of your social network added to your own inherent worth” (p. 79).	Information and social network created by electronic word-of-mouth.
San José-Cabezudo and Camarero-Izquierdo (2012)	“The sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit” (p. 99).	Opening and forwarding email messages.
Park, Lee, Choi, and Yoon (2012)	“Consists of three features: trust, reciprocity, and cooperation” (p. 1511).	Formation of rural tourism communities in South Korea.
Casanueva, Gallego, and Sancho (2013)	“A resource in the network of individual and organizational relations over time” (p. 442).	Airline alliance portfolios.
Hung, Xiao, and Yang (2013)	“An individual or collective social asset accumulated over time via social interactions” (p. 308).	Immigrants’ home traveling behavior.
Jin and Phua (2014)	“Resources created through people’s social relationships that can be harnessed to achieve positive social outcomes” (p. 182).	Twitter-based electronic word-of-mouth.
Gibson et al. (2014)	Conceptualized as a multidimensional construct consisting of five dimensions: “(1) Collective Action (i.e., community participation), (2) Trust and Safety (i.e., trustworthiness and helpfulness), (3) Social Connections (i.e., friends, family, and community support), (4) Tolerance of Diversity (i.e., fairness and respect of others), and (5) Value of Life (i.e., personal value in the community)” (p. 117).	Psychic income and social capital among South African residents prior to, and following, the 2010 FIFA World Cup.
Liu et al. (2014)	“Stronger relationships of trust, common rules, shared norms, reciprocity between neighbors, and endorsement of environmental behaviors within a community” (p. 191).	Pro-environmental behaviors in community-based ecotourism.

Source: Own elaboration.

Table 2
Confirmatory factor analysis results.

Constructs	Items	<i>Full sample</i>		<i>Facebook</i>		<i>TripAdvisor</i>	
		Standardized β	SE	Standardized β	SE	Standardized β	SE
Homophily	→ HOM1	.80		.81		.76	
Homophily	→ HOM2	.88	.03	.86	.04	.87	.04
Homophily	→ HOM3	.91	.03	.90	.04	.91	.05
Homophily	→ HOM4	.89	.03	.87	.05	.89	.05
Shared vision	→ SHARED1	.77		.80		.74	
Shared vision	→ SHARED2	.87	.03	.88	.04	.86	.05
Shared vision	→ SHARED3	.91	.03	.93	.04	.89	.05
Shared vision	→ SHARED4	.89	.03	.90	.04	.87	.05
Trust	→ TRUST1	.62		.70		.54	
Trust	→ TRUST2	.70	.05	.77	.05	.63	.08
Trust	→ TRUST3	.82	.06	.82	.07	.82	.11
Trust	→ TRUST4	.88	.06	.87	.06	.88	.11
Trust	→ TRUST5	.85	.06	.85	.06	.87	.10
Social interaction ties	→ SIT1	.84		.79		.72	
Social interaction ties	→ SIT2	.83	.02	.78	.04	.76	.03
Social interaction ties	→ SIT3	.96	.03	.88	.05	.98	.06
Social interaction ties	→ SIT4	.85	.03	.62	.05	.85	.06
Fit indexes		$\chi^2_{136} = 740.41$ CFI = .97, GFI = .94, RMSEA = .061		$\chi^2_{136} = 468.53$ CFI = .96, GFI = .94, RMSEA = .064		$\chi^2_{136} = 376.91$ CFI = .97, GFI = .94, RMSEA = .054	

Note: Based on the maximum likelihood method. CFI = composite fit index; GFI = good-of-fit index; RMSEA = root mean square error of approximation; SE = standard error.

Table 3
Reliability and discriminant validity.

Constructs	M	SD	CR	AVE	<i>Homophily</i>	<i>Shared vision</i>	<i>Trust</i>	<i>Social interaction ties</i>
Homophily	4.41	1.43	.93	.50	.71			
Shared vision	4.61	1.26	.92	.50	.46	.71		
Trust	4.37	1.23	.85	.51	.39	.69	.71	
Social interaction ties	3.77	1.94	.93	.51	.61	.20	.23	.71

Note: The analysis was performed with the maximum likelihood method. Diagonal elements in bold are the square root of the AVE between the constructs and their indicators. Off-diagonal elements are correlations between the constructs.

M = mean; SD = standard deviation; CR = composite reliability; AVE = average variance extracted.

Table 4
Structural model results.

Hypotheses	Paths		Standardized β	SE	<i>z</i> -value	<i>p</i>
H1:	SM for information search	→ SM for knowledge sharing	.36	.03	14.87	***
H2:	Social interaction ties	→ SM for knowledge sharing	.28	.03	1.63	***
H3a:	Trust	→ Social interaction ties	-.02	.05	-.60	.55
H3b:	Trust	→ SM for knowledge sharing	-.05	.07	-1.24	.21
H4a:	Shared vision	→ Trust	.65	.03	16.13	***
H4b:	Shared vision	→ SM for knowledge sharing	.22	.06	5.75	***
H5a:	Homophily	→ Shared vision	.46	.03	14.54	***
H5b:	Homophily	→ Trust	.10	.02	3.38	***
H5c:	Homophily	→ Social interaction ties	.61	.05	18.20	***
H5d:	Homophily	→ SM for information search	.12	.04	3.85	***

Note: Based on a full sample with the maximum likelihood method. SE = standard error.

Table 5
Multigroup analysis results.

		<i>Facebook</i>																		
		<i>H1</i>		<i>H2</i>		<i>H3a</i>		<i>H3b</i>		<i>H4a</i>		<i>H4b</i>		<i>H5a</i>		<i>H5b</i>		<i>H5c</i>		<i>H5d</i>
TripAdvisor	H1	2.50	*	3.08		3.22		5.02		-1.24		3.29		-1.60		6.16		-2.74		-1.73
	H2	-1.34		-0.11		0.05		2.62		-4.50		0.70		-4.91		2.41		-5.66		-4.62
	H3a	-5.43		-3.63		-3.44	**	-0.13		-7.99		-2.24		-8.44		-1.70		-8.81		-7.76
	H3b	-4.50		-3.55		-3.43		-1.06		-6.36		-2.66		-6.61		-2.23		-7.15		-6.47
	H4a	2.53		3.11		3.24		5.04		-1.20		3.31		-1.57		6.18		-2.71		-1.70
	H4b	1.20		1.83		1.94		3.75		-1.22		2.25	*	-1.46		3.68		-2.33		-1.61
	H5a	0.40		1.48		1.65		3.96		-3.63		2.01		-4.13	***	4.92		-4.99		-3.80
	H5b	-7.08		-3.78		-3.50		0.53		-9.84		-1.90		-10.61		-1.23		-10.34		-8.91
	H5c	1.45		2.25		2.39		4.44		-2.39		2.61		-2.80		5.44		-3.82	***	-2.75
	H5d	-4.83		-2.57		-2.34		1.11		-7.87		-1.13		-8.47		-0.03		-8.69		-7.43

Note: z-values for the differences between parameters. Bold numbers indicate statistically significant scores.
Cutoff (2-tailed): * $p < .05$ ($z = \pm 1.96$); ** $p < .01$ ($z = \pm 2.58$); $p < .001$ ($z = \pm 3.31$).