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Published

2020

Journal Title

Journal of Sustainable Tourism

Version

Accepted Manuscript (AM)

DOI

[10.1080/09669582.2020.1845710](https://doi.org/10.1080/09669582.2020.1845710)

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Effects of Social Media on Residents' Attitudes to Tourism:
Conceptual Framework and Research Propositions

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Abstract

The pervasive influence of social media on our lives provides new opportunities to study residents' attitudes to tourism. Even though it is now common for residents to express their opinions and read about tourism development on social media, the consequences of this for their attitudes remain to be understood. This article uses the analytical perspectives of the information society and draws from the elaboration likelihood model, the influence of presumed influence model, and the social exchange theory to develop a causal-chain framework that considers the influence of social media on residents' attitudes to tourism. Twenty-five research propositions emanate from the conceptual framework. The framework examines the direct as well as indirect influence of social media tourism messages on residents' attitudes. It also recognizes users as the receivers and expressers of pro- as well as anti-tourism messages on social media. Our framework is theoretically inclusive, providing a reference to scholars and stimulating new ideas for future research on social media and residents' attitudes. To the best of our knowledge, this is the first study that provides the necessary theoretical foundations and a conceptual framework to study residents' attitudes to tourism in an information era intensified by the growth of social media.

Keywords: social media, information society, information processing, sustainable tourism; residents' attitudes; conceptual framework

1. Introduction

Academic discourses on sustainable tourism consider destination communities as the focal point for tourism development and emphasize the importance of addressing their needs and concerns for the success of the industry (Hadinejad, Moyle, Scott, Kralj, & Nunkoo, 2019; Nunkoo & Gursoy, 2012; Nunkoo & Ramkissoon, 2011). Residents are viewed as one of the most important stakeholders whose endorsement is a prerequisite for the sustainable development of the tourism industry (Ribeiro, Pinto, Silva, & Woosnam, 2017; Wassler, Nguyen, & Schuckert, 2019). Thus, research on residents' attitudes has proliferated over the past decades, which utilized a variety of theories with various disciplinary roots (Hadinejad et al., 2019; Nunkoo, Smith, & Ramkissoon, 2013; Sharpley, 2014). These theories include social exchange theory (SET, Gursoy, Nunkoo, & Wei, 2019; Maruyama, Keith, & Woosnam, 2019; Nunkoo & Gursoy, 2012; Nunkoo & So, 2016; Ribeiro et al., 2017), the social representation theory (Wassler, Nguyen, & Schuckert, 2019; Lu, Mihalik, Heere, Meng & Fairchild, 2019; Suess & Mody, 2016), the theory of planned behavior (TPB) and theory of reasoned action (TRA, Lepp, 2007; MacKay & Campbell, 2004; Oh & Hsu, 2001), and the tourist area life cycle (Diedrich & García-Buades, 2009; Hunt, & Stronza, 2014; Lundberg, 2015).

Studies that utilized these theories have mainly assumed that residents form their attitudes utilizing the information and knowledge they gain through various sources. However, the source of such information and knowledge and the cognitive mechanism through which they influence attitudes have not received much attention. Research suggests clearly that an increasing number of individuals rely heavily on social media platforms for gathering information and gaining knowledge about various issues. Furthermore, information disseminated through social media channels is found to have a notable influence on public engagement with various socio-

economic, political, and environmental issues (Hansen, 2019), including tourism (Navío-Marco, Ruiz-Gómez, & Sevilla-Sevilla, 2018). Thus, the pervasive influence of social media on our lives provides new opportunities to study residents' attitudes to tourism. The rise of social media as a new cultural and social phenomenon of the information society has considerably enhanced people's ability to engage with public affairs and issues, which help them shape their opinions and behaviors, and enabled them to coordinate massive and rapid responses towards those affairs and issues (Baum, & Potter, 2019; Hamid, Ijab, Sulaiman, Anwar, & Norman, 2017; Joshi et al., 2019; McGregor, 2019; Valenzuela, 2013; Valeriani & Vaccari, 2016). For example, using various examples, Gretzel (2017) discusses how social-media has facilitated tourism activism.

Recently, some studies have investigated the influence of media on residents attitudes to tourism, but those studies have focused on traditional news media such as newspapers, that generally function within the framework of the agenda-setting theory (Hao, Fu, Hsu, Li, & Chen, 2019; Lu, Mihalik, Heere, Meng, & Fairchild, 2019). Whereas, social media users co-create and curate news for their social networks, attribute their own meanings to information, and express them in a naturalistic manner to others (Balkin, 2004; Bolat, 2019). Consequently, compared to traditional media, social media works in different ways to influence public opinion. Much research on social media in tourism takes a marketing orientation, focusing largely on its influence on travelers' decision-making (e.g. Dolan, Seo, & Kemper, 2019; Giglio, Bertacchini, Bilotta, & Pantano, 2019; Jansson, 2018; Liu, Wu, & Li, 2019). The consequences of social media for sustainable tourism have also been discussed in some studies, but their emphasis are on tourists' behaviors, with little considerations given to destination communities (Dickinson et al., 2017; Gössling, 2017; Han, McCabe, Wang, & Chong, 2017).

Receipt and expression of messages and news on social media has concomitant implications for users' attitudes and behaviors (Yoo et al., 2016). However, "there is a dearth of studies that specifically focus on the use of social media by residents" (Uchinaka, Yoganathan, and Osburg 2019, p. 138). Even though it is now very common for residents to express their opinions and read about tourism development on social media platforms (Becken, Alaei, Chen, Connolly, & Stantic, 2017; Becken, Alaei, & Wang, 2019; Ketter, & Avraham, 2012; Postma, & Schmuecker, 2017), the consequences of this for residents' attitudes to tourism remain to be understood, leaving a major gap in the existing literature. Considering the possible effects of social media on residents' attitudes and behaviors toward tourism, knowledge advancement in this field requires scholars to push the boundaries of existing research by delving into new theoretical perspectives that provide the appropriate constructs, domain, and set of relationships and make accurate predictions. In response to the literature gaps, this article draws from the analytical perspectives of the information society and uses as theoretical bases the elaboration likelihood model (ELM, Petty & Cacioppo, 1986; Sussman & Siegal, 2003), the influence of presumed influence model (IPIM, Gunther & Storey, 2003), and the SET (Ap, 1992) to develop a causal-chain framework that explains the cognitive processes through which information on social media influences residents' attitudes to tourism and their resulting behavioral consequences.

2. Residents' Attitudes to Tourism Impacts

Residents' attitudes to the positive and negative impacts of tourism is as important as the actual impacts of tourism (McGehee & Andereck, 2004). On the positive side, tourism improves the local economies, creates business, investment and employment opportunities, provides additional income for the government, improves the local infrastructure, enhances the image of a place, provide recreational opportunities, develops the cultural identity, and valorizes local

traditions (Woosnam, Draper, Jiang, Aleshinloye, & Erul, 2018; Gursoy & Rutherford, 2004; Nunkoo & Gursoy, 2012; Nunkoo & Ramkissoon, 2011; Nunkoo & Smith, 2013; Ribeiro, Pinto, Silva, & Woosnam, 2017). The adverse consequences of tourism are also well documented (Nunkoo, Smith, & Ramkissoon, 2013; Nunkoo & Ramkissoon, 2010, 2011; Prayag, Hosany, Nunkoo & Alders, 2013). Tourism destroys the occupational identity of local people, increases costs of living, harms the natural environment and local culture, and contributes to traffic congestion and pollution (Gursoy & Rutherford, 2004; Nunkoo & Gursoy, 2017; Nunkoo, Gursoy, & Juwaheer, 2010; Nunkoo & Ramkissoon, 2011, 2012; Woosnam, Draper, Jiang, Aleshinloye, & Erul, 2018).

2.1 Residents' Attitudes in an Online Information Society

The information society provides a broad analytical perspective to study the influence of social media on residents' reactions to tourism in an era where the creation, manipulation, and distribution of information is a significant socio-economic and political activity. Emerged in the 1970's and throughout the 1980's, the information society is characterized by a shift in the economic model of production from an industrial society to an information society and social transformation, driven by information and communication technologies and the availability of information (Bell, 2004; Martin, 1995; Webster, 2006). Rapid advancement of information and communication technologies during the last decade has resulted in the formation of an information society which has systematically transformed the socio-economic and political texture of communities. Despite contentions, Martin's (1995) definition is the probably the most appropriate, as it conceptualizes the information society away from its technological determinism, by considering its socio-economic and political consequences. According to Martin (1995), an information society is

“...a society in which the quality of life, as well as prospects for social change and economic development, depend increasingly upon information and its exploitation. In such a society, living standards, patterns of work and leisure, the education system and the market place are all influenced markedly by advances in information and knowledge. This is evidenced by the increasing array of information-intensive products and services, communicated through a wide range of media, many electronic in nature” (p. 3).

In contemporary times, the information society is predominantly hosted online, with social media platforms occupying a dominant place. Social media are interactive and computer-mediated technologies that enable the creation and exchange of user generated contents. They include, but are not limited to social networking sites such as Facebook, micro-blogging services such as Twitter, and video and picture sharing sites such as YouTube and Instagram (Kaplan & Haenlein, 2010). Social media usage is the most important online activity, with an anticipated increase in users from 2.65 billion in 2018 to 3.1 billion in 2021. Globally, the social network penetration currently stands as 45%, while North America and East Asia have a penetration rate as high as 70% (Clement, 2019).

Social media facilitates the sharing of user-generated contents, allowing for the democratization of information (Kaplan & Haenlein, 2010; Lund, Cohen, & Scarles, 2018) and making the free expressions of ones opinions at the forefront of policy issues and discourses (Balkin, 2004). Digital platforms such as social media shifts power dynamics in social movements, by allowing marginalized and aggrieved groups to connect together and engage in collective actions in pursuing change (Cullinane, Donaghey, Dundon, Hickland, & Dobbins, 2014; Leong, Pan, Bahri, & Fauzi, 2019; Leong, Pan, Ractham, & Kaewkitipong, 2015). In this way, social media fosters a ‘spiral of empowerment’ by breaking the ‘spiral of silence’ among the public (Lee & Chun, 2016). Although there are some evidences of organized manipulation

campaigns on social media by certain groups and individuals who frame public discourses - referred to as 'cyber troops' (Bradshaw & Howard, 2018), social media, if properly utilized and managed, fosters freedom of speech by allowing the ordinary citizens, not just political, social, and economic elites, to participate in the dissemination of ideas. Participation here refers to the creation, growth, and spread of ideas, news and opinions of tourism development by the public, which promote a democratic culture about individual liberty that can foster collective self-governance of tourism development (Balkin, 2004; Black, Welsler, Cosley, & DeGroot, 2011; Shirky, 2011). It is not surprising therefore, that social media platforms have become established spheres for the formation of public opinions (Dahlberg 2001; McGregor, 2019).

Social media is now an important source of news for the public (Bergström & Jervelycke Belfrage 2018; Ku et al., 2019; Pentina & Tarafdar, 2014). It has altered the general public's role from passive recipients to active users who take part in the production and dissemination of news (Choi, 2016) - what Burns (2008) refers to as bottom-up news 'produsage'. Social media provides interactive platforms that go beyond geographical and economic boundaries and the ability of users to collaboratively create and curate news, offer transparent and a socially negotiated information characterized by 'multi-perspectivity' (Ku et al., 2019; Pentina & Tarafdar, 2014). Compared to traditional media, social media exposes users to unlimited and diverse types of information, potentially promoting cognitive variety and diversity and facilitate sense-making (Pentina & Tarafdar, 2014). While searching for news on social media can be deliberate, incidental consumption of news is also very common (Boczkowski, Mitchelstein, & Matassi, 2019) and provide online users information they would otherwise not have received (Bergström & Jervelycke Belfrage, 2018).

At the same time, fake news, also known as junk news, deliberately created to mislead the public is also prevalent on social media platforms (Waldrop, 2017) - what Hills (2019) refers to as the 'dark side' of the information society. Fake information can relate to news materials such as those seeking to undermine the contributions of tourism to environmental degradation or climate change on one hand, or exaggerate the adverse socio-economic consequences of the industry, on the other. For example, it is common for tourism operators to engage in greenwashing by using online marketing deceptively to promote their products and services as sustainable, despite their adverse socio-economic and environmental consequences (Rahman, Park, & Chi, 2015; Smith & Font, 2014). Certainly, most of the contents on social media are not related to public issues such as tourism development, just as most of the contents portrayed on television are not news. However, as social media becomes more pervasive in our daily life, available contents are expected to diversify as well (Valenzuela, 2013), with implications for tourism (Fedeli, 2019).

Social media also has implications for the process of public knowledge generation of tourism and consequently, for the contemporary elites who live by this knowledge (Bharati, Zhang, & Chaudhury, 2015; Robins and Webster, 1999). Lévy (1997) describes the cyberspace as a new knowledge space, distinguished by its open, fluid, and dynamic qualities in contrast to an older knowledge space characterized by linearity, hierarchy, and rigidity of structures. In the new knowledge space, Lévy argues, "communities, discover and construct their own objectives, and come to know themselves as intelligent collectives" (Lévy, 1997, p.197). Social media makes it possible for users to share knowledge, increasing collective intelligence among human groups and providing the basis for a social transformation, if not a social revolution (Lévy, 1997). For local communities, public knowledge of tourism is a source of empowerment and allows them to

distinguish between the different components of tourism and to understand how development is organized and managed (Nunkoo, 2015). Collective intelligence, however, may cause societal conflicts between professionals and the general population (Bell, 2004) over public goods and use of community resources for tourism purposes for example (Alipour & Arefipour, 2019; Rigall-I-Torrent, & Fluvià, 2011), which can significantly influence the formation process of residents' attitudes and behaviors toward tourism.

While on the one hand social media promotes public understanding of tourism, on the other, it (re)shapes meanings and societal conventions about tourism development, both influencing how residents (de)construct the tourism phenomenon. In the process of expressing and disseminating their opinions, social media users create meanings that in turn help constitute them as persons and the communities and sub-communities they belong to (Balkin, 2004; Bolat, 2019). Participation leads to the creation of new meanings out of old ones, and when individuals repeat messages and opinions of others, while contributing through comments, their reiteration often carries a different meaning or context. Thus, social media users re-shape meanings and cultural conventions about things (Balkin, 2004), which may alter public understanding of (sustainable) tourism, with consequences for the ways in which residents' perceive tourism development.

2.2 Tourism Discourses on Social Media

Social media platforms have become important spaces where public discourses about community issues are generated and circulated (Kou, Kow, Gui, & Cheng, 2017). They play an important role in communicating and building residents' perceptions of complex issues such as sustainable tourism and improving their understanding of the directions of public discourses.

Therefore, growing public engagement with social media, along with the demise of traditional media, makes it significant and important to examine its influence on residents' reactions to tourism development. Residents' engagement with social media can come in various forms such as the creation, reading, watching, or sharing of information, opinions, videos or pictures about tourism development over social networks. Social media messages are expressed in a naturalistic manner and are displayed to all users, creating the opportunities for interactions with other users (Mehmet & Simmons, 2016). As Shakeela and Weaver (2012) argue, "technology mediates the resident/tourism encounter and can amplify the voice of all stakeholders" (p. 1342).

There is increasing evidence that residents' use social media to express their opinions about tourism. Jabreel, Moreno and Huertas (2017) analyzed 3000 tweets by local residents in 10 European tourism destinations. While residents made mostly positive comments about tourism development in their city, opinions varied across destinations, with some cities receiving more negative tweets from residents than others. Becken, Alaei and Wang's (2019) study on the uses of tweets to assess destination sentiment found residents as active tweeters whose opinions on the destination evolved over time. Residents tweeted positively in July and August, which the researchers attributed to increased local pride as a result of the Gold Coast Marathon and lower visitation levels during these months. However, their sentiments turned negative over time as the number of visitors increased. Using comments posted on social media by residents, Shakeela and Weaver (2012) constructed an emotional landscape of their reactions toward a video of a Maldivian service sabotage incident. The study retrieved more than 900 commentaries posted by local

residents on social media and classified them as direct reactions (visceral reactions, reflective fight responses, and sentiments) as well as indirect reactions, through cognitive interpretation.

Other studies provide similar evidence of residents' reactions to tourism development on social media (Becken, Alaei, Chen, Connolly, & Stantic, 2017; Kirilenko & Stepchenkova, 2017; Serna, Gerrikagoitia, Bernabe, & Ruiz, 2017). For example, when the Maldivian's tourism authority launched a twitter campaign (#SunnySideofLife) to promote the destination, the tweet was picked-up by local residents to raise awareness of political issues and human right issues at the destination. The hastag was trending on twitter not only because of the positive tweets, but also because of negative tweets about the destination (Siddique, 2012). In other cases, social media applications dedicated specifically to the discussions of tourism development issues have been created (Table 1). Some of them are related to tourism issues in specific destinations such as Mauritius, Spain, Greece, and Portugal, others are more global in their orientation.

INSERT TABLE 1 HERE

3. Theoretical Foundation

3.1 Elaboration Likelihood Model

The ELM (Petty & Cacioppo, 1986) has theoretically informed much research on the influence of social media messages on users' attitudes and behaviors (Manca & Fornara, 2019; Zhu, Chang, & Luo, 2016). The ELM posits that external information induces attitude change by introducing people with new possibilities, causing them to reexamine prior beliefs and judgments, potentially changing their extant behaviors. As a dual process model, the ELM suggests that attitudes and consequent behavioral changes occur via two routes of persuasion: the central route and the peripheral route, which can be considered as opposing sides of a continuum

(Petty & Cacioppo, 1986). The two routes through which attitudinal outcomes are reached differ in at least three distinct ways (Bhattacharjee & Sanford, 2006). First, while the central route processes message-related arguments, the peripheral route processes cues. Second, the central route involves a higher cognitive effort than the peripheral route, requiring the individual to think critically about, carefully examine and scrutinize closely the information. Third, the central route leads to more enduring and stable attitudinal and behavioral changes than the peripheral route (Bhattacharjee & Sanford, 2006).

According to the central route of persuasion, the quality of argument in personally relevant messages has a significant influence on attitude. Petty and Cacioppo (1981, pp. 264-5) conceptualize argument quality as the audience's subjective perception of the arguments in the persuasive message as strong and cogent on the one hand, versus weak and specious on the other. In a resident attitudes context, argument quality may depend on the extent to which social media messages contain relevant scientific information and evidence such as statistics, pictures, and data about environmental and socio-economic conditions that can persuade receivers about the positive/negative impacts of tourism development. When persuasive messages have a low relevance to users, they rely on peripheral cues, which are informational indicators use to assess content other than the content itself (Petty & Cacioppo, 1986). Such cues relate to source credibility, liking for the communicator, and consensus heuristic. For example, social media messages posted by a tourism scientist/expert or a community leader may be considered more credible and persuasive than those posted by non-experts or the common person. Likewise, tourism-related information on which a consensus has been reached among social media users will be more persuasive compared to those where disagreements abound.

The ELM however, does not suggest that the two routes to persuasion lead to different attitudinal and behavioral outcomes. For example, two individuals may form the same attitudes toward tourism development, but their attitude formation may be the result of two entirely different influence routes (argument-based or cue-based). Support for the two routes of persuasion is provided by various studies (Chang, Lu, & Lin, 2020; Shi, Hu, Lai, & Chen, 2018; Wang, Fan, Bae, 2019). For example, in their study on transport behavior, Manca et al. (2019) found that attitude change in individuals concerned with sustainability were influenced by the quality of arguments on the need for travel change, while for those less concerned about sustainability issues, attitudes were influenced by messages presented by an expert source. Tourism information posted on social media usually contains both positive and negative elements about development impacts (Jabreel et al., 2017). These messages are processed by users via the central or the peripheral routes and depending on their contents and personal relevance, they will influence users' attitudes toward the positive and negative impacts of tourism. Thus, the following propositions are developed:

Proposition 1: Argument quality of personally relevant messages, representing the central route processing, is associated with (a) positive attitudes toward tourism and (b) negative attitudes toward tourism.

Proposition 2: Peripheral cues such as source credibility, liking for the communicator, and consensus heuristic, representing the peripheral route processing, are associated with (a) positive attitudes toward tourism and (b) negative attitudes toward tourism.

3.2 Influence of Presumed Influence Model

While it is true that users change their attitudes and behaviors based on their exposure to personally relevant media messages, theoretical developments over the past two decades suggest that attitude and behavior changes also occurs because of reactions to their anticipation of the influence of a message on others (Gunther & Storey, 2003). This suggests that mass media also

exerts indirect and powerful influences on people's attitude (Gunter & Storey, 2003). The construction of messages on social media requires cognitive efforts as users not only consider what they wish to express, but also the way in which such information is perceived by others (Eveland, 2004). After a user has expressed a message on social media, the perceptions of its meaning may be altered through an awareness that other users will read it and comment on it - a process called reasoning, which refers to mental elaboration or collective consideration (Shah et al., 2007).

To this end, drawing on Davison's (1983) notion of third-party effect, Gunter and Storey (2003) developed the IPIM, hypothesizing that individuals estimate the influence of any communicative action on others and as a result, they change their attitudes and behaviors. The IPIM explains attitude change via three stages: first, our exposure to information is the basis on which we make inferences about others exposure to the same content (presumed exposure); second, the presumed exposure of others to information leads to the perception that the content will influence others (presumed influence); and third, the presumed influence on others leads to an alignment of our own attitude to the attitude of others (influence of presumed influence, Gunter and Storey, 2003). The IPIM has been tested empirically across a range of social media context (e.g. Cho, Shen, & Peng, 2020; Yoo, Yang, & Cho, 2016).

Tourism news content on social media are both anti-tourism and pro-tourism (Gretzel, 2017). For example, #boycotthawaii, which was first spread by supporters' of Donald Trump, was used by local residents to express anti-tourism attitudes to discourage tourists from visiting Hawaii. Anti-tourism movements on social media have also emerged in Europe (e.g. #touristgohome) and were propelled by the use of Facebook and Twitter to generate the interest of mainstream media

(Gretzel, 2017). Social media has also expanded the news users' role from passive recipients to active participants in the creation and dissemination of news. Users not only receive messages - referred to as 'news internalizing', but also express their opinions on social media - referred to as 'news externalizing' (Choi, 2016). Therefore, it is important that the IPIM distinguishes between the expression and reception of anti-tourism and pro-tourism messages on social media.

In line with the first stage of the IPIM, the pervasive media influence inference suggests that when users pay attention to a content, they presume that it has a broad reach, and others also pay attention to the same content (Gunther, 1998). As Eveland and McLeod (1999) argue, individuals are naïve social scientists who create theories about media effects on others. Studies on the IPIM provide support for the presumed exposure inference (Stage 1). Ho et al. (2020) showed that public's attention to media messages about nano-enabled food was positively associated with the presumption that others attend to the same messages. Cho et al. (2020) also established a relationship between social media view numbers and presumed exposure of others. Yoo et al. (2016) distinguished between expression and reception of anti-smoking and pro-smoking social media messages and established a significant relationship between respondents' own media exposure and others exposure to similar messages. Therefore, one would expect that the reception and expression of anti-tourism and pro-tourism social media messages will influence the presumption of others' attention to the same messages. Thus:

Proposition 3a: Expression of anti-tourism messages is associated with perceived peer expression of anti-tourism tourism messages.

Proposition 3b: Reception of anti-tourism messages is associated with perceived peer reception of anti-tourism messages.

Proposition 3c: Expression of pro-tourism messages is associated with perceived peer expression of pro-tourism messages.

Proposition 3d: Reception of pro-tourism messages is associated with perceived peer reception of pro-tourism messages.

The second stage of the IPIM relates to presumed influence, which describes people responses to their own perceptions of social norms regarding tourism development. Social norms play a key role in the IPIM (Yoo et al., 2016). Users' perceived influence of media messages on others determines their perceived social norms, as social messages are considered to reflect reality (Eveland & Glynn, 2008). Users consider the media to fulfil an informational role by educating others on the social approval of a certain behavior (Paluck, 2009). Thus, users adjust their perceived social norms according to how they believe social media messages influence others. The relationship between perceived media influence on others and perceived norms (presumed influence) has been established in a variety of settings (e.g. Hong & Kim, 2019; Yang & Zhao, 2018). Some studies distinguished conceptually between the peer expression and reception of positive and negative social media messages and responses to those messages, and found them to have different empirical associations with perceived peer norms (Yoo et al., 2016). Thus:

Proposition 4: (a) Perceived peer expression of anti-tourism messages, (b) perceived peer reception of anti-tourism messages, (c) perceived peer expression of pro-tourism messages, and (d) perceived peer reception of pro-tourism messages are associated with perceived peer norms toward tourism development.

The third stage of the IPIM goes beyond simple perceived influence by examining changes in attitudes and behaviors that result from such perception, a process referred to as the influence of presumed influence. The IPIM suggests that users develop and change their attitude and behaviors based on considerations of normative standards and judgments about what others think (Gunter & Storey, 2003). Social norms are "collective awareness about the preferred, appropriate

behaviors among a certain group of people” (Chung & Rimal, 2016, p. 3). Normative influence on attitude and behavior is explained by social conformity, which refers to an individual’s willingness to change his own attitudes and behaviors to comply with social norms (Hong & Kim, 2019). Social learning theory posits that individuals diligently monitor their environment to understand the prevalence and acceptability of a certain attitude and behavior (Bandura, 1986). Individuals perceive media representation as a reflection of social boundaries and the (un)acceptability of an idea. Hence, social media users may consider peer expression and reception of tourism messages as the opinions held by other in a community, which shape their perceived norms toward tourism. Studies using the IPIM to assess media influences report an association between perceived peer norms and attitudes and behaviors across a range of context (Ho, Goh, & Leung, 2020; Hong & Kim, 2019; Yoo et al., 2016). In tourism, the influence of normative beliefs on attitudes and behaviors is also well acknowledged (e.g. Kim, & Hwang, 2020; Meng, Chua, Ryu, & Han, 2020). Hence:

Proposition 5: Perceived peer norms about tourism is associated with (a) attitudes to the positive impacts of tourism, (b) attitudes to the negative impacts of tourism, and (c) pro-tourism behavior.

3.2.1 Direct and Indirect Effects of Exposure to Social Media

Studies using the IPIM have investigated the direct influence of users’ exposure to media on their behaviors across a range of settings. For example, Lioa, Ho, and Yang (2015) validated a relationship between respondents’ attention to pro-environmental messages in various media outlets and their pro-environmental behavior. Yoo et al. (2016) empirically demonstrated that while the expression and reception anti-smoking messages on social media did not influence smoking intention, they established an association between the expression of pro-smoking messages on intention. Although not based on the IPIM, some tourism studies confirm the effect

of media news on residents' attitudes. For example, Lu et al. (2019) and Ritchie, Shipway, and Chien (2010) showed that media messages influence residents' support for the Olympic Games.

Thus, the following propositions are developed:

Proposition 6: (a) Expression of anti-tourism messages, (b) reception of anti-tourism messages, (c) expression of pro-tourism messages, and (d) reception of pro-tourism messages are associated with pro-tourism behaviors.

The indirect media effects on behavior is a central tenet of the IPIM (Gunter & Storey, 2003). However, such indirect effects does not imply that the direct link between media exposure and behavior is inconsequential, but rather, the IPIM suggests that the indirect media influences have important theoretical and practical implications (Gunther, Bolt, Borzekowski, Liebhart, & Dillard, 2006). The indirect effect of media exposure on pro-tourism behavior is implied in our conceptual framework – an indirect effect via presumed influence on others. The IPIM links media exposure to behavioral reactions through cognitive pathways, however, identifying the mediating variables is the most challenging in the application of the model (Gunther & Storey, 2003; Gunther et al., 2006). Research has identified perceived norms as an important mediating variable between media exposure and behavior. Perceived norms exert powerful influences on individuals, while at the same time, the literature on communication suggests that norms are influenced by exposure to mass media (Gunther et al., 2006). Gunther et al. (2006) found that exposure to pro- and anti-smoking messages indirectly influenced smoking intent through their effects on perceived norms. Yang and Zhao's (2017) study reported that the relationship between social media exposure and binge drinking intention is mediated by descriptive norms. Perceived norms also played a mediating role in the relationship between media attention and pro-environmental behavior in Liao, Ho, and Yang's (2015) study. Therefore, we would expect

that exposure to tourism messages on social media will influence pro-tourism behavior via perceived norms about tourism development. Hence:

Proposition 7: The relationships between (a) expression of anti-tourism messages, (b) reception of anti-tourism messages, (c) expression of pro-tourism messages, and (d) reception of pro-tourism messages and pro-tourism behavior are mediated by perceived norms about tourism development (not visually shown in Figure 1).

3.3 Social Exchange Theory

Residents' attitudes to the impacts of tourism development has behavioral consequences with implications for sustainability (Bakhsh, Potwarka, Nunkoo, & Sunnassee, 2018; Sharpley, 2014).

For the tourism industry to develop in a socially compatible way, it is important that local residents support tourism development willingly (Gursoy, Milito, & Nunkoo, 2017; Lepp, 2007; Nunkoo, 2015; Ribeiro, Pinto, Silva, & Woosnam, 2017). Residents' behavior toward tourism is influenced by the extent to which they perceive tourism to result in positive and negative impacts. Such a proposition is supported by both the SET (Ap, 1992) and the TRA (Ajzen & Fishbein, 1991). According to SET, residents will enter in an exchange process with the tourism industry once they have evaluated the positive and negative impacts of the development (Ap, 1992). A similar logic underpin the TRA, which is effective for analyzing non-routine thinking decisions that require deliberations (Ajzen & Fishbein, 1991). Both theories postulate that residents' positive attitudes toward tourism increases their intention to engage in pro-tourism behaviors, while negative attitudes lowers their intention to engage in pro-tourism behaviors (Lepp, 2007; Ribeiro, Pinto, Silva, & Woosnam, 2017). Thus:

Proposition 8: There is an association between (a) residents' attitudes to the positive impacts of tourism and (b) residents' attitudes to the negative impacts of tourism and their pro-tourism behavior.

4. The Conceptual Framework

Further to the preceding theoretical discussions from the literature, the conceptual framework (Figure 1) is developed based on theoretical premises of the ELM, SET (dotted blue line) and the IPIM (dotted red line). Twenty-five research propositions (including the mediating propositions not visually shown) emanate from the conceptual framework. The framework examines the direct influence of social media tourism messages on residents' attitudes and behavior toward tourism. Theoretical developments over the last two decades suggest that social media also exerts powerful indirect effects (Baek, Kang, & Kim, 2018; Gunther & Storey, 2003; Yoo, Yang, & Cho, 2016). In line with the IPIM, individuals perceive some influence of a communication on others, and in turn, change their own attitudes and behaviors (Gunther & Storey, 2003). The framework takes this process into account by considering the influence of social media messages on perceived norms toward tourism and the latter's implications for attitudes and behaviors (dotted red line in Figure 1).

INSERT FIGURE 1 ABOUT HERE

The act of receiving and commenting on social media messages has distinct effects on individuals' engagement and involvement in specific issues (Yo et al., 2006). Thus, the framework distinguishes between message expression and reception effects. The framework also recognizes users as the receivers and expressers of pro- as well as anti-tourism messages on social media platforms. Such a distinction is important theoretically as individuals tend to emphasize negative messages because they lead to more provocative conversations and produce the perception of stronger influence on others – referred to as the negative-influence corollary (Gunther & Mundy, 1993; McLeod, Wise, & Perryman, 2017). Social media users are more likely to be more concerned with and engaged themselves in messages about the negative

impacts of tourism development than positive ones. Furthermore, in response to the criticism of earlier studies (Sharpley, 2014), the framework makes a conceptual distinction between ‘residents’ attitudes’ and ‘residents’ behavior’, on the premise that people’s attitudes influence their behavior (Ajzen, 1977, 1991; Steinmetz, Knappstein, Ajzen, Schmidt, & Kabst, 2016).

5. Conclusion

With the rise of an information society predominantly hosted online, social media has a pervasive influence on several aspects of our lives. In the communication and political science literature, the influence of social media on public opinion and behaviors has been a core area of research. However, media effects on residents’ attitudes to tourism has not been well investigated (Lu et al., 2019). The few studies on this topic have focused on the influence on traditional news media on residents’ attitudes (e.g. Hao et al., 2019; Lu et al., 2019). While traditional news media operate within the agenda-setting framework, social media functions on voluntary contributions by self-selected individuals who co-create, share, report, and distribute news. In addition, social media allows users to curate news for other users by selecting and sharing those worthy of attention (Pentina & Tarafdar, 2014). A proper investigation of the influence of social media therefore requires the use of appropriate concepts and theories that capture its distinctive characteristics while providing a robust theoretical basis for understanding its influence on residents’ attitudes to tourism.

Grounded in the broad analytical perspective of the information society, this study develops a conceptual framework of social media influence on residents’ attitudes to tourism. The research makes some important theoretical contributions for the literature. The study offers the benefits of conceptual research for theory development (see Xin, Tribe, & Chambers, 2013; MacInnis,

2011; Yadav, 2010). It adopts an interdisciplinary approach, drawing from three different theoretical perspectives to propose a new and logical framework that clarifies the relationships among constructs that have thus far remained unexplored in tourism, rather than testing them empirically. In so doing, the study attempts to “bridge existing theories in interesting ways, link work across disciplines, provide multi-level insights, and broaden the scope of our thinking” (Gilson and Goldberg, 2015, p. 127-128).

To the best of our knowledge, this is the first study that provides the necessary theoretical foundations and a conceptual framework to study residents’ attitudes to tourism in an information era intensified by the growth of social media platforms that has substantially changed the ways in which people and communities communicate and interact (Ngai, Tao, & Moon, 2015). We welcome researchers to test empirically the proposed conceptual framework and refine it by bringing appropriate modifications of a theoretical nature in the light of empirical evidence. While we advocate an empirical testing of the whole framework to ensure a comprehensive analysis of the influence of social media on attitudes to tourism, researchers can also consider including in their theoretical models a variable that captures residents’ exposure to tourism messages on social media. **Researchers should also be aware that there are broader social, cultural, economic, and political factors that can influence the process through which social media influence residents’ attitudes, however, a discussion of such factors is outside the scope of this article.** Although the major limitation of this research is lack of empirical evidence, our framework is theoretically inclusive, providing a reference to scholars and stimulating new ideas for future research on social media and residents’ attitudes to tourism.

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, 50(2), 179-211.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological bulletin*, 84(5), 888.
- Alipour, H., & Arefipour, T. (2019). Rethinking potentials of Co-management for sustainable common pool resources (CPR) and tourism: The case of a Mediterranean island. *Ocean & Coastal Management*, 104993.
- Baek, Y. M., Kang, H., & Kim, S. (2019). Fake News Should Be Regulated Because It Influences Both “Others” and “Me”: How and Why the Influence of Presumed Influence Model Should Be Extended. *Mass Communication and Society*, 22(3), 301-323.
- Bakhsh, J., Potwarka, L. R., Nunkoo, R., & Sunnasseer, V. (2018). Residents’ support for the Olympic Games: single host-city versus multiple host-city bid arrangements. *Journal of Hospitality Marketing & Management*, 27(5), 544-560.
- Balkin, J. M. (2004). Digital speech and democratic culture: A theory of freedom of expression for the information society. *New York University Law Review*, 79, 1–55.
- Bandura, A. (1986). *Social foundations of thought and action*. Englewood Cliffs, NJ: Prentice Hall.
- Baum, M. A., & Potter, P. B. (2019). Media, public opinion, and foreign policy in the age of social media. *The Journal of Politics*, 81(2), 747-756.
- Becken, S., Alaei, A. R., & Wang, Y. (2019). Benefits and pitfalls of using tweets to assess destination sentiment. *Journal of Hospitality and Tourism Technology*.

- Becken, S., Alaei, A. R., Chen, J., Connolly, R., & Stantic, B. (2017). The role of social media in sharing information about the Great Barrier Reef.
- Becken, S., Alaei, A. R., Chen, M. J., Connolly, R., & Stantic, B. (2017). *The role of social media in sharing information about the Great Barrier Reef*. Griffith Institute for Tourism, Griffith University: Gold Coast, Australia.
- Bell, D. (2004). Post-industrial society. In F. Webster (ed.), *The information society reader* (p. 86-102). London: Routledge.
- Bergström, A., & Jervelycke Belfrage, M. (2018). News in social media: incidental consumption and the role of opinion leaders. *Digital Journalism*, 6(5), 583-598.
- Bharati, P., Zhang, W., & Chaudhury, A. (2015). Better knowledge with social media? Exploring the roles of social capital and organizational knowledge management. *Journal of Knowledge Management*, 19(3), 456-475.
- Bhattacharjee, A., & Sanford, C. (2006). Influence processes for information technology acceptance: An elaboration likelihood model. *MIS quarterly*, 805-825.
- Black, L. W., Welser, H. T., Cosley, D., & DeGroot, J. M. (2011). Self-governance through group discussion in Wikipedia: Measuring deliberation in online groups. *Small Group Research*, 42(5), 595-634.
- Boczkowski, P. J., Mitchelstein, E., & Matassi, M. (2018). "News comes across when I'm in a moment of leisure": Understanding the practices of incidental news consumption on social media. *New Media & Society*, 20(10), 3523-3539.
- Bolat, E. (2019). The African new media digital revolution: Some selected cases from Nigeria. In N. D. Taura, E. Bolat, N. O. Madichie (Eds.), *Digital entrepreneurship in Sub-Saharan Africa* (pp. 67-87). Palgrave Macmillan: Cham.

- Bradshaw, S., & Howard, P. N. (2018). *Challenging truth and trust: A global inventory of organized social media manipulation*. Oxford Internet Institute, University of Oxford. Retrieved 25 Oct, 2020 <http://comprop.oii.ox.ac.uk/wp-content/uploads/sites/93/2018/07/ct2018.pdf>
- Camilleri, M. A. (2018). The promotion of responsible tourism management through digital media. *Tourism Planning & Development*, 15(6), 653-671.
- Chang, H. H., Lu, Y. Y., & Lin, S. C. (2020). An elaboration likelihood model of consumer respond action to facebook second-hand marketplace: Impulsiveness as a moderator. *Information & Management*, 57(2), 103171.
- Cho, H., Shen, L., & Peng, L. (2020). Examining and extending the influence of presumed influence hypothesis in social media. *Media Psychology*, 1-23.
- Choi, J. (2016). Why do people use news differently on SNSs? An investigation of the role of motivations, media repertoires, and technology cluster on citizens' news related activities. *Computers in Human Behavior*, 54, 249–256.
- Chung, A., & Rimal, R. N. (2016). Social norms: A review. *Review of Communication Research*, 4, 1-28.
- Clement, J. (2019). Number of social network users worldwide from 2010 to 2021 (in billions). Retrieved Nov 13, <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>
- Dahlberg, L. (2001). Computer-mediated communication and the public sphere: A critical analysis. *Journal of Computer-mediated communication*, 7(1), JCMC714.
- Davison, W. P. (1983). The third-person effect in communication. *Public opinion quarterly*, 47(1), 1-15.

- Dickinson, J. E., Filimonau, V., Hibbert, J. F., Cherrett, T., Davies, N., Norgate, S., ... & Winstanley, C. (2017). Tourism communities and social ties: the role of online and offline tourist social networks in building social capital and sustainable practice. *Journal of Sustainable Tourism*, 25(2), 163-180.
- Diedrich, A., & García-Buades, E. (2009). Local perceptions of tourism as indicators of destination decline. *Tourism Management*, 30(4), 512-521.
- Dolan, R., Seo, Y., & Kemper, J. (2019). Complaining practices on social media in tourism: A value co-creation and co-destruction perspective. *Tourism Management*, 73, 35-45.
- Eusébio, C., Vieira, A. L., & Lima, S. (2018). Place attachment, host–tourist interactions, and residents’ attitudes towards tourism development: the case of Boa Vista Island in Cape Verde. *Journal of Sustainable Tourism*, 26(6), 890-909.
- Eveland Jr, W. P., & McLeod, D. M. (1999). The effect of social desirability on perceived media impact: Implications for third-person perceptions. *International Journal of Public Opinion Research*, 11(4), 315-333.
- Eveland, Jr, W. P. (2004). The effect of political discussion in producing informed citizens: The roles of information, motivation, and elaboration. *Political Communication*, 21(2), 177-193.
- Fedeli, G. (2020). ‘Fake news’ meets tourism: a proposed research agenda. *Annals of Tourism Research*, 80, 102684.
- Garay Tamajón, L., & Cànoves Valiente, G. (2017). Barcelona seen through the eyes of TripAdvisor: Actors, typologies and components of destination image in social media platforms. *Current Issues in Tourism*, 20(1), 33-37.
- Giglio, S., Bertacchini, F., Bilotta, E., & Pantano, P. (2019). Using social media to identify tourism attractiveness in six Italian cities. *Tourism Management*, 72, 306-312.

- Gilson, L. L., & Goldberg, C. B. (2015). Editors' comment: so, what is a conceptual paper? *Group and Organization Management, 40*, 127-130.
- Gössling, S. (2017). Tourism, information technologies and sustainability: an exploratory review. *Journal of Sustainable Tourism, 25*(7), 1024-1041.
- Gössling, S., & Stavrinidi, I. (2016). Social networking, mobilities, and the rise of liquid identities. *Mobilities, 11*(5), 723-743.
- Gretzel, U. (2017). Social Media Activism in Tourism. *Journal of Hospitality and Tourism, 15*(2), 1-14.
- Gunther, A. C., & Mundy, P. (1993). Biased optimism and the third-person effect. *Journalism Quarterly, 70*(1), 58-67.
- Gunther, A. C., & Storey, J. D. (2003). The influence of presumed influence. *Journal of Communication, 53*(2), 199-215.
- Gunther, A. C., Bolt, D., Borzekowski, D. L., Liebhart, J. L., & Dillard, J. P. (2006). Presumed influence on peer norms: How mass media indirectly affect adolescent smoking. *Journal of Communication, 56*(1), 52-68.
- Gursoy, D., Milito, M. C., & Nunkoo, R. (2017). Residents' support for a mega-event: The case of the 2014 FIFA World Cup, Natal, Brazil. *Journal of Destination Marketing & Management, 6*(4), 344-352.
- Gursoy, D., Ouyang, Z., Nunkoo, R., & Wei, W. (2019). Residents' impact perceptions of and attitudes towards tourism development: a meta-analysis. *Journal of Hospitality Marketing & Management, 28*(3), 306-333.
- Hadinejad, A., D. Moyle, B., Scott, N., Kralj, A., & Nunkoo, R. (2019). Residents' attitudes to tourism: a review. *Tourism Review, 74*(2), 150-165.

- Hamid, S., Ijab, M. T., Sulaiman, H., Md. Anwar, R., & Norman, A. A. (2017). Social media for environmental sustainability awareness in higher education. *International Journal of Sustainability in Higher Education*, 18(4), 474-491.
- Han, W., McCabe, S., Wang, Y., & Chong, A. Y. L. (2018). Evaluating user-generated content in social media: an effective approach to encourage greater pro-environmental behavior in tourism?. *Journal of Sustainable Tourism*, 26(4), 600-614.
- Hansen, A. (2019). *Environment, media and communication* (2nd edition). Routledge: Abingdon, Oxon.
- Hao, J. X., Fu, Y., Hsu, C., Li, X., & Chen, N. (2019). Introducing News Media Sentiment Analytics to Residents' Attitudes Research. *Journal of Travel Research*, 0047287519884657.
- Hickland, E., Cullinane, N., Dobbins, T., Dundon, T., & Donaghey, J. (2020). Employer silencing in a context of voice regulations: Case studies of non-compliance. *Human Resource Management Journal*.
- Hills, T. T. (2019). The dark side of information proliferation. *Perspectives on Psychological Science*, 14(3), 323-330.
- Ho, S. S., Goh, T. J., & Leung, Y. W. (2020). Let's nab fake science news: Predicting scientists' support for interventions using the influence of presumed media influence model. *Journalism*, 1464884920937488.
- Ho, S. S., Goh, T. J., Chuah, A. S., Leung, Y. W., Bekalu, M. A., & Viswanath, K. (2020). Past Debates, Fresh Impact on Nano-Enabled Food: A Multigroup Comparison of Presumed Media Influence Model Based on Spillover Effects of Attitude Toward Genetically Modified Food. *Journal of Communication*.

- Hong, Y., & Kim, S. (2019). Influence of presumed media influence for health prevention: How mass media indirectly promote health prevention behaviors through descriptive norms. *Health Communication*, 1-11.
- Hunt, C., & Stronza, A. (2014). Stage-based tourism models and resident attitudes towards tourism in an emerging destination in the developing world. *Journal of Sustainable Tourism*, 22(2), 279-298.
- Hynes, N., & Wilson, J. (2016). I do it, but don't tell anyone! Personal values, personal and social norms: Can social media play a role in changing pro-environmental behaviours?. *Technological Forecasting and Social Change*, 111, 349-359.
- Jabreel, M., Moreno, A., & Huertas, A. (2017). Do local residents and visitors express the same sentiments on destinations through social media?. In R. Schegg & B. Stangl (eds.), *Information and Communication Technologies in Tourism 2017* (pp. 655-668). Springer, Cham.
- Jansson, A. (2018). Rethinking post-tourism in the age of social media. *Annals of Tourism Research*, 69, 101-110.
- Joshi, G. C., Paul, M., Kalita, B. K., Ranga, V., Rawat, J. S., & Rawat, P. S. (2019). Mapping the social landscape through social media. *Journal of Information Science*, 0165551519865487.
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons*, 53(1), 59-68.
- Ketter, E., & Avraham, E. (2012). The social revolution of place marketing: The growing power of users in social media campaigns. *Place Branding and Public Diplomacy*, 8(4), 285-294.
- Kim, J. J., & Hwang, J. (2020). Merging the norm activation model and the theory of planned behavior in the context of drone food delivery services: Does the level of product knowledge really matter?. *Journal of Hospitality and Tourism Management*, 42, 1-11.

- Kirilenko, A. P., & Stepchenkova, S. O. (2017). Sochi 2014 Olympics on Twitter: Perspectives of hosts and guests. *Tourism Management*, *63*, 54-65.
- Kou, Y., Kow, Y. M., Gui, X., & Cheng, W. (2017). One social movement, two social media sites: A comparative study of public discourses. *Computer Supported Cooperative Work (CSCW)*, *26*(4-6), 807-836.
- Ku, K. Y., Kong, Q., Song, Y., Deng, L., Kang, Y., & Hu, A. (2019). What predicts adolescents' critical thinking about real-life news? The roles of social media news consumption and news media literacy. *Thinking Skills and Creativity*, *33*, 100570.
- Lee, M. J., & Chun, J. W. (2016). Reading others' comments and public opinion poll results on social media: Social judgment and spiral of empowerment. *Computers in Human Behavior*, *65*, 479-487.
- Leong, C., Pan, S. L., Bahri, S., & Fauzi, A. (2019). Social media empowerment in social movements: power activation and power accrual in digital activism. *European Journal of Information Systems*, *28*(2), 173-204.
- Leong, C., Pan, S. L., Bahri, S., & Fauzi, A. (2019). Social media empowerment in social movements: power activation and power accrual in digital activism. *European Journal of Information Systems*, *28*(2), 173-204.
- Lepp, A. (2007). Residents' attitudes towards tourism in Bigodi village, Uganda. *Tourism management*, *28*(3), 876-885.
- Liu, H., Wu, L., & Li, X. (2019). Social media envy: how experience sharing on social networking sites drives millennials' aspirational tourism consumption. *Journal of Travel Research*, *58*(3), 355-369.

- Lu, Q., Mihalik, B. J., Heere, B., Meng, F., & Fairchild, A. (2019). Media effect on resident attitudes toward an Olympic bid. *Tourism Management Perspectives*, 29, 66-75.
- Lund, N. F., Cohen, S. A., & Scarles, C. (2018). The power of social media storytelling in destination branding. *Journal of destination marketing & management*, 8, 271-280.
- Lundberg, E. (2015). The level of tourism development and resident attitudes: A comparative case study of coastal destinations. *Scandinavian Journal of Hospitality and Tourism*, 15(3), 266-294.
- MacInnis, D. J. (2011). A framework for conceptual contributions in marketing. *Journal of Marketing*, 75(4), 136-154.
- MacKay, K. J., & Campbell, J. M. (2004). An examination of residents' support for hunting as a tourism product. *Tourism Management*, 25(4), 443-452.
- Manca, S., & Fornara, F. (2019). Attitude toward sustainable transport as a function of source and argument reliability and anticipated emotions. *Sustainability*, 11(12), 3288.
- Martin, W. J. (1995). *The global information society*. Hampshire: Aslib Gower.
- Maruyama, N. U., Keith, S. J., & Woosnam, K. M. (2019). Incorporating emotion into social exchange: considering distinct resident groups' attitudes towards ethnic neighborhood tourism in Osaka, Japan. *Journal of Sustainable Tourism*, 1-17.
- McGregor, S. C. (2019). Social media as public opinion: How journalists use social media to represent public opinion. *Journalism*, 1464884919845458.
- McGregor, S. C. (2019). Social media as public opinion: How journalists use social media to represent public opinion. *Journalism*, 20(8), 1070-1086.

- McLeod, D. M., Wise, D., & Perryman, M. (2017). Thinking about the media: a review of theory and research on media perceptions, media effects perceptions, and their consequences. *Review of Communication Research, 5*, 35-83.
- Mehmet, M., & Simmons, P. (2018). Kangaroo court? An analysis of social media justifications for attitudes to culling. *Environmental Communication, 12*(3), 370-386.
- Meng, B., Chua, B. L., Ryu, H. B., & Han, H. (2020). Volunteer tourism (VT) traveler behavior: merging norm activation model and theory of planned behavior. *Journal of Sustainable Tourism, 1-23*.
- Navío-Marco, J., Ruiz-Gómez, L. M., & Sevilla-Sevilla, C. (2018). Progress in information technology and tourism management: 30 years on and 20 years after the internet-Revisiting Buhalis & Law's landmark study about eTourism. *Tourism Management, 69*, 460-470.
- Ngai, E. W., Tao, S. S., & Moon, K. K. (2015). Social media research: Theories, constructs, and conceptual frameworks. *International journal of information management, 35*(1), 33-44.
- Nunkoo, R. (2015). Tourism development and trust in local government. *Tourism Management, 46*, 623-634.
- Nunkoo, R., & Gursoy, D. (2012). Residents' support for tourism: An identity perspective. *Annals of tourism research, 39*(1), 243-268.
- Nunkoo, R., & Gursoy, D. (2017). Political trust and residents' support for alternative and mass tourism: an improved structural model. *Tourism Geographies, 19*(3), 318-339.
- Nunkoo, R., & Ramkissoon, H. (2010). Modeling community support for a proposed integrated resort project. *Journal of Sustainable Tourism, 18*(2), 257-277.
- Nunkoo, R., & Ramkissoon, H. (2011). Residents' satisfaction with community attributes and support for tourism. *Journal of Hospitality & Tourism Research, 35*(2), 171-190.

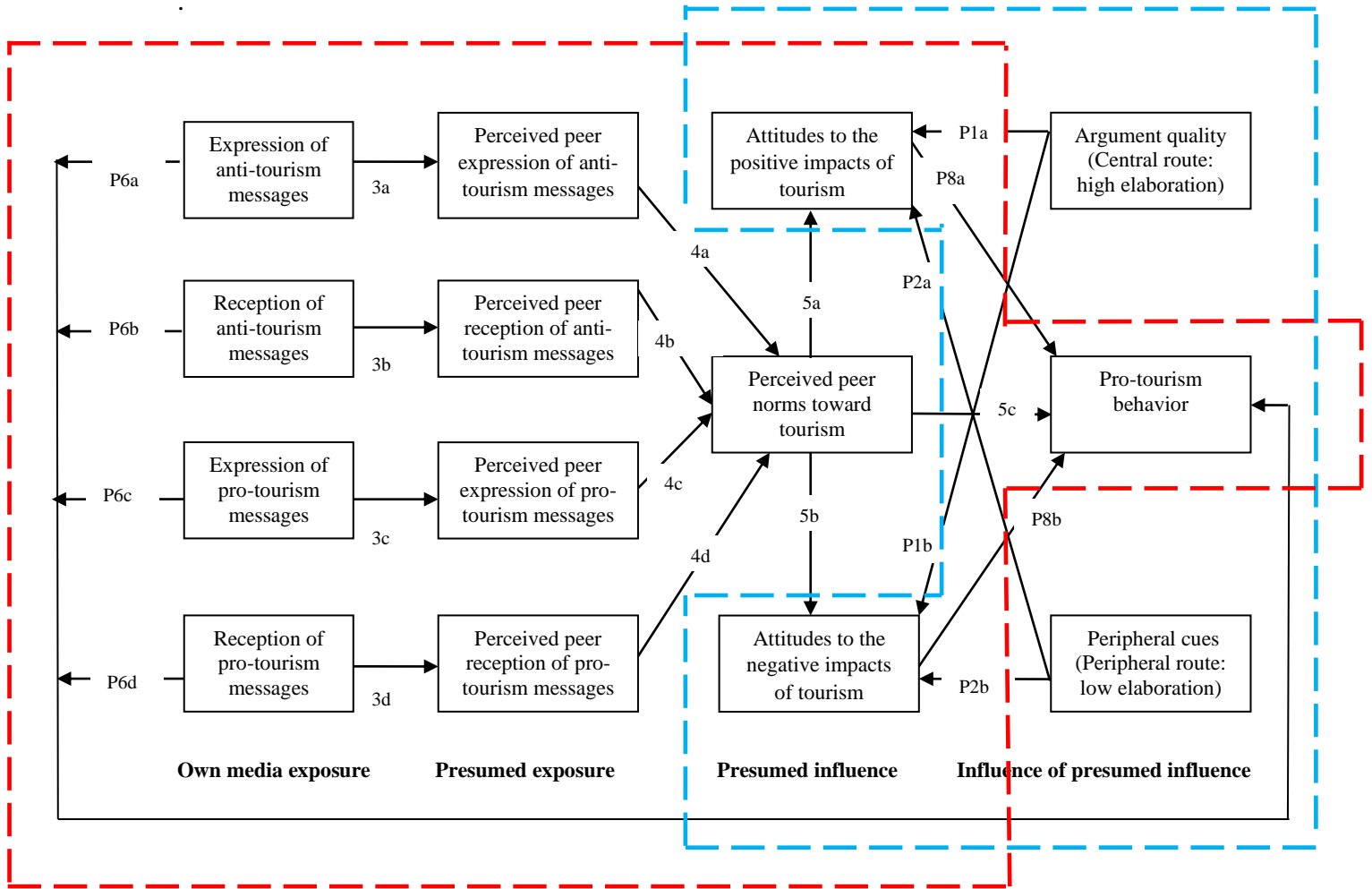
- Nunkoo, R., & Ramkissoon, H. (2012). Power, trust, social exchange and community support. *Annals of Tourism Research*, 39(2), 997-1023.
- Nunkoo, R., & So, K. K. F. (2016). Residents' support for tourism: Testing alternative structural models. *Journal of Travel Research*, 55(7), 847-861.
- Nunkoo, R., Gursoy, D., & Juwaheer, T. D. (2010). Island residents' identities and their support for tourism: an integration of two theories. *Journal of Sustainable Tourism*, 18(5), 675-693.
- Nunkoo, R., Smith, S. L., & Ramkissoon, H. (2013). Residents' attitudes to tourism: A longitudinal study of 140 articles from 1984 to 2010. *Journal of Sustainable Tourism*, 21(1), 5-25.
- Nunkoo, R., Smith, S. L., & Ramkissoon, H. (2013). Residents' attitudes to tourism: A longitudinal study of 140 articles from 1984 to 2010. *Journal of Sustainable Tourism*, 21(1), 5-25.
- Oh, H., & Hsu, C. H. (2001). Volitional degrees of gambling behaviors. *Annals of Tourism Research*, 28(3), 618-637.
- Pentina, I., & Tarafdar, M. (2014). From "information" to "knowing": Exploring the role of social media in contemporary news consumption. *Computers in Human Behavior*, 35, 211-223.
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In *Communication and persuasion* (pp. 1-24). Springer, New York, NY.
- Postma, A., & Schmuecker, D. (2017). Understanding and overcoming negative impacts of tourism in city destinations: conceptual model and strategic framework. *Journal of Tourism Futures*, 3(2), 144-156.

- Rahman, I., Park, J., & Chi, C. G. Q. (2015). Consequences of “greenwashing” Consumers’ reactions to hotels’ green initiatives. *International Journal of Contemporary Hospitality Management*, 27(6), 1054-1081.
- Ribeiro, M. A., Pinto, P., Silva, J. A., & Woosnam, K. M. (2017). Residents’ attitudes and the adoption of pro-tourism behaviours: The case of developing island countries. *Tourism Management*, 61, 523-537.
- Rigall-I-Torrent, R., & Fluvià, M. (2011). Managing tourism products and destinations embedding public good components: a hedonic approach. *Tourism Management*, 32(2), 244-255.
- Ritchie, B. W., Shipway, R., & Chien, P. M. (2010). The role of the media in influencing residents' support for the 2012 Olympic Games. *International Journal of Event and Festival Management*.
- Robins, K., & Webster, F. (1999). *Times of the technoculture*. London: Routledge.
- Serna, A., Gerrikagoitia, J. K., Bernabe, U., & Ruiz, T. (2017). A method to assess sustainable mobility for sustainable tourism: The case of the public bike systems. In In R. Schegg and B. Stangl (eds.), *Information and Communication Technologies in Tourism 2017* (pp. 727-739). Springer, Cham.
- Shah, D. V., Cho, J., Nah, S., Gotlieb, M. R., Hwang, H., Lee, N. J., ... & McLeod, D. M. (2007). Campaign ads, online messaging, and participation: Extending the communication mediation model. *Journal of communication*, 57(4), 676-703.
- Sharpley, R. (2014). Host perceptions of tourism: A review of the research. *Tourism Management*, 42, 37-49.

- Shi, J., Hu, P., Lai, K. K., & Chen, G. (2018). Determinants of users' information dissemination behavior on social networking sites. *Internet Research*.
- Shirky, C. (2011). The political power of social media: Technology, the public sphere, and political change. *Foreign affairs*, 28-41.
- Siddique, H. (2012). Maldives tourism campaign backfires as Twitter shows darker side of island life. Retrieved July 6, 2020 from <https://www.theguardian.com/world/2012/jul/12/maldives-twitter-tourism-campaign-backfires>.
- Smith, V. L., & Font, X. (2014). Volunteer tourism, greenwashing and understanding responsible marketing using market signalling theory. *Journal of Sustainable Tourism*, 22(6), 942-963.
- Steinmetz, H., Knappstein, M., Ajzen, I., Schmidt, P., & Kabst, R. (2016). How effective are behavior change interventions based on the Theory of Planned Behavior? A three-level meta-analysis. *Zeitschrift Fur Psychologie-Journal of Psychology*, 224, 216-233.
- Suess, C., & Mody, M. (2016). Gaming can be sustainable too! Using Social Representation Theory to examine the moderating effects of tourism diversification on residents' tax paying behavior. *Tourism Management*, 56, 20-39.
- Sussman, S. W., & Siegal, W. S. (2003). Informational influence in organizations: An integrated approach to knowledge adoption. *Information systems research*, 14(1), 47-65.
- Valenzuela, S. (2013). Unpacking the use of social media for protest behavior: The roles of information, opinion expression, and activism. *American Behavioral Scientist*, 57(7), 920-942.
- Valeriani, A., & Vaccari, C. (2016). Accidental exposure to politics on social media as online participation equalizer in Germany, Italy, and the United Kingdom. *New Media & Society*, 18(9), 1857-1874.

- Waldrop, M. M. (2017). News Feature: The genuine problem of fake news. *Proceedings of the National Academy of Sciences*, *114*(48), 12631-12634.
- Wang, L., Fan, L., & Bae, S. (2019). How to persuade an online gamer to give up cheating? Uniting elaboration likelihood model and signaling theory. *Computers in Human Behavior*, *96*, 149-162.
- Wassler, P., Nguyen, T. H. H., & Schuckert, M. (2019). Social representations and resident attitudes: A multiple-mixed-method approach. *Annals of Tourism Research*, *78*, 102740.
- Webster, F. (2006). *Theories of the information society*. London and New York: Routledge.
- Woosnam, K. M., Draper, J., Jiang, J. K., Aleshinloye, K. D., & Erul, E. (2018). Applying self-perception theory to explain residents' attitudes about tourism development through travel histories. *Tourism Management*, *64*, 357-368.
- Xin, S., Tribe, J., & Chambers, D. (2013). Conceptual research in tourism. *Annals of Tourism Research*, *41*, 66-88.
- Yadav, M. S. (2010). The decline of conceptual articles and implications for knowledge development. *Journal of Marketing*, *74*(1), 1-19.
- Yang, B., & Zhao, X. (2018). TV, social media, and college students' binge drinking intentions: moderated mediation models. *Journal of health communication*, *23*(1), 61-71.
- Yoo, W., Yang, J., & Cho, E. (2016). How social media influence college students' smoking attitudes and intentions. *Computers in human behavior*, *64*, 173-182.
- Zeng, B., & Gerritsen, R. (2014). What do we know about social media in tourism? A review. *Tourism management perspectives*, *10*, 27-36.

Zhu, D. H., Chang, Y. P., & Luo, J. J. (2016). Understanding the influence of C2C communication on purchase decision in online communities from a perspective of information adoption model. *Telematics and Informatics*, 33(1), 8-16.



Notes:

- Influence of presumed influence model (Gunther & Storey, 2003; Yo et al., 2016)
 - Elaboration likelihood model (Petty & Cacioppo, 1981); Social exchange theory (Ap, 1992)
- The mediating propositions (P7) are not shown, but are implied in the framework.

Figure 1. Conceptual framework of social media influence on residents' attitudes to tourism

Table 1. Examples of tourism discourses on social media

Social media sites	Country
https://nextdoor.com/	USA
https://www.facebook.com/aretkokinnulaplaz/	Mauritius
https://www.facebook.com/appalfama	Lisbon, Portugal
https://www.facebook.com/Left-Hand-Rotation-290963300240	Lisbon, Portugal
https://twitter.com/antalyacityblog	Antalya, Turkey
@AssBarrisTS	Kavos, Greece
https://twitter.com/Terraferida	Barcelona, Spain
https://www.gobmallorca.com/	Mallorca, Spain
https://es-es.facebook.com/salvemPortoColom/	Mallorca, Spain
https://twitter.com/mesbarrigirona	Portocolom, Spain
https://www.facebook.com/Mesbarrigirona/	Girona, Spain
https://twitter.com/hashtag/overtourism	Girona, Spain
https://twitter.com/toursustainably	Global
https://twitter.com/susttourism	Global
https://twitter.com/Tiredearth	Global
https://www.youtube.com/TiredEarthGroup	Global
https://goodtourismblog.com/	Global
https://twitter.com/sti_travel	Global
https://www.linkedin.com/groups/12088115/	Global
#sustainabletourism	Global