Social comparison orientation and frequency: a study on international travel bloggers

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Abstract

This study adopts a social comparison theory perspective to examine the drivers of social comparison frequency (SCF) on Facebook among international travel bloggers who utilize Facebook for their travel blogging activities. An online survey led to 99 usable responses covering travel bloggers from 33 countries.

Results suggest that there is a strongly positive and significant relationship between SCF on Facebook and the Ability dimension of social comparison orientation (SCO), as well as between SCF and opinion leadership. While professional travel bloggers are more likely to be opinion leaders, non-professional travel bloggers tend to compare themselves with others on Facebook considerably more often. Overall, it seems that Facebook is deployed in a rather strategic way by travel bloggers who try to enhance the visibility of themselves and their blogs vis-à-vis international competitors. Research contributions and managerial implications are discussed.

Keywords: *Travel bloggers, social comparison, social media, social media influencers, marketing*

1. Introduction

The development and consolidation of digital technologies and platforms is bringing about radical changes in the way people interact, engage, and communicate. More specifically, social media are changing the interactions between consumers and companies, and are affecting how customers review products and services. This is particularly relevant in the travel and tourism (T&T) industry where social media have been increasingly adopted by hotels, transportation companies, restaurants, and tourism destinations (Baggio, 2014; Bilgihan, Peng, & Kandampully, 2014; Kim, Yoon, Cha, & Lee, 2015; Mariani, Mura, & Di Felice, 2018; Mariani, 2020; Xiang & Gretzel, 2010).

In the T&T industry, social media represent an information source for travelers, helping them during the planning process of their trips (Mariani, Ek Styven & Ayeh, 2019; Xiang & Gretzel, 2010). Furthermore, they also play a considerable role during and after trips as consumers, be them tourists or residents (Ek Styven et al., 2020), are increasingly using them to share their travel experiences (Munar & Jacobsen, 2014) with friends and acquaintances.

Moreover, social media are increasingly deployed by social media influencers (SMIs) who constitute "a new type of independent third-party endorser who shapes audience attitudes through blogs, tweets, and the use of other social media" (Freberg, Graham, McGaughey, & Freberg, 2011, p. 90). The most prominent SMIs in T&T are travel bloggers. They can be either amateur or professional; the latter having travel blogging as their main occupation and source of income. They review and write about travel products and services online and, using social media, they can reach an even greater audience and influence travelers' decisions (Bosangit, Hibbert, & McCabe, 2015; Magno & Cassia, 2018). There is a growing recognition among tourism marketers that travel bloggers are effective as online influencers (Wang, 2012). Therefore, they are increasingly employed by a wide set of T&T stakeholders, including

destination marketers (Mariani, Di Felice, & Mura, 2016), travel intermediaries (Huang, 2012), and tourism companies themselves (Seo & Park, 2018).

Even though a number of practitioners and high-caliber international institutions such as the World Bank have recently emphasized the relevance of travel bloggers for tourism development and promotion (Salem & Twining-Ward, 2018), to date research on the phenomenon of travel blogging is, at best, nascent (Ge & Gretzel, 2018; Magno & Cassia, 2018; Xu & Pratt, 2018). So far, only three studies have tackled travel blogging. Ge and Gretzel (2018) examined how travel bloggers deploy emoji-based verbal moves to enrich their persuasive rhetoric. Magno and Cassia (2018) analyzed the effect of travel bloggers' credibility and quality of information generated on consumers' behavioral intention to adopt travel bloggers' suggestions when making travel-related decisions. Xu and Pratt (2018) studied the relationship between travel blogger–consumer congruence and visit intentions toward the endorsed destination.

All three aforementioned studies focus on consumers' perceptions of travel bloggers. However, they fail to recognize that, as competition among travel bloggers intensifies (Barker, 2018), they are likely to compare with each other. Hence, we conceptualize travel bloggers as SMIs in T&T who are increasingly engaging in comparison and benchmarking with other SMIs. Accordingly, in this study we argue that it is crucial to understand how travel bloggers compare socially on generalist social media where they can actually influence travelers' decisions. Therefore, we specifically examine how travel bloggers perceive each other by leveraging social comparison orientation (SCO) theory (Festinger, 1954) to examine the drivers of social comparison frequency (SCF) on generalist social media among travel bloggers.

Consequently, we address the overarching research question: what are the drivers of SCF on generalist social media among SMIs in Travel (i.e., travel bloggers)? The study focuses on

the most popular general social medium, that is, Facebook, which had over 2.6 billion monthly active users as of the first quarter of 2020 (Statista, 2020).

To the best of the authors' knowledge, this is among the first studies to adopt a social comparison theory perspective to examine the drivers of SCF on generalist social media (i.e., Facebook) among international travel bloggers who use the social networking site for their travel blogging activities.

Accordingly, it bridges a relevant research gap in extant marketing literature revolving around SMIs (Audrezet, de Kerviler, & Guidry Moulard, 2018; Freberg et al, 2011; Hughes, Swaminathan, & Brooks, 2019; Lou & Yuan, 2019) and tourism marketing literature revolving around social media (Capatina, Micu, Micu, Bouzaabia, & Bouzaabia, 2018; Ge & Gretzel, 2018; Leung, Law, van Hoof, & Buhalis, 2013; Magno & Cassia, 2018; Xu & Pratt, 2018) by making both a conceptual and an empirical contribution. From a conceptual point of view, it moves beyond traditional models leveraging opinion leadership by entailing social comparison theory (Festinger, 1954) to understand the SCF of a specific type of SMIs, namely travel bloggers. From an empirical point of view, on the basis of a survey conducted on international travel bloggers (both professional and amateur), we examine through a multivariate regression analysis if, and to what extent, SCO (Gibbons & Buunk, 1999) and opinion leadership (Rogers & Cartano, 1962) influence SMIs' SCF. Accordingly, we offer a more comprehensive picture of the drivers of SCF among international travel bloggers on the most popular "generalist" social media, extending research on travel blogs and online travel communities (such as TripAdvisor) that has focused on the impact of travel bloggers on consumers (e.g., Bosangit et al, 2015; Chen, Shang, & Li, 2014).

The paper is organized as follows: in the second section we review the relevant literature and develop the main research hypotheses. The third section describes the data and methods, while section four illustrates the major findings. The fifth section discusses the main

theoretical contributions and practical implications. Finally, the sixth section elaborates the concluding remarks, illustrates the study's limitations, and identifies future research directions.

2. Theoretical background

2.1 Social media influencers

Social media influencers (SMIs) have become an increasingly relevant object of marketing and information management studies over the last decade, due to their gradually more relevant role in creating user generated content (UGC) that can influence other users' perceptions, intentions, behaviors, and purchasing decisions (Arnold, 2017). In their work, Freberg et al (2011, p. 90) defined SMIs as "a new type of independent third-party endorser who shapes audience attitudes through blogs, tweets, and the use of other social media". Marketing and information management studies have dealt with SMIs by focusing on different aspects of the communication processes through which they generate electronic word-of-mouth (Hennig-Thurau et al, 2004) to influence or persuade other social media users to like, prefer, adopt, and ultimately purchase a product, brand or company (Audrezet et al, 2018), and even develop loyalty and engagement (Uzunoğlu & Kip, 2014).

SMIs have been analyzed in a variety of contexts, industries, and verticals, including fashion (Audrezet et al, 2018; Schwemmer & Ziewiecki, 2018), beauty and cosmetics (Schouten, Janssen, & Verspaget, 2020; Schwemmer & Ziewiecki, 2018), food and wine (Cosenza, Solomon, & Kwon, 2015; Schouten et al , 2020), transportation modes (Borowski, Chen, & Mahmassani, 2020), and travel (Ge & Gretzel, 2018; Magno & Cassia, 2018).

So far, most of these studies have examined how and why SMIs leverage their recognized opinion leadership (Rogers & Cartano, 1962) to influence and persuade (either intentionally or not) other consumers to like, or prefer, a specific product/brand over other products/brands. One of the mechanisms identified is trust, as social media users tend to perceive content

produced by SMIs as more trustworthy than content produced by companies and brands (Lou & Yuan, 2019). Moreover, it has been found that SMIs' opinions are perceived as guiding advice if SMIs engage with authenticity strategies (Audrezet et al, 2018) showing consumers that their opinions are not driven entirely by the commercial imperatives dictated by the partnering brands, if present.

While influencer marketing is becoming an increasingly lucrative business opportunity (Arnold, 2017) across many sectors, it is also becoming gradually more competitive (Barker, 2018). This implies that SMIs are progressively more engaging in comparison and benchmarking with other SMIs. In the nascent stream on SMIs in T&T (Ge & Gretzel, 2018; Magno & Cassia, 2018; Xu & Pratt, 2018), all of the studies have focused on the effect of travel bloggers' features on travelers' preferences, perceptions, and attitudes. In this study, however, we distinctively examine how travel bloggers perceive each other, by leveraging SCO theory (Festinger, 1954), which is illustrated in section 2.2.

2.2 Social comparison orientation and frequency

According to social comparison theory, humans are actors with a need to appraise their own capacities and limitations—i.e., their abilities—as well as their opinions of objects and of other individuals (Festinger, 1954). In situations when it is not possible to perform self-evaluation against objective, non-social standards, people instead compare themselves with other people (Wood, 1989). Festinger's similarity hypothesis proposes that in order to gain self-evaluation, individuals prefer to make comparisons with those who they perceive as similar in their abilities and opinions (Alfasi, 2019; Wood, 1989). Today, such behaviors are largely facilitated by the proliferation of social media, where users can compare themselves with their social network friends at any given moment. As most people want to communicate a positive

image of themselves online, others' lives may appear to be much better than one's own, which might trigger negative emotions and reduce well-being (Alfasi, 2019).

The tendency to make social comparisons, however, varies between different individuals. While many are simply reluctant to admit that they engage in such behavior, some are truly uninterested in social comparison information and therefore feel no need to assess their own situation in relation to that of others (Buunk & Gibbons, 2007). In order to capture individual dispositional differences, Gibbons and Buunk (1999) developed the SCO scale. The concept refers to the extent to which individuals pay attention to, and base their own behavior on, the way others behave (Gibbons & Buunk, 1999; Lee, 2014), and comprises the two dimensions of Ability and Opinions. The Ability dimension broadly addresses the question "How am I doing?", whereas the Opinions dimension instead focuses on the question "What should I think or feel?" (Gibbons & Buunk, 1999).

In a social media context, SCO has been frequently studied as correlating with, or working as an antecedent to, psychological or emotional states such as depressive symptoms (Brandenberg, Ozimek, Bierhoff, & Janker, 2019; Feinstein et al, 2013; Liu et al, 2017), envy (Park & Baek, 2018), mental health (Jang, Park, & Song, 2016), negative feelings from comparison (Lee, 2014), or fear of missing out (Reer, Tang, & Quandt, 2019). Studies have also found that individuals with depression, anxiety, loneliness (Reer et al, 2019), lower self-esteem (Brandenberg et al, 2019; Cramer, Song, & Drent, 2016), or higher levels of narcissism (Ozimek, Bierhoff, & Hanke, 2018) more often compare themselves with others.

Moreover, research addressing the relationship between SCO and social media behavior shows that stronger SCO can be connected to more intense social media use (Brandenberg et al, 2019; Vogel, Rose, Okdie, Eckles, & Franz, 2015; Yang & Robinson, 2018) and higher SCF on social media (Lee, 2014; Reer et al, 2019). While many of the extant studies have relied on student samples, this study adds to the understanding of social comparison by applying the

theory to the context of travel bloggers in social media. Hence, based on the premises of social comparison theory and the reviewed literature, we hypothesize that the higher the SCO of an individual (e.g., travel blogger), the higher their SCF on social media. Thus:

H1a: Social comparison orientation (Ability) positively influences social comparison frequency on social media.

H1b: Social comparison orientation (Opinions) positively influences social comparison frequency on social media.

2.3 Opinion leadership

Opinion leaders are "individuals who exert an unequal amount of influence on the decision of others" (Rogers & Cartano, 1962, p. 435). Typically, information stemming from opinion leaders is perceived as more credible than advertising (Berkman & Gilson, 1986; Flynn, Goldsmith, & Eastman, 1996). In the SMI literature it has been found that opinion leaders are also effective endorsers of products and services (Jin & Ryu, 2019; Ki & Kim, 2019) as—based on their knowledge of products—they can share their opinions online, thus influencing their followers (Lou & Yuan, 2019) and other people that they are connected to online. Opinion leadership is often domain specific—that is, an individual is not generally an opinion leader in several different areas; instead, most opinion leaders tend to focus on a single topic of interest (Goldsmith & De Witt, 2003). In the context of T&T, opinion leaders have been characterized as technology savvy, engaged in social media use for travel, and experienced in travel (Yoo, Gretzel, & Zach, 2011).

In the SMI research stream some scholars (Stubb & Colliander, 2019) have found that SMIs highlighting their impartiality are most likely to influence consumers' attitudes and behaviors. It has been observed that individuals and social groups tend to trust information provided by other individuals that they perceive as similar to them; perceived similarity

engenders mechanisms of influence on purchase behavior (Eastman, Iyer, Liao-Troth, Williams, & Griffin, 2014; Moschis, 1976). Eastman et al (2014, p. 459) point out that opinion leadership has a key social comparison element, and suggest, "the need to gather information to guide their personal usage and purchase behaviors is directly tied to their disposition to stay ahead of their social others". In an earlier study, Oh (1997) found that travel opinion leaders not only shared travel information more with other people, they also actively sought travel advice from others.

Thus, in line with social comparison theory (Festinger, 1954; Moschis, 1976), it might be expected that opinion leaders in social media, such as travel bloggers, also tend to compare themselves to others on social media more frequently. We hypothesize that the higher the opinion leadership of an individual (e.g., travel blogger), the higher their SCF on social media. Therefore:

H2: Opinion leadership positively influences social comparison frequency on social media.

2.4 Social media use

In addition to the possible relationships hypothesized in section 2.2 and 2.3, it is possible that travel bloggers' SCF could be influenced simply by how much, or how intensely, they use social media. Pertinent literature refers to social media use intensity as a way to understand to what extent an individual is involved in the use of the social medium (Lee, 2014). Given that an individual exposed to a large amount of information is more likely to be willing to compare themselves with others, Facebook use intensity may increase SCF, which has also been shown empirically by, e.g., Lee (2014). According to Ellison, Steinfield, and Lampe (2007), use intensity can be regarded as a better measure of social media usage than frequency or duration indices as it also considers the extent to which one is emotionally connected to the social

medium, as well as the extent to which it is integrated into one's daily activities. A user's number of friends on the particular social medium can also be viewed as an aspect of use intensity (Ellison et al, 2007), as well as potentially the proportion of "real", genuine friends on the social medium (cf. Dunbar, 2016).

Hence, we apply three variables to control for the possible influence of social media use: social media use intensity (measured as a multi-item construct), number of social media friends, and percentage of genuine friends on social media.

Figure 1 illustrates the conceptual model derived from the theoretical background, including the hypothesized relationships as well as the control variables.

INSERT FIGURE 1 ABOUT HERE

3. Research method

3.1 Measurement instrument

A questionnaire was designed based on scales from previous studies (items are displayed in the Appendix). All questions were adapted to the context of Facebook, except the SCO, which is a dispositional construct, indicating a person's general tendency to compare with others. The dependent variable; that is, SCF on Facebook was slightly adapted from Buunk, Zurriaga, Peíró, Nauta, and Gosalvez (2005) and Lee (2014). It was measured by one question, asking "How often do you compare yourself with others on Facebook when you are reading news feeds or checking out others' photos?", with response alternatives ranging from "Never" (1) to "Very often" (7). To measure SCO, including the two Ability and Opinions dimensions, we employed the Iowa-Netherlands Comparison Orientation Measure, which has eleven items (Gibbons & Buunk, 1999; Lee, 2014). Further, an existing and commonly used three-item scale of opinion leadership (Eastman et al, 2014; Flynn et al, 1996) was adapted to the context of

social media. The SCO and opinion leadership items were measured on a seven-point Likert-type response scale, indicating strength of agreement.

Regarding the control variables, Facebook use intensity was captured using a six-item scale from Ellison et al (2007), which also was used by Lee (2014). We assessed the respondents' number of Facebook friends through one question with eleven options ranging from "0–50" to "More than 4000" (adapted from Dunbar, 2016; Ellison et al, 2007), while the percentage of genuine friends was indicated by responding on a slider bar from 0 to 100% (Dunbar, 2016).

In addition, the questionnaire comprised background questions such as gender, age, and main occupation. Respondents were also asked specifically if their main job is travel blogging. For comparison purposes, we also assessed respondents' perceived travel experience with three items from Teichmann (2011), as well as asking how many new destinations they visit annually during their trips (categories ranging from "No more than 2 new places per year" to "More than 30 new places per year").

3.2 Sample selection and data collection

Data were collected through an online survey using the software Qualtrics. Email invitations were sent to 721 travel bloggers all over the world using a purposive sampling strategy. Two screening questions at the beginning of the questionnaire were asked to make sure that all respondents were in fact travel bloggers, and that they used Facebook for their travel blogging. Upon closure of the survey, 110 responses had been received, equivalent to a response rate of 15.3%. Out of these, eight were removed after screening. An additional three responses were dropped due to missing values exceeding 15% (cf. Hair, Black, Babin, & Anderson, 2010), resulting in 99 useable responses for analysis. A few of these respondents had one or two missing values. As Little's MCAR test was non-significant (indicating missing

at random), the few instances of missing data in the quantitative variables were replaced using the expectation maximation (EM) method (Hair et al, 2010).

The retained responses covered travel bloggers from 33 different countries. All continents except Africa were represented. The country with the highest number of respondents was the US (11), followed by the UK (6), Switzerland (6), and Italy (6). Two-thirds (65.7%) of the respondents were females and the median age of the sample was 35 years. Almost half (46.5%) of the sample was younger than 40 years. More than half (54.7%) had travel blogging as their main occupation. As could be expected, the respondents overall were experienced travelers, with 51.5% indicating that they generally visit up to ten new places per year. An additional 28% answered that they visit 11–20 new places annually.

When it comes to the general social media usage variables, 61.6% of the respondents indicated they had more than 500 friends on Facebook; the most common response category being 501-1000. On average, they perceived 30.3% of all their Facebook friends to be "real", genuine friends.

To test for non-response bias, we divided the sample into earlier and later respondents (the first 49 vs. the last 50 responses) and then compared demographics, travel, and Facebook use variables between these two groups (Armstrong & Overton, 1977). The independent samples t-tests, median tests, and Chi-square tests conducted on these variables did not indicate any significant differences between early and late respondents.

3.3 Validity and reliability

Before proceeding to test the hypotheses, we assessed the quality of the data to be included in the model. Skewness and kurtosis values showed only slight deviations from normality (cf. Lei & Lomax, 2005), suggesting that appropriate multivariate analyses could be used. To check the dimensionality of the two-dimensional SCO construct, we first ran a principal components

analysis with Oblimin rotation. After dropping item SCO11 in the Opinions factor due to very weak factor loading, the factor solution represented the theoretical Ability (six items) and Opinions (four items) dimensions, accounting for 36.6% and 25.5%, respectively, of the total variance. The KMO value was .809 (p<.001).

Next, we ran a confirmatory factor analysis in Amos 25 to assess all constructs in the model. As the dependent variable, i.e. SCF, was measured with a single item, we fixed the loading of the observed variable to .90 and the variance of the error term to .10, corresponding to a reliability of .95 (Anderson & Gerbing, 1988; Hair et al, 2010). After checking factor loadings (displayed in the Appendix), modification indexes, and standardized residual covariances, we concluded that all items could be retained. Discriminant validity was assessed by checking that the correlation between each pair of constructs was lower than the square root of the average variance extracted (AVE) for both constructs and that all AVE values were at least .50 (Fornell & Larcker, 1981). Composite reliability and Cronbach's alpha were well over the threshold of .70 for all constructs, indicating internal consistency (Hair et al, 2010). Inter-construct correlations, AVE and reliability measures are displayed in Table 1.

INSERT TABLE 1 ABOUT HERE

Finally, in order to test for problematic levels of common method variance, fit statistics of the measurement model were compared to the fit of a single-factor model (Boyer & Hult, 2005). Running the model with all items loading on one factor resulted in very poor fit, with a χ^2 of 504.227 (77 df); i.e. χ^2/df = 6.548. In comparison, the measurement model had a χ^2 of 89.902 (72 df) at p =.075; that is, χ^2/df = 1.249. Gaskin's Chi-square test (Gaskin, 2020) showed that the difference between the one-factor model and the measurement model was significant, which suggests that common method bias is not a major concern in this study. Other model fit

indexes were also at acceptable levels (CFI = .971, standardized RMR = .0623, RMSEA = .050 and non-significant), indicating sufficient fit between the measurement model and sample data (Byrne 2001).

4. Results

4.1 Hypothesis tests

After validation of the constructs, we proceeded to test the hypotheses. Considering that our model includes only one dependent variable—i.e., SCF—and that structural equation modeling generally requires larger samples, multiple linear regression analysis was used. As we wanted to control for social media use variables, we employed a hierarchical regression method.

First, the internal consistency of the multi-item social media use intensity scale was checked, which led to dropping item 1. A summated average factor score was computed for the remaining five items in the construct. Then, the three control variables—social media use intensity, number of friends in social media, and percentage of genuine friends in social media—were added to the regression function at step 1. The second step included the three main independent constructs of the hypothesized model: SCO—Ability, SCO—Opinions, and opinion leadership. Inspection of residuals statistics and plots did not indicate any violations of the underlying assumptions of normality, linearity, and homoscedasticity (Pallant, 2016). All tolerance values were higher than .80; i.e. well over the cut-off of .10, suggesting no major multicollinearity between the variables (Hair et al, 2010; Pallant, 2016).

Regression results show that the social media use variables explained 10.5% of the variance in SCF. When adding the three main variables, the total variance explained increased to 40.2% (F = 10.327, p<.001). That is, the hypothesized independent constructs explained an additional 30% of SCF after controlling for social media use intensity, number of friends in

social media, and percentage of genuine friends in social media (R^2 change = .298, F change = 15.288, p<.001).

In the final model, none of the control variables was statistically significant. There was a strongly positive and statistically significant relationship (β = .563, p<.001) between the Ability dimension of SCO and SCF on Facebook, thus supporting H1a. However, the Opinions dimension of SCO was negatively and non-significantly related to SCF (β = –.118, p = .178), which means that H1b is rejected. On the other hand, a paired-samples t-test shows that the mean value is significantly higher (t = 9.941, p<.001) for the Opinions dimension (4.83) than for the Ability dimension (3.42). These results suggest that the overall tendency for travel bloggers to compare with others what one "should" think or feel (Opinions) is stronger than the tendency to compare in terms of how one is doing or performing (Ability). At the same time, the Ability aspect of SCO tends to drive comparison behavior in social media, while the Opinions aspect does not.

Finally, in line with H2, opinion leadership in social media was found to be significantly related to SCF on a moderately strong level (β = .198, p = .022). Results of the hypothesis tests, including the regression coefficients (*Betas*) and R^2, are displayed in Figure 2.

INSERT FIGURE 2 ABOUT HERE

4.3 Professional vs. non-professional travel bloggers

To further explore social comparison and social media behavior among travel bloggers, we compared the professional travel bloggers—i.e., respondents whose main occupation is travel blogging—to the non-professional ones. Results of the independent samples *t*-tests, as displayed in Table 2, show that the professional travel bloggers in the sample were more experienced travellers and visit more new places per year. There was also a tendency for

professional travel bloggers to perceive themselves as opinion leaders to a somewhat higher extent, but this difference was only significant if a higher level of α is accepted, as $p = .074$.

Non-professional travel bloggers, on the other hand, had a considerably higher SCF and thus tend to compare themselves with others on social media more often. They also had a stronger SCO in terms of the Ability dimension than professional travel bloggers, while there was no difference in the Opinions dimension. Social media use intensity, number of social media friends, and share of genuine friends did not differ between professional and non-professional travel bloggers. That is, similar to the regression results, the general social media use variables did not contribute to explaining travel bloggers' behavior.

INSERT TABLE 2 ABOUT HERE

5. Research contributions and managerial implications

5.1 Research and theoretical contributions

This research has made several key contributions to the research stream revolving around SMIs (Audrezet et al, 2018; Freberg et al, 2011). First, we move beyond conceptual approaches to consumers' perceptions of SMIs (Audrezet et al, 2018; Freberg et al, 2011; Hughes et al, 2019; Lou & Yuan, 2019) and more specifically look at how SMIs perceive each other. Second, while recognizing that competition between SMIs is becoming progressively more intense (Barker, 2018), we suggest that SMI studies should embrace theories that reveal how SMIs compare (competitively) with each other; one of these theories is the social comparison theory (Festinger, 1954). Third, this is also the first study to conceptualize and test how SCO (Festinger, 1954), opinion leadership (Rogers & Cartano, 1962), and social media use (Ellison, Steinfield, & Lampe, 2007) drive SCF between SMIs.

Fourth, our findings seem to suggest that SCO in a social media context—which is a specific subset of an online context—cannot be considered as a monolithic dimension, but the

Ability and Opinion dimensions (Gibbons & Buunk, 1999) should be conceptualized and measured separately as they might influence the focal dependent variable differently. Interestingly, our study proposes that this holds not only for online consumers (Phua, Jin, & Kim, 2017; Shen, 2012), but also for users employing social media to intentionally share their (travel) experiences. Fifth, our study indicates that opinion leadership plays a critical role in affecting SCO; this result stems from an international sample, thus suggesting that beyond cultural differences (Chu, Chen, & Gan, 2020; Mariani, Di Fatta & Di Felice, 2019; Mariani & Prevoditeleva, 2019), the construct is a relevant predictor of SCO overall across multiple cultures. Sixth, unlike in other contexts where the phenomenon of influencer marketing is explicitly examined (e.g., De Veirman et al, 2017), our study offers evidence that the number of Facebook friends does not seem to make a real difference in travel blogging social comparison frequency.

Seventh, we contribute to the nascent literature on SMIs in T&T (Ge & Gretzel, 2018; Magno & Cassia, 2018; Xu & Pratt, 2018) by advancing a comprehensive conceptual and empirical understanding of the drivers of comparison across travel bloggers. This is distinctive as previous studies in tourism marketing only focused on opinion leadership framework, disregarding travel bloggers' perceptions of each other. Last, we significantly enrich the research stream on the use of social media in T&T contexts (e.g., Bilgihan et al, 2014; Leung et al, 2013) and suggest that SCO and opinion leadership should be constructs to embed in model specifications when analyzing the online behavior of travel influencers.

5.2 Managerial implications

Our findings generate a rich set of practical and managerial implications. First, as competition among travel bloggers intensifies (Barker, 2018), SMIs in T&T should develop an awareness that they should position themselves in the blogosphere vis-à-vis other travel

bloggers. This implies also analyzing their peers and understanding strengths and weaknesses in relation to the specific social media technology (Prasad, 2018) and their ability to create distinctive content. Second, both professional and non-professional travel bloggers' SCF is positively influenced by the Ability dimension of SCO. Therefore, digital entrepreneurs (Mariani & Borghi, 2019; Nambisan, 2017) should be encouraged to develop software applications and digital platforms allowing travel bloggers to benchmark themselves with other travel bloggers, as it seems that the frequency of comparison is significantly dependent on relative performance. Third, and related to the previous point, as non-professional travel bloggers tend to compare themselves with others on Facebook more often and display a stronger SCO in terms of the Ability dimension than professional travel bloggers, platform managers should offer benchmarking services by developing a freemium business model (Kumar, 2014); this would allow the non-professional segment to still access benchmarking systems despite the potential absence of a dedicated budget for such services.

Fourth, the social medium itself (i.e., Facebook) might expand its data analytics offering by developing further data analytics (Davenport, 2017; Gandomi & Haider, 2015), allowing travel bloggers leveraging Facebook (especially the professional ones, doing it for a living) to monitor their performance over time (for instance in terms of engagement) and enhance their business intelligence and competitiveness (Fosso Wamba et al, 2017; Mariani, Baggio, Fuchs & Höpken, 2018; Mariani, 2019).

Fifth, travel bloggers (especially professional ones) should use Facebook in an increasingly strategic way to augment their visibility as this might lead both travel companies and brands and destination marketers (Mariani, 2020; Morrison, 2018) to hire travel bloggers to increase engagement with tourism destinations (Mariani et al, 2016, Mariani, Baggio, Fuchs & Höpken, 2018) as well as with travel brands (Harrigan, Evers, Miles, & Daly, 2018) and, more generally, T&T firms. Sixth, and related to the previous point, since tourism destinations

are fundamentally networks of interlinked economic and social individual and organizational actors (Baggio, 2008; Mariani & Baggio, 2020) and seem to display some universal traits that can help design better services for travellers (Baggio, 2020), travel bloggers might be deployed by destination marketers as collaborators (Mariani, Baggio, Buhalis & Longhi, 2014) not only to communicate more effectively the destination, but also to develop more appealing tourism products and services.

Finally, while travel restrictions have made the less visible travel bloggers less critical for travel decision making (Sands, 2020), it also means that the travel blogging sphere will become even more competitive and comparison frequency will perhaps exacerbate. Accordingly, travel bloggers (especially the professional ones) should invest more in benchmarking tools.

6. Conclusion

The findings cannot be generalized to all international travel bloggers, but as indicated above, there are several managerial implications in relation to the way professional travel bloggers tend to perceive colleagues and the way they compare with them. It seems that social media is deployed in a rather strategic way by travel bloggers who try to enhance the visibility of themselves and their blogs vis-à-vis international competitors. Results indicate that the more travel bloggers perceive themselves as opinion leaders, the more likely they are to engage in social comparison on social media. Furthermore, the two main aspects of SCO tend to influence travel bloggers' comparison behavior in different ways. The Ability dimension of SCO reflects comparisons in terms of how one is doing relative to others, whereas the Opinions dimension, which was not significant in this study, reflects what one "should" think or feel.

While the tendency to compare opinions and ideas is generally stronger than the Ability type of comparison among both professional and non-professional travel bloggers, it does not lead to higher SCF in social media. This suggests that such comparisons primarily take place

elsewhere, such as in discussions with family and friends. Thus, our findings imply that travel bloggers primarily compare themselves to others in order to learn more about their own abilities and thereby improve how they work with social media.

6.1 Limitations and suggestions for future research

This study was conducted online on an international sample of influential travel bloggers from a wide variety of countries. This allowed to cover somehow travel bloggers' different cultural backgrounds. However, the sample size was relatively small, which limited the possibilities for more advanced statistical analysis methods such as structural equation modeling. Thus, it might be interesting to send out more questionnaires to increase the number of respondents. A larger sample would open up for examining inter-relationships between the explanatory variables. For instance, opinion leadership might influence the Opinions dimension of the SCO. Other functional relationships could also be tested; for example, age might influence the SCF negatively.

The fact that a non-probability sampling method was used means that the results cannot be generalized to the population of international travel bloggers. Rather, the findings should be seen as a first step towards shedding some light on the social comparison phenomenon among individuals who share the same interest but who display it at different levels of professionalism. A larger-scale survey or experimental design could be conducted to take the results of this study further. Moreover, big data analytics derived from travel blogs and other content posted online by travel bloggers might reveal interesting insights that might be juxtaposed to the findings of this analysis.

The chosen setting for the study was Facebook, which continues to be the dominating social media platform in many parts of the world. However, further research could look into how travel bloggers compare themselves socially with others on different platforms, such as

Instagram (whose parent company is still Facebook), Snapchat or YouTube. It would be interesting to study if they feel and behave differently depending on the specific channel in which they post their content, or the submission device deployed to post content (Mariani, Borghi & Gretzel, 2019). Finally, as SCF might generate both positive and negative feelings, including anxiety and envy (Krasnova, Widjaja, Buxmann, Wenninger, & Benbasat, 2015), future research might examine to what extent increased SCF might be conducive to different feelings among travel bloggers.

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Table 1. Reliability, AVE, and correlation matrix

	α	**CR**	**AVE**	**SCF**	**SCO-AB**	**SCO-OP**	**OL**
Social Comparison Frequency (SCF)	N/A	.962	.962	**.981**			
Social Comparison Orientation—Ability (SCO-AB)	.863	.869	.536	.635**	**.732**		
Social Comparison Orientation—Opinions (SCO-OP)	.806	.792	.508	.056^{ns}	.379*	**.713**	
Opinion Leadership (OL)	.859	.864	.680	.254*	.089^{ns}	-.069^{ns}	**.825**

Notes: CR = composite reliability. Square root of AVE on diagonal (in bold).

**) $p<.001$, *) $p<.05$, ^{ns}) non-significant ($p>.05$)

Table 2. Professional vs. non-professional travel bloggers (*t*-tests)

Variable*	Travel blogging main occupation	Mean	*t*	*p* (two-tailed)
Social comparison frequency	Yes	3.69	3.340	*.001*
	No	4.77		
Social comparison orientation—Ability	Yes	3.15	2.193	*.031*
	No	3.73		
Social comparison orientation—Opinions	Yes	4.93	.515	.607
	No	4.81		
Opinion leadership	Yes	5.34	1.804	.074
	No	4.82		
Facebook use intensity	Yes	5.01	.541	.590
	No	5.85		
No. of Facebook friends (11 response categories)	Yes	6.90	1.144	.256
	No	6.40		
Percentage genuine friends (0–100)	Yes	30.35	.056	.956
	No	30.09		
Travel experience	Yes	6.38	2.289	*.024*
	No	5.94		
No. of new places/year (6 response categories)	Yes	3.92	2.601	*.011*
	No	3.21		

*) All variables measured on 7-point scales except where otherwise indicated.

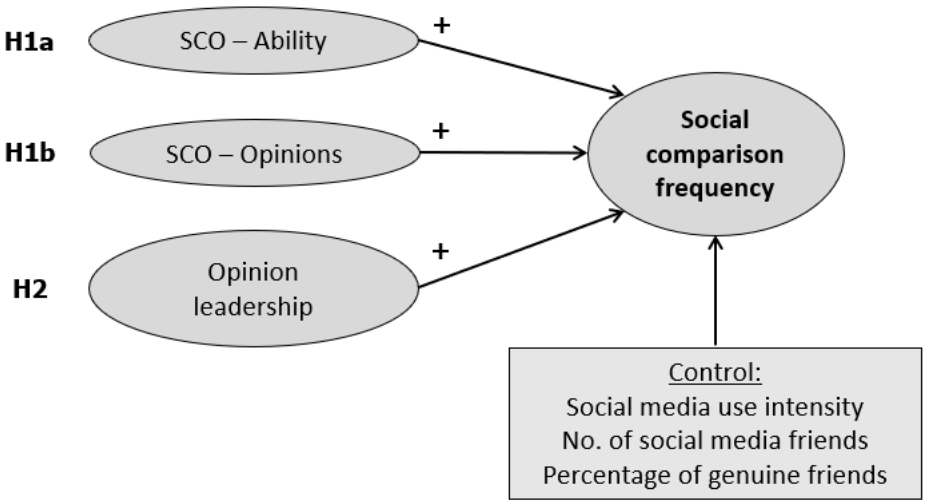
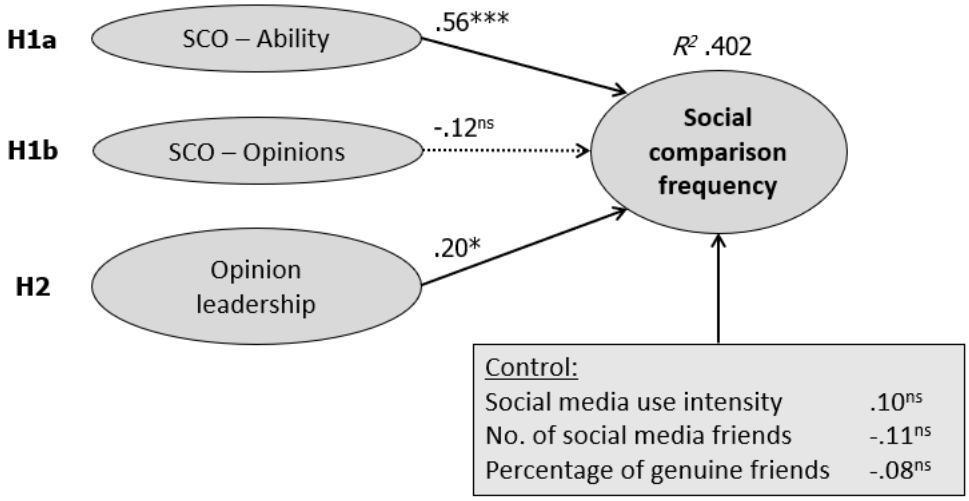


Figure 1. Conceptual model



Note: ***) $p<.001$, **) $p<.01$, *) $p<.05$, ns) non-significant ($p>.05$)

Figure 2. Results of hypotheses tests (regression analyses)

Appendix

Items in model

SCF: Social comparison frequency (Buunk et al, 2005; Lee, 2014)

How often do you compare yourself with others on Facebook when you are reading news feeds or checking out others' photos? (.981)

(1 = Never to 7 = Very often)

SCO: Social comparison orientation (Gibbons & Buunk, 1999; Lee, 2014)

Most people compare themselves from time to time with others. There is nothing particularly "good" or "bad" about this type of comparison, and some people do it more than others. We would like you to indicate how often you compare yourself with other people, by marking the extent to which you agree or disagree with each of the statements below.

Ability

1. I often compare how my loved ones (partner, family members, etc.) are doing with how others are doing (.739)
2. I always pay a lot of attention to how I do things compared with how others do things (.874)
3. If I want to find out how well I have done something, I compare what I have done with how others have done (.843)
4. I often compare how I am doing socially (e.g., social skills, popularity) with other people (.822)
5. I am not the type of person who compares often with others (Reversed) (.507)

6. I often compare myself with others with respect to what I have accomplished in life (.512)

Opinions

7. I often like to talk with others about mutual opinions and experiences (.453)
8. I often try to find out what others think who face similar problems as I face (.689)
9. I always like to know what others in a similar situation would do (.919)
10. If I want to learn more about something, I try to find out what others think about it (.748)
11. I never consider my situation in life relative to that of other people (Reversed)*

(1 = Strongly disagree to 7 = Strongly agree)

OL: Opinion leadership in social media (Eastman et al, 2014; Flynn et al, 1996)

1. My Facebook fans often choose destinations based on what I have told them on my Facebook page (.813)
2. I often persuade my fans on Facebook to travel to places I like (.793)
3. On my Facebook page, I often influence my fans' opinions about destinations (.865)

(1 = Strongly disagree to 7 = Strongly agree)

Factor loadings from confirmatory factor analysis in parentheses (all loadings significant at $p<.001$).

*) Item removed during measurement validation.

Control variables

Social media use intensity (Ellison et al, 2007; Lee, 2014)

1. Facebook is part of my everyday activity*
2. I am proud to tell people I'm on Facebook
3. Facebook has become part of my daily routine
4. I feel out of touch when I haven't logged onto Facebook for a while
5. I feel I am part of the Facebook community
6. I would be sorry if Facebook shut down

(1 = Strongly disagree to 7 = Strongly agree)

Number of Facebook friends (adapted from Dunbar, 2016; Ellison et al, 2007)

How many friends do you currently have on Facebook?

- 0–50
- 51–100
- 101–200
- 201–300
- 301–400
- 401–500
- 501–1000
- 1001–2000
- 2001–3000
- 3001–4000
- More than 4000

Percentage of genuine Facebook friends (Dunbar, 2016)

What percentage of your Facebook friends do you actually consider really genuine friends?

(Answer on slider bar 0–100%)

*) Item removed during measurement validation.