The Impact of Credibility Attributes on Consumer Intention to Adopt Information on Social Networking Sites: Application to Tourism Services

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ABSTRACT

This study examines the effect of consumers’ perceived credibility of information on SNS on their attitude and intention to adopt this information in the Arab world. The study adopted a quantitative research approach using a survey questionnaire conducted among 317 individuals. Structural equation modelling was conducted. The results highlighted that there are positive direct effects of authority cues, expertise, trustworthiness, social identity, and argument strength on perceived credibility. Although both authority cues and transparency have non-significant direct effects on perceived credibility, they have positive direct effects on attitude and indirect effects on intention via attitude. Finally, the positive impact of credibility on intention is mediated by attitude. This study contributes to the literature on the credibility of information on SNS and its effect on consumer intention to adopt it.

KEYWORDS

Credibility Attributes, Intention to Adopt Information on SNS, Social Networking Sites (SNS), Tourism Services

INTRODUCTION

Social media plays a critical role for both travelers and tourism companies (Chung & Buhalis, 2008; Ye, Fong, & Luo, 2021). Instead of resorting to official company websites, consumers are increasingly turning to social networking sites (SNS) pages to search for any relevant information, including travel-related tips (Mehraliyev, Choi, King, 2021). Nowadays, suggestions from friends and family, online recommendations, as well as online comments influence travelers’ decisions for planning for a trip (Berhanu & Raj, 2020). SNS allow travelers to share their experiences and ideas with others. SNS provide easily accessible forums on which travelers may share their personal information, experiences and ideas with others and leave their comments, reviews, opinions and suggestions about airlines, hotels or restaurants (Hur, Kim, Karatepe & Lee, 2017). As information from SNS comes from a large number of users every day, it can be difficult to quickly differentiate reality from fiction or actual news from mere opinions (Johnson & Kaye, 2014). According to Sunny Tsai and Rita Men...
(2013), to support consumers’ engagement with SNS, the credibility of information provided by both brand developers and consumers on SNS pages is an essential element for establishing trusting relationships with consumers (Pop, Săplăcan, Dabija, & Alt, 2021). Similar findings regarding trust in news in social media were also reported recently (Karlsen & Aalberg, 2021). Perceived online credibility is defined as the extent to which one perceives information to be believable and this is considered as a strong predictor of consumer’s further action (Li & Suh, 2015) and decision making (Alrubaiian, Al-Qurishi, Alamri, Al-Rahami, Hassan, & Fortino, 2018). Prior research has reported how to judge the information credibility on traditional media or websites (Metzger & Flanagin, 2013). However, information on social media platforms suffers from a lack of professional gatekeepers who can monitor content (Li & Suh, 2015), leading to the presence of some fake news in social media (Abdallah, 2021). It is not unusual to find unverified or false information flow on social media (Di Domenico, Sit, Ishizaka, & Nunan, 2021). In this situation, online consumers are forced to look for new ways to evaluate the credible information.

Although past research has examined the use of social media for travel-related purposes (Varkaris & Neuhofer, 2017; Rahman, Sharmin & Akhter, 2021), scant attention has been paid to how perceived credibility of information on SNS influences consumers’ intention to adopt such information in purchasing decisions, specifically in the hospitality marketplace (Li & Suh, 2015). Since consumers can access services indirectly and form a degree of trust of a service provider through online interactions with both a company and other customers (Daugherty, Eastin & Bright, 2013), it is expected that SNS can also play a vital role in consumers’ intentions to adopt and act on information on SNS. Although previous research has attempted to investigate antecedents that drive consumers to visit or follow SNS information (Daugherty et al., 2013), more research on a larger and more diverse sample which is applicable to a variety of SNS is needed to aid understanding of consumers’ perceived credibility of information concerning SNS and how this affects their intention to adopt it (Li & Suh, 2015).

Importantly, Aluri et al., (2016) argued that despite the popularity of social media usage by travel services, companies still wonder whether social media channels truly enhance the overall experience of travelers, particularly their intention to adopt information on SNS. Research on the perceived credibility of information on SNS is still not very clear or well established, and future research is still needed (Alkhamees et al., 2021). Johnson and Kaye (2014) found that SNS was ranked as less credible than traditional and other online sources of information. Johnson and Kaye (2014) recommended that more research should be conducted to examine the relationship between SNS credibility and the intention to adopt information on SNS for purchasing decisions. This is especially important because according to Inversini and Masiero (2014) and Ayeh, Au and Law (2013), describing and explaining the role of social media in the tourism and travel industry involves cultural elements. Accordingly, further research on a variety of customer attributes is needed in order to increase our understanding of the impact of the perceived credibility of information on SNS on purchasing in tourism services (Song & Yoo, 2016).

Tourism SNS and Credibility

Recently, social media has become an effective channel for the marketing of tourism services (Zeng & Gerritsen, 2014; Hysa, Karasek, & Zdonek, 2021; Mehraliyev et al., 2021). Reports showed that there are 4.38 billion internet users, including 3.48 billion active social media users (Global Web of index, 2019). This may be because tourism customers have become more active and information shared in social media considerably reduces the burden of their decision-making process (Icoz, Kutuk & Icoz, 2018). The Forbes (2017) report highlights that social networking sites have gained remarkable popularity especially among the younger generation of people because they can share pictures, videos and stories. As the travel planning process frequently entails high level of uncertainty due to the characteristics of tourism, the availability of online travel information that can be accessed anytime and anywhere has become increasingly important in order to optimise travel plans (Xiang & Gretzel, 2010, Hsu & Cox, Burgess, Sellitto, & Buultjens, 2009).
The issue of credibility of online travel information sources continued to be arguable among scholars (Kol et al., 2021). Scholars have not reached a consensus regarding the credibility of tourism applications (Munar & Jacobsen, 2014). Some scholars highlighted that information on tourism applications are credible (Cantallops & Salvi, 2014; Fotis, Buhalis & Rossides, 2012). Consumers trust comments from other travellers on social media prior to their consumption and consider it to be more trustworthy than any information provided by official tourism websites or travel agents as these comments are not intended for commercial purposes (Cantallops & Salvi, 2014; Ye, Law, & Chen, 2011). Furthermore, several methods are being used by several social media websites in order to investigate trustworthiness of reviews (Zelenka et al., 2021). In agreement with this view, Sigala et al. (2012) confirmed that social media represents a key source for potential travellers to understand previous travellers’ experiences about destinations, facilities and restaurants (for discussion, see Shankar, 2021). For example, more than 74% of customers use the comments of other consumers on SNS as information sources when planning leisure trips (e.g. choosing a hotel or a restaurant). However, on the other hand, others considered information on tourism SNS as less credible (Tham et al., 2013; Yoo et al., 2009; Zelenka, Azubuike, & Pásková, 2021). Some highlighted that as social media comprises a great deal of user-generated information, users may not consider it as credible source of information (Cox et al., 2009; Fotis et al., 2012).

THEORETICAL FOUNDATION

The current research model for this study was built on the elaboration likelihood model (ELM) developed by Petty and Cacioppo (1986). Although ELM was originally applied to consumer behaviour before the advent of the Internet, it has been employed in different online contexts (Cyr, Head, Lim Stribe, 2018) and specifically for online reviews and to analyse consumer behaviour (Shahab, Ghazali, & Mohtar, 2021). The elaboration likelihood model (ELM) is an information processing theory (Petty & Cacioppo, 1986) that provides a theoretical framework for understanding how people process messages that are intended to be persuasive. According to ELM, there are two major routes by which persuasive messages can be processed: the central and peripheral route. If information recipients view a given message as being important and relevant to the target behaviour, they will carefully consider the issues presented in the message and evaluate the merits of the arguments. Under these circumstances, the recipient will undergo further cognitive processing and exert more effort to evaluate a message. On the other hand, people do not always elaborate on a message’s arguments. If they view a message as having little personal relevance, they may not be willing to spend the time and effort in analysing it, but they may rely on what ELM refers to as peripheral cues (Petty & Cacioppo, 1986).

As a central cue, quality and merits of the message presented determines one’s attitude towards that message (Petty & Cacioppo, 1986; Chaiken, 1980). Thus, in the context of SNS reviews, it is expected that a review with a stronger message credibility should be perceived as more credible. Unlike central cues, the peripheral route requires less cognitive work. People use simple heuristic cues or informational indicators, such as source credibility, to assess the believability of a message. Peripheral cues are contextually oriented towards the source environment rather than the credibility of the message. Theoretically, people may elaborate a message purely through either the central or peripheral route. For example, social media users who search travel information with high involvement conditions prioritise the central route and critically consider several online reviews (Park, Lee & Han, 2007), while they make judgments using simple peripheral cues under low involvement conditions (Tang, Jang & Morrison, 2012). However, in practice, people elaborate a message at a moderate level employing both routes or may shift processing from the heuristic mode to systematic processing (Oinas-Kukkonen & Harjumaa, 2009).

Based on prior discussion, evaluation of the credibility of information on SNS is expected to be affected not only by central, but also, peripheral cues. Consumers tend to make judgments about the credibility of the information on SNS as well as the credibility of the source prior to deciding to adopt this information (Li & Suh, 2015).
Measures and Hypotheses

Source Dependency

As consumers increasingly rely on social media as one of their main sources of information (Berhanu & Raj, 2020), source dependency has been included in this study to establish the effect of SNS dependency on consumers’ perceptions of SNS information credibility, which may affect their attitude and intention to adopt this information. SNS dependency is included in this study due to users’ tendency to depend on SNSs to gain social relationships, information and knowledge acquisition (Ha et al., 2015). According to Johnson and Kaye (2014) dependence on social media is a strong predictor of judgments of high credibility. Johnson and Kaye (2014) found that dependence is a significant indicator of online credibility because the more familiarity users have with a specific media source, the more their ability is to judge its credibility. Recently, Hassan (2020) found that credibility is correlated with dependence on social media sources in Iraq. Social media dependency is important for practitioners and organisations as it allows behaviours that were now possible before the advent of such tools, including visibility, persistence, editability, and association (Treem & Leonardi, 2013). The following hypothesis is therefore proposed:

H1a. Perceived dependency has a positive impact on perceived credibility.

Authority Cues (AC)

According to Sundar (2008), authority cues serve as “a major criterion for assigning credibility to a website” by assessing “whether the source is an official authority or not” (p. 84).

Koh and Sundar (2010) found that information from more authoritative sources was found to have significantly higher trust ratings. According to Lin, Spence and Lachlan (2016) and Westerman, Spence and Heide (2014), individuals have more trust in medical experts or officials, such as tweets from the American Heart Association. As uncertainty is very high on SNS and in many cases, consumers could not guarantee the consistency of peer cues of other consumers, authority cues influenced consumers’ decisions (Sundar, Xu, & Oeldorf-Hirsch, 2009). Further, more recent studies have shown that authority cues increase creditability in social media (Lin et al., 2016; Lin & Spence, 2018; Conrad, Leidner, & Schilder, 2008). Accordingly, the following hypothesis is proposed:

H1b. Perceived authority cues have a positive impact on perceived credibility.

Homophily

Humans have a natural need to engage with others who share their way of thinking and interests (McPherson et al., 2001). As social media helps gather people of similar interests together, it encourages the need for homophily (Kang and Chung, 2017; Gu et al., 2014), although other studies have reported different results (Bisgin, Agarwal, & Xu, 2012). According to social identity theory (Ashforth and Mael, 1989), a person’s demographic attributes have important influence on others’ evaluations about this person (Huang and Kwok, 2013). Reviewers’ demographic characteristics of reviewers (such as age or gender) or beliefs and attitudes are expected to have significant impacts on the extent to which others perceive the credibility of reviews. Due to the anonymous nature of the online environment, consumers consider it challenging to determine the credibility of information provided in online reviews as well as the intentions of the information provider (Racherla, Mandviwalla & Connolly, 2012). Wei and Liu (2020) highlighted that homophily fosters users’ positive judgements towards similar rather than dissimilar ones (also see Trandoc, 2019). Liu and Park (2015) argued that people consider information as believable if it matches their views, and not believable if it is contradictory to their beliefs, regardless of how this information is well argued or properly sourced.
Organisations and practitioners should rely on data on homophily by highlighting comments and feedback by existing consumers who show similar traits to potential consumers. In other words, personalised marketing techniques by organisations and practitioners should rely on findings on the impact of homophily on credibility. The following hypothesis is therefore proposed:

H1c. Perceived homophily has a positive impact on perceived credibility.

Social Identity
According to social identity theory, people may decrease uncertainty by communicating with others who share similar social identity (Tajfel & Turner, 1979). Supporting this proposition, Jahng and Litthau (2016) have found that in online communities, disclosure of users’ profile characteristics such as individual identification (demographics and lifestyle), geographical location, and real name of the reviewer rather than a nickname or screen name have an impact on credibility perceptions. Liu and Park (2015) found that reviewers with a real photo, name, and address are rated more believable than others (for similar results, also see Lee & Shin, 2014). Cyr et al. (2018) considered perceived social presence to be a major effect on online consumers’ trust. Recently, Cooley and Parks-Yancy (2019) found that people find reviews by people they know to be more credible.

In the tourism industry, the presence of distinguishable reviewer information such as name and gender improves the perceived credibility of online hotel reviews (Hlee et al., 2018), which amplifies their persuasion and consumers’ intention to adopt them (Xie et al., 2011). Like homophily, organisations and practitioners should reveal social identities to increase credibility in online consumers. The following hypothesis is therefore proposed:

H1d. Perceived social identity has a positive impact on perceived credibility.

Source Transparency
Watts and Wyner (2011) asserted that source transparency is the degree to which users can validate the information provided by a source, which in turn increases their perceptions of the information and source credibility. There have several studies in the relationship between source transparency and credibility in online news (Masullo, Curry, Whipple, & Murray, 2021; Curry & Stroud, 2021). Porumbescu (2015) confirmed that one of the most important aspects of online transparency is that information presented should be current, understandable and accessible by online users. Some researchers have suggested that SNS users consider social media as credible as they are independent from media control, which allows users to write in-depth reviews in an open, interactive and transparent way (Arshad & Khurram, 2020; Song & Lee, 2015; Yang & Lim, 2009). This ultimately leads to developing users’ trust (Park et al., 2015). Furthermore, Masullo, Curry, Whipple, and Murray (2021) argued that organisations should capitalise on source transparency to increase consumer credibility, although this was not conducted in practice yet. The following hypothesis is therefore proposed:

H1e. Perceived transparency has a positive impact on perceived credibility.

Perceived Expertise
As mentioned earlier, perceived credibility is based on two main factors: trustworthiness and expertise. Perceived expertise is commonly cited as one of the critical factors of perceived credibility (Hovland, Janis & Kelley, 1953). Expertise incorporates whether a source is both qualified and is presenting relevant, accurate information (Hovland et al., 1953), knowledgeable, skilled and competent (Fogg et al., 2002). A message can be considered expert when the source enables easy engagement for both experienced users and beginners (Guido, Prete & Sammarco, 2010). More recent studies in different
contexts, including tourism and online healthcare, have also emphasised the substantial effects of source trustworthiness on various consumers’ attitudes, information adoption intentions (Balouchi, et al., 2017; Ayeh et al., 2013; Thon & Jucks, 2017; Thomas et al., 2019; Lo & Yao, 2019). Perceived expertise is important for organisations as it allows for increased visibility (Treem & Leonardi, 2013), although to our knowledge, this was not incorporated in practice. The following hypothesis is therefore proposed:

H1f. Perceived expertise has a positive impact on perceived credibility.

**Perceived Trustworthiness**

Ohanian (1991, p. 47) defines trustworthiness as a “consumer’s confidence in the source for providing information in an objective and honest manner.” A message displays signs of trustworthiness when it gives users an easy and direct idea of the source content and purpose and presents facts in a confident and transparent way (Guido et al., 2010). Low perceptions of the trustworthiness of online information have been considered as a main obstacle to consumers’ intentions to embrace this information (Ayeh et al., 2013; Filieri, 2015; Machackova & Smahel, 2018; Mumuni, O’Reilly, MacMillan, Cowley, & Kelley, 2020). Trustworthiness is critical as consumers usually agree that most online information is not trustworthy (Elsantil, 2020). In this regard, Hensel and Deis (2010) asserted that consumers should be careful when searching information and reading comments on social media sites because SNS users may post fake reviews. Trust is crucial for online tourism marketing as it enhances travellers’ intention to purchase (Li, Ong & Ito, 2020; Balouchi, et al. 2017). There is scarcity of studies that tested how organisations and practitioners may incorporate findings on the impact of perceived trustworthiness on credibility. However, Wiencierz, Pöppel, and Röttger, (2015) show that increasing perceived trustworthiness online that help bolster the reputation of the nonprofict organisations, although this was done in tourism organizations. The following hypothesis is therefore proposed:

H1g. Perceived trustworthiness has a positive impact on perceived credibility.

**Argument Strength**

Argument strength refers to the persuasive strength of arguments embedded in an informational message (Cheung, Sia & Kuan, 2012). Dillard and Shen’s (2005) highlighted that there is a strong probability that strong arguments containing real facts and information can reduce uncertainty and increase message credibility as compared to messages that ignore proof and logic (for similar argument, also see Thomas et al., 2019; Xiao, Wang, & Chan-Olmsted, 2018). In the case of SNS, reviews with relevant, persuasive and convincing claims are perceived to be more credible and have a positive effect on consumers’ intentions to adopt this information (Cheung et al., 2012; Lee & Shin, 2014). The manner in which a reviewer presents and describes the information in a review continues to impact other reviewers. Information available in a review helps consumers assess the characteristics of an information as well as the source of information (Racherla et al., 2012). Xu and Yao (2015) indicated that argument quality positively affect the consumers’ final decision of the adoption of online reviews. Further, Thomas et al. (2019) claimed that arguments can highlight argument strength in their online platforms in order to increase reputation (also see Bee & Dalakas, 2015). The following hypothesis is therefore proposed:

H1h. Perceived argument strength has a positive impact on perceived credibility.
Perceived Credibility

Credibility of SNS is a critical factor in creating trusting relationships with consumers. Credibility has been broadly examined in the marketing communication literature from both source and message aspects (Metzger & Flanagin, 2013). Previous studies demonstrated disagreement regarding the credibility of information on SNS and its impact on consumer behavior. Travelers may consider SNS as credible sources because posted information comes from other travelers, who are not considered to have any commercial interest. Others argue that any individual can post information on SNS, which may raise several uncertainties about the trustworthiness of social media (Go, You, Jung & Shim, 2016). The perceived credibility of online reviewers significantly influences consumers’ attitudes and intentions (Ayeh et al., 2013; Filieri, 2015). The research hypothesis supporting this proposed is as follows:

H2a. Perceived credibility has a positive direct effect on attitude towards information on SNS.

Attitudes Towards Adopting Information on SNS

Attitudes can be defined as an individual’s favorable or unfavorable feelings and evaluations about a particular behavior (Fishbein and Ajzen, 1975). The technology acceptance model, the theory of planned behaviour, and other social psychology theories recognise the role of attitudes in shaping behavioral intention. In many studies, attitudes have been considered as a mediator of the effect of consumers’ perceptions on behavioral intentions (Ajzen, 1991). Additionally, in the online context, attitudes are considered to be a major cause of the intention to accept online travel information (Casaló, Flavián & Guinalíu, 2010). Boateng and Okoe (2015) and Chu, Kamal and Kim (2013) have also shown that consumers’ attitudes toward social media influence their responses toward it. Positive consumers’ action, such as adopting information on social media, is the outcome of their attitude toward this information (Mir, 2012). The research hypotheses supporting this are proposed as follows:

H3a. Attitudes towards information have a positive direct effect on intention to adopt information on SNS.

H4a: Attitudes towards information mediate the relation between information credibility and intention to adopt information on SNS.

Intention to Adopt Information on SNS

Intention to adopt information on SNS to purchase tourism services is defined as the probability that consumers will use information on social media to purchase tourism-related services. SNS users are subjected to an overwhelming amount of electronic Word of Mouth (eWOM) information, which is found to be as influential on consumers’ decisions (See-To & Ho, 2014). Users perceive the trustworthiness of a source through message and source features which have been shown to have a great influence on their intention to adopt this information (Li and Zhan, 2011). Casaló et al. (2010) highlighted that consumers’ intention to use travel information on SNS is significantly affected by their attitudes.

Hypotheses Development

Based on the previous discussion, the anticipated relations of the consumer’s intention to adopt SNS information and the study hypotheses are presented in Figure 1.

Methodology

A quantitative research approach was utilized to validate the proposed framework. The questionnaire contained 50 statements measured on a five-point Likert scale ranging from 1 = strongly disagree...
to 5 = strongly agree. The questionnaire, distributed using Google forms via messages sent to the participants, entailed two sections: the first included participants’ demographic information, such as gender, age, qualifications and income. The second section included statements about each construct. The scales used to measure constructs were adapted from the following sources: homophily from Ayeh et al., (2013), information transparency and argument strength from Li and Suh (2015), authority cues from Choi, Hickerson & Kerstetter (2018), source dependency from Li and Suh (2015), perceived expertise and perceived trustworthiness from Balouchi et al. (2017), perceived credibility from Li and Suh (2015), attitude towards SNS use from Casaló et al. (2010) and Intention to adopt information on SNS from Balouchi et al. (2017).

Participants
A total of 318 individuals residing in different Arab countries completed the survey. The target population of the current study includes consumers who have used information from any SNS to collect travel information during the past two years. The majority (70.10%) of them were between 19 and 25 years old. Women comprised 63.2% of the sample. In terms of level of education, 16% of the participants attended high school, 62% held a bachelor’s degree, and 22% had completed a graduate degree. Furthermore, the family income was more than $5,000 per month in 25.00% of the sample; All respondents originated from Arab cultures such as Qatar, Egypt, Jourdan and other Arabic countries. There were no exclusions from the collected data.

Statistical Analysis and Results
The study utilized a two-phase approach (Hair et al., 2010) to analyze the conceptual framework by assessing a measurement model. Structural Equation Modeling (SEM) was then used to examine the hypotheses testing. Descriptive statistics and exploratory factor analyses were conducted using the statistical package SPSS, version 25.0 (IBM Corporation, Armonk, NY, USA). An exploratory factor analysis (EFA) was conducted for the measurement items of the pre-determined constructs. One item for each of homophily and dependency was deleted due to small values of their factor loadings and because it was recommended by reliability analysis. The EFA results for the remaining items showed that Kaiser-Meyer-Olkin (KMO) test = 0.92, and Barlett’s test of sphericity p value < 0.05, indicating that the correlation matrix is not an identity matrix and the items sufficiently relate to run a meaningful EFA. Communalities were also above a recommended cut point of 0.4, identifying that each item correlates adequately with all other items. The EFA results revealed that all items loaded on their designed factors, and factor loadings ranged from 0.65 to 0.94, averaging out to greater than 0.70 for each factor. With regard to the reliability test, all Cronbach’s alpha coefficients shown in Table 1 achieved the minimum criterion of 0.70, demonstrating satisfactory inter-item reliability.
A confirmatory factor analysis was used to confirm the factor structure extracted in the EFA and to evaluate the dimensionality of the study variables. Some correlations between error terms were incorporated into the confirmatory factor analysis as suggested by the modification indices, which yielded a significant improvement in the model’s goodness of fit. The measurement model, including all the first-order reflective constructs, was tested and the fit indices met the suggested thresholds revealing adequate goodness of fit: Chi-square (2405.514)/degrees of freedom (892) = 2.96, GFI (goodness-of-fit index) = 0.954, AGFI (adjusted goodness of fit index) = 0.915, CFI (incremental fit index) = 0.925, normal fit index (NFI) of 0.950, and RMSEA (root mean square error of approximation) = 0.073.

Factor scores were implemented and the correlations between them do not exceed 0.70 and are significant at the 0.05 and 0.01 levels (see Table 1). The reliability and convergent and discriminant validity of the measurement scales were assessed. The reliability was examined based on composite reliability (CR), whereas a construct is considered to have an adequate composite reliability if composite reliability is greater than 0.70. As shown in Table 1, all composite reliability values ranged from 0.71 to 0.92. In addition, discriminant validity was achieved as the inter-construct correlations did not exceed the square roots of AVE. Finally, all item loadings/standardized path coefficients were equal to or above a recommended cutoff value of 0.60, and the values of AVE were above 0.56, proposing convergent validity of the scales.

The structural model in Figure 1 was conducted to examine the potential relationships between the credibility attributes on customers’ attitudes and intention to adopt information on SNS. The Amos software (Arbuckle, Bennett & Speed, 2014) was used to conduct the SEM, estimate the parameters of the proposed structural model, and investigate its goodness of fit. The calculated modification indices recommended that direct effects of perceived source dependency, authority cues and source transparency on attitude towards SNS as well as a regression path between source dependency and intention would improve the goodness of fit of the proposed model in Figure 1. Therefore, regression paths that show these direct effects were successively incorporated into an adjusted model, as shown in Figure 2, and added to the tested hypotheses as H2b- H2d, and H3b.

The results shown in Table 2 revealed an adequate fit for the adjusted model shown in Figure 2, whereas the values of model fit indices meet the suggested thresholds and recommend an adequate goodness of fit for the developed structural model.

**Direct Effects**

The results shown in Table 3 are consistent with the hypotheses presented in Figure 2. These results reveal that H1a, H1d, and H1f-H1h are supported, indicating that participants’ level of perceived source dependency (b = 0.080, p = 0.047), social identity (b = 0.150, p < 0.01), expertise (b = 0.114, p = 0.023), trustworthiness (b = 0.416, p < 0.001), and argument strength (b = 0.141, p = 0.013) had positive significant direct effects on their perceived information credibility. However, H1b, H1c, and H1e were not supported, demonstrating that level of authority cues (b = 0.074, p > 0.05), homophily (b = - 0.044, p > 0.05), and source transparency (b = 0.038, p > 0.05) had insignificant direct effects on information credibility. On the other hand, H2a-H2d were supported, presenting that participants’ level of information credibility (b = 0.288, p < 0.01), source dependency (b= 0.322, p < 0.01), authority cues (b = 0.237, p < 0.01), and source transparency (b = 0.128, p = 0.045) had significant positive direct effects on consumers’ perceived level of attitude towards SNS. Furthermore, the results support H3a and H3b, specifying that attitude towards SNS (b = 0.128, p < 0.01) and degree of source dependency (b = 0.249, p < 0.01) had significant positive direct effects on intention to adopt information on SNS. The values of squared multiple correlations () in Table 3 demonstrate that the exogenous predictors of the endogenous factors: information credibility, attitude towards SNS and intention to purchase, explain 57.5%, 35.0% and 63.0%, of their variances, respectively.
Indirect effects (Test of Mediation)

The results shown in Table 4 show that H4a was supported, suggesting there were significant indirect effects (IE) of information credibility (IE = 0.196, p < 0.01) on consumers’ intention to adopt SNS. In other words, the consumers’ attitude mediates the relation between consumers’ information credibility and intention to adopt SNS.

In addition to H4a, the developed model allows us to test the added hypotheses H4b-H4e in Table 4. The results show that there were significant indirect effects of source dependency (IE = 0.219, p < 0.01), authority cues (IE = 0.161, p < 0.01) and source transparency (IE = 0.087, p = 0.047) on consumer intention, which were mediated by attitude. Furthermore, the indirect effect of source dependency (IE = 0.016, p = 0.031) expressed via credibility and attitude on consumers’ intention was statistically significant.

Discussion

The main purpose of this study was to examine the effect of consumers’ perceived credibility of information on SNS on consumers’ attitude and intention to adopt this information. Social media users employ specific cues when they evaluate perceived credibility online. Oinas-Kukkonen and

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<th>Table 1 Cronbach’s alpha, correlation coefficients, coverage reliability (CR), average variances extracted (AVE).</th>
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Notes: ns, correlation is insignificant. The diagonals represent the square root of average variance extracted (AVE) and the off diagonals represent the bivariate correlations among the constructs. *, **Significant at the 0.05 and 0.01 levels, respectively.
Harjumaa (2009) reported that users usually assess credibility via content. Similar findings were also reported among Polish and Dutch participants in that similar antecedents as ones used in the current study are also associated with perceived credibility (van Dam, 2013). However, users are also influenced by heuristics such as user names and message topics. As mentioned above, there is a gap in the literature regarding how social media influences consumers’ intentions to adopt information on SNS to purchase tourism services, specifically in the hospitality context (Varkaris & Neuhofer, 2017). The current study adds to the literature by investigating antecedents of perceived credibility that affect consumers’ perceptions of the credibility of information on SNS and their impact on consumers’ attitude and intention to use this information. Our study is the first to investigate the relationship between a large number of antecedents and perceived credibility in Arab context.

Overall, the findings of this study were sometimes consistent with and at other times contradictory to previous research. For instance, the current study suggests that consumers’ perceived credibility of information on SNS has an impact on their attitude and intention to adopt this information. The findings of the current study are consistent with previous research that social identity and argument strength have a significant effect on consumers’ perceived credibility, attitude and intention to adopt information on SNS. In line with findings by Kusumasondjaja, Shanka and Marchegiani (2012), the current study found that online reviews with an identified source are perceived to be more credible than reviews without an information source. Reviews by users who allow others to access their personal information, such as their name and photo, and allow others to visit their personal pages and see their posts are more credible and have a larger impact on consumers’ intention to adopt these reviews when purchasing tourism services. Importantly, one study confirmed the relationship

Table 2 Model goodness of fit criteria.

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<tr>
<th>Statistics</th>
<th>Suggested</th>
<th>Obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-square significance</td>
<td>&lt;0.05</td>
<td>0.00</td>
</tr>
<tr>
<td>Goodness of fit index (GFI)</td>
<td>&lt;0.90</td>
<td>0.983</td>
</tr>
<tr>
<td>Adjusted goodness of fit index (AGFI)</td>
<td>&lt;0.80</td>
<td>0.911</td>
</tr>
<tr>
<td>Comparative fit index (CFI)</td>
<td>&lt;0.90</td>
<td>0.980</td>
</tr>
<tr>
<td>Normal fit index (NFI)</td>
<td>&lt;0.90</td>
<td>0.913</td>
</tr>
<tr>
<td>Root mean square residuals (RMSEA)</td>
<td>&gt;0.08</td>
<td>0.068</td>
</tr>
</tbody>
</table>
between trust and credibility in participants from 31 different countries, vacationing in Indonesia (Kusumasondjaja, Shanka, & Marchegiani, 2011). They have found that revealing social identity of person writing a review is associated with more credibility. In addition, the current study found that the way reviewers build their argument for or against a product or service increases the credibility of other reviewers’ perceptions.

Table 3 Estimated direct effects (regression path coefficients) for the adjusted structural model.

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Dependent Variables</th>
<th>Predictor variables</th>
<th>Estimated direct effect (b)</th>
<th>P</th>
<th>Squared multiple correlations ()</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1a</td>
<td>Information Credibility</td>
<td>Source dependency</td>
<td>0.080</td>
<td>0.047*</td>
<td>0.575</td>
<td>Supported</td>
</tr>
<tr>
<td>H1b</td>
<td>Authority cues</td>
<td>Source transparency</td>
<td>0.074 ns</td>
<td>0.128</td>
<td>ns</td>
<td>ns</td>
</tr>
<tr>
<td>H1e</td>
<td>Source transparency</td>
<td>Social identity</td>
<td>0.150</td>
<td>**</td>
<td>ns</td>
<td>Supported</td>
</tr>
<tr>
<td>H1d</td>
<td>Perceived expertise</td>
<td>Trustworthiness</td>
<td>0.114</td>
<td>0.023*</td>
<td>0.575</td>
<td>Supported</td>
</tr>
<tr>
<td>H1f</td>
<td>Argument strength</td>
<td>Homophily</td>
<td>-0.044 ns</td>
<td>0.352</td>
<td>ns</td>
<td>Supported</td>
</tr>
<tr>
<td>H1c</td>
<td>Source dependency</td>
<td>Information credibility</td>
<td>0.322</td>
<td>**</td>
<td>0.575</td>
<td>Supported</td>
</tr>
<tr>
<td>H2b</td>
<td>Authority cues</td>
<td>Source transparency</td>
<td>0.237</td>
<td>**</td>
<td>ns</td>
<td>Supported</td>
</tr>
<tr>
<td>H2d</td>
<td>Source transparency</td>
<td>Information credibility</td>
<td>0.128</td>
<td>0.045*</td>
<td>0.575</td>
<td>Supported</td>
</tr>
<tr>
<td>H2a</td>
<td>Information credibility</td>
<td>Source dependency</td>
<td>0.249</td>
<td>**</td>
<td>0.575</td>
<td>Supported</td>
</tr>
<tr>
<td>H3b</td>
<td>Source dependency</td>
<td>Attitude towards SNS</td>
<td>0.681</td>
<td>**</td>
<td>ns</td>
<td>Supported</td>
</tr>
<tr>
<td>H3a</td>
<td>Source dependency</td>
<td>Intention to adopt SNS</td>
<td>0.196</td>
<td>.115 .281</td>
<td>.001**</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*, **significant at the 0.05 and 0.01 levels, respectively, ns not significant.

Table 4 Estimated indirect effects (test of mediation).

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Indirect paths</th>
<th>Estimated indirect effect (IE)</th>
<th>95% CI</th>
<th>P</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H4a</td>
<td>Information credibility -&gt; Attitude towards SNS -&gt; Intention to adopt SNS information</td>
<td>0.196</td>
<td>.115 .281</td>
<td>.001**</td>
<td>Supported</td>
</tr>
<tr>
<td>H4b</td>
<td>Source dependency -&gt; Attitude towards SNS -&gt; Intention to adopt SNS information</td>
<td>0.219</td>
<td>.148 .289</td>
<td>.001**</td>
<td>Supported</td>
</tr>
<tr>
<td>H4c</td>
<td>Authority cues -&gt; Attitude towards SNS -&gt; Intention to adopt SNS information</td>
<td>0.161</td>
<td>.089 .246</td>
<td>.001**</td>
<td>Supported</td>
</tr>
<tr>
<td>H4d</td>
<td>Source transparency -&gt; Attitude towards SNS -&gt; Intention to adopt SNS information</td>
<td>0.087</td>
<td>.017 .157</td>
<td>.047**</td>
<td>Supported</td>
</tr>
<tr>
<td>H4e</td>
<td>Source dependency -&gt; Information credibility -&gt; Attitude towards SNS -&gt; Intention to adopt SNS information</td>
<td>0.016</td>
<td>.004 .033</td>
<td>.031*</td>
<td>Supported</td>
</tr>
</tbody>
</table>

*, **significant at the 0.05 and 0.01 levels, respectively.
In agreement with Erkan and Evans (2016) and Cheung et al. (2012), the results indicate that as information on SNS is user generated, a review with a stronger argument quality and a high degree of persuasion should be perceived as more credible. This may be also explained by the fact that high uncertainty avoidance cultures, like Arab cultures, consider security issues to be critical, especially online, where there is no personal interaction between the buyer and seller (Elsantiel & Harness, 2011). Accordingly, Arab consumers consider online reviews with identified sources and persuasive and convincing arguments as more credible. Furthermore, similar studies were conducted in other Arab countries, confirming our results, such as Kuwait (Rouibah, Lowry, & Hwang, 2016). However, Rouibah, Lowry, and Hwang (2016) found that there is a relationship between innovativeness, propensity to trust, familiarity and the intention to use an online payment, although credibility was implied implicitly in their study. Similarly, one study has also investigated online credibility in five Arabic countries, including Qatar, Lebanon, Saudi Arabia, Tunisia, and United Arab Emirates (Martin & Hassan, 2020). This study found that there is a relationship between fake media exposure and credibility in all studies countries except Tunisia and Lebanon. Future work should conduct a similar study in the domain of tourism.

Additionally, the results show that dependency, expertise and trustworthiness have a significant effect on consumers’ perceived credibility, attitude and intention to adopt information on SNS, in agreement with prior findings (Flanagin, & Metzger, 2013). This finding is consistent with those of Johnson and Kaye (2014), who highlighted that reliance on SNS is a major predictor for SNS credibility perceived by consumers. Loyal SNS users consider SNS as more credible than less loyal users. In addition, the results of the current study align with previous research that expertise and trustworthiness significantly affect users’ perception of the credibility of the SNS (Elsantiel & Harness, 2011) as well as their attitudes and intention to adopt information on SNS. The nature of social media interactions is more complex compared to traditional media, and this complexity can have negative impacts due to the great risks and unique features of personal information shared on social media platforms or networks (Miranda, Young, & Yetgin, 2016). Trustworthiness is a major reason for successes in the travel and hospitality sectors (Choi et al., 2018). One of the main reasons for the great importance of expertise and trustworthiness could be the intangibility of tourism products and services. Online users who use information on SNS for travel purposes believe this information is provided by trustworthy tourism consumers who do not have any personal motivations. Similar findings on online credibility were also reported in Bangaldesh (Andaleeb, Rahman, Rajeb, Akter, & Gulshan, 2012) and South Korea (Kim & Johnson, 2009) in that perceived expertise, and revealing social identity do often increase credibility.

However, our research findings reveal that although transparency and authority cues do not have a significant effect on consumers’ perceived credibility, and these cues significantly affect their attitude and intention to adopt information on SNS (for similar points, see Sundar, Xu, & Oeldorf-Hirsch, 2009). We attribute the insignificant effect of both antecedents on consumers’ perceived credibility to the characteristics of our respondents, who are mainly young people (83%) below 35 years of age, and highly educated (83% were holders of bachelor and postgraduate certificates). These young and educated users have grown up using the internet and social networking through mobile phones, and social media such as Facebook. Our findings are thus in agreement with prior research showing that younger than older people are more likely to rely on using SNS (Ha, Yoon, & Zhang, 2013). This familiarity with the use of social media has made them more risk-averse and less concerned about transparency or authority cues as indicators of credibility. This is especially true for tourism services, where users trust information coming from personal travellers rather than any information coming from official tourism websites. Perceived transparency and authority cues are expected to reduce perceived risk between users and thereby enhance their intention to adopt information on SNS (Arshad & Khurram, 2020; Song & Lee, 2015; Westerman et al., 2014). This appears to be consistent with the high uncertainty avoidance recognized in the current sample that makes them more likely.
to make decisions about online purchasing based on references (reviews) from trusted persons than consumers would do in low uncertainty avoidance cultures.

Previous research by Liu and Park (2015) suggested that reviews from online users who share the same background and attitudes are considered more trustworthy and credible. In contrast, our study found that homophily does not affect consumers’ perceived credibility, attitude or intention to adopt information on SNS. The results of the current study might be explained by the widespread use of social media worldwide. Rather than similarities that exist between reviewers on social media, the relationship entails numerous cultural and other considerations such as reviewers’ social status, personal reputation, cultural affiliations and experience regarding the topic of the review (Koiranen, Koivula, Keipi & Saarinen, 2019). Because of the great reliance on social media as a key source to gain experience of tourism services, potential travellers are more likely to be exposed to different views and accept reviews from different users from different backgrounds (Koiranen et al., 2019). In addition, as the majority of current research respondents were young users (83%) under 35 years of age, they might be expected to use social media to search for tourism services more often. In addition, younger users are expected to be less careful when evaluating the credibility of information available on SNS.

As expected, the findings from the current study support the elaboration likelihood model (ELM) regarding the mediating role of perceived credibility and attitude. The evaluation of SNS information credibility determines the expected value of the information it provides. Trustworthy Information that imparts significant knowledge has a great influence on consumers’ perceived credibility of information and cognitive judgments and enhances their likelihood of adopting this information (Filieri, 2015). It is important to note that model presentation in Figure 1 is a simplified model of the relationship between antecedents (e.g., dependency, expertise, homophily) and credibility. There are possible earlier and intermediate constructs that mediate the relationship between these antecedents and perceived credibility. For example, authority cues and perceived expertise may increase dependence on social media, which in turn may impact credibility. In other words, it is possible that there are some relationships between the antecedents described in Figure 1. However, it is also important to note that it is experimentally difficult to investigate a more complex model. Nonetheless, although our model has limitations, it provides an initial step towards understanding the complex relationship between several factors that may impact credibility in online platforms.

CONCLUSION AND IMPLICATIONS

This study adds to the ever-growing literature on the credibility of information on SNS. It is an appropriate response for the need to more research on information credibility on SNS and has important implications academically, especially, as it broadens our understanding of the impact of consumers’ perceived information credibility (considering different antecedents of credibility) on their intention to adopt this information for purchase decisions on a larger and more diverse sample. Being the first study in the Arab world to investigate consumers’ credibility perceptions of information on SNS and their intention to adopt this information, this study contributes to the academic research and practice and extend the current concepts of online credibility. Although several scholars have studied the credibility of SNS technical attributes, little work has considered consumers’ perspectives regarding the adoption of information on SNS. The main theoretical contribution of this study was to provide a more suitable and comprehensive model for today’s dynamic virtual environment, considering antecedents of SNS information credibility and how they impact consumers’ intention to adopt information. This model can be applicable to assess online consumers’ perceived credibility on various SNS such as Twitter or Facebook. Credible information on SNS can play a significant role in the believability of social media. Credible sources are seen as likely to produce credible messages and credible messages are seen as likely to have originated from credible sources.

The findings of this study improve the growing body of literature by targeting new societies, including the Arab culture, whose information providers could benefit significantly from the insights
offered by this research. Our research shows that managers or operators of social media platforms should maintain a high level of source dependency, trustworthiness and expertise in order to ensure the credibility of the information disseminated on their sites. They should also ensure source transparency and authority cues, which affect consumers’ attitude and intention to adopt information on SNS. On the other hand, users should pay more attention to disclosing their social identity and enhancing the strength of their arguments, which will improve the perceived credibility of online reviews.

The current study also has very important implications for organizations, practice, and society. For example, organizations should attempt to increase credibility in their online platforms. Specifically, organizations should attempt to encourage users to reveal their social identity, increase argument strength, trustworthiness, source dependency, and highlight expertise of users, in online platforms. For example, organizations should highlight reviews by experts who are not related to the organization itself (König, & Jucks, 2019). As suggested by Kusumasondaja, Shanka, and Marchegiani (2011), the identity of the information posted online should be made available for potential customers, as this can increase credibility. Importantly, managers should strive to address negative reviews online. This can increase trust in the organization, as potential customers will know that organisers are addressing negative reviews, as reported in prior studies (Babin, Lee, Kim, 2005; Kau, & Loh, 2006; Wong, 2004). Organizations should conduct surveys to study how customers make decisions in their online platforms. Doing so will increase trust in the organization and likely increase attitude and intention to adopt SNS information. This will help investigate whether factors mentioned here contribute to their decision making. Such surveys can also help investigate whether homophily impacts intention to adopt SNS information. As for impact on society, our study helps better connect online platforms with customers. As more activities are being conducted online, it is important for future research to understand factors underlying trust and credibility in virtual environments in general.

LIMITATIONS AND FUTURE RESEARCH

However, some limitations need to be addressed for future research. First, data were collected for this study from various Arabic countries without consideration of the cultural differences among these cultures. Future examination may replicate this study in different Arab cultures to find out whether there will be any differences in consumers’ perceptions of information credibility. Additionally, conducting a cross-culture comparison of consumers’ perceptions of information credibility on SNS and its effect on their intention to adopt this information in purchasing tourism services is an important area to investigate in the future. Another limitation relates to the fact that this study has focused only on the tourism sector. Future research could replicate the same model in different sectors and identify how the type of service affects consumers’ perceptions of information on SNS. A future study may also replicate the current study to investigate whether homophily has any effect on consumers’ perceived credibility of information on SNS or their intention to adopt this information for a different sample or context. In addition, further studies could examine whether there would be any significant effect for information transparency and authority cues on consumers’ perceived credibility. Further research also may examine additional factors that influence SNS credibility. Importantly, future research should also test additional factors, such as interactivity. Research found that more interaction online with potential users increase credibility (Jahng, & Littau, 2016; Johnson & Kaye, 2016; Kaye & Johnson, 2017).

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REFERENCES


