

## Effects of Media Coverage and Perceived Risk during COVID-19: Moderated Mediation Model

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**How to cite this article:** Erragcha, N. & Babay, H. (2022). Effects of Media Coverage and Perceived Risk during COVID-19: Moderated Mediation Model. African Journal of Hospitality, Tourism and Leisure, 11(6):1824-1841. DOI: <https://doi.org/10.46222/ajhtl.19770720.327>

### Abstract

The objective of this research is first to study the effect of social media on intent to revisit a tourism destination in the era of the pandemic, using an integrative model that highlights the respective mediating effect of satisfaction, engagement and co-created value as well as the moderating effect of perceived COVID-19 risk on model's direct relationships. Data were collected from 597 tourists through a self-administered online questionnaire. The relationships of the conceptual model were tested using structural equations modeling as well as the Hayes process. All direct relationship assumptions have been confirmed. The research's results show that social media can be used to improve tourists' satisfaction, their engagement and to help them to create value. The perceived risk of COVID-19 has a positive dampening effect on the majority of the model's direct relationships. Based on results of this research, the managers of tourist destinations are recommended to use social media to satisfy the tourists, engage them and encourage them to co-create value, in order to better manage the crisis imposed by COVID19.

**Keywords:** COVID-19; satisfaction; engagement; co-created value; perceived risk

### Introduction

Tourism is a major global industry. According to statistics provided by the UNWTO (World Tourism Organization [UNWTO], 2021), this sector is considered the 3rd largest export sector, it provides millions of jobs with a high proportion of women (54% of the workforce) and youth and is a key sector for many advanced and emerging economies (UNWTO, 2021). However, this data has not been the same since the spread of the COVID-19 pandemic. The health crisis has negatively affected tourism (Gossling et al., 2020). Data shows an 87% drop in international tourist arrivals in January 2021 compared to 2020 (UNWTO, 2021). The viral aspect of the COVID-19 crisis has suggested that tourism is one of the vectors of the spread of the virus. From the point of view of the buyer of the tourist service, travel and/or tourist stay are now sources of risk. The tourist incurs the risk of contamination during his trip. It is also faced with uncertainty during the use of this service, which encourages it to learn more to reduce this uncertainty, particularly through social media. These media are a major source of information and communication during global crises (Azer et al., 2021). They are also used by tourism-related businesses and customers at all stages of a trip (Lange-Faria & Elliot, 2012). Thus, it is important to shed light on their role in promoting this industry (Harrigan et al., 2018) particularly in the era of this pandemic (Yu et al., 2020). In this respect, a theoretical and managerial interest seems to be developing around the modalities of promotion of the tourism sector through these media. Previous research in this area has drawn attention to the fact that

the effect of these media on the intention to revisit a tourism destination is not direct. This impact is particularly mediated by travelers' engagement to tourism destinations (Rather, 2021 a, b). Nevertheless, the commitment does not seem to be the only significant mediator in this regard. Indeed, past work focuses on the relationship between social media and satisfaction (Agnihotri et al., 2016; Narangajavana et al., 2017), social media and value co-creation (Aluri et al., 2015; Chathoth et al., 2014) as well as on the relationship between these two variables and the intention to revisit a tourism destination (Bigné et al., 2001; Xu et al., 2021). As a result, this research aims to pay particular attention to the variables that mediate the relationship between social media and the intention to revisit a tourism destination, in order to shed additional light on this relationship. It is also central to the quest for better management of tourism activity in the era of the pandemic that considers risk as an important aspect of the decision-making process when selecting destinations. (Bhati et al., 2020; Reisinger & Mavondo, 2005). Despite the observed effect of the pandemic on global travel behavior, little work has examined health or pandemic risks (Rather, 2021 a, 2021b) and their impact on travel behavior. As perceptions of these risks can vary from one person to another or from one culture to another, it is useful to investigate this factor in a variety of cultural contexts, considering its impact on travel consumption. Thus, starting from a work by Rather (2021a), this research is intended to test the effect of social media on the intention to revisit a tourism destination by focusing first on the mediating role of travelers' satisfaction, their engagement and their tendency to co-create value. Next, we need to take a close look at the perceived risk moderating effect on model relationships to understand if the perception of COVID-19 related risk could affect these relationships or hinder the power of social media as a lever for actions to boost tourism activity. The results of this study should provide relevant information to tourist destination managers to properly manage the Crisis situation.

## **Literature review and hypotheses**

### ***Tourism, COVID-19 and social media***

COVID-19 quickly became a pandemic after its first appearance in China in December 2019 (Im et al., 2021). It has caused a multi-faceted global crisis, not only health but also psychological, financial, environmental, socio-cultural and geopolitical (Utkarsh & Sigala, 2021). In this sense, several rules have been recommended by the State to avoid any risk of transmission of the Virus. Therefore, several measures have been taken including social distancing, congregational bans and travel restrictions (Im et al., 2021). In this regard, the COVID-19 pandemic has disrupted the entire tourism system (Kaczmarek et al., 2021; Rasoolimanesh et al., 2021; Zenker et al., 2019) prompting researchers to study its impact on global tourism (Gossling et al., 2020). It has also changed travel consumers' perceptions of tourism (Huang et al., 2021) and significantly affected their behavior throughout the decision-making process. Indeed, this current crisis imbalance supply and demand in the market of the tourism industry, by recording an alarming drop in demand (Bakar & Rosbi, 2020). More social media orientation for travel consumers (Wong et al., 2021) including searching for credible information or sharing their lived experiences (Zeng & Gerritsen, 2014).

### ***Effect of social media on satisfaction during COVID-19***

Satisfaction is at the heart of business marketing activities (Machleit & Mantel, 2001) because it is intimately linked to the survival, development and success of service industries such as tourism (Sirakaya et al., 2004). Pizam (1978) introduced the concept of tourism satisfaction, which results from comparing tourists' expectations with their actual travel experience. In the digital age, social media has revolutionized the hotel industry (Martin-Fuentes, 2019). Travel consumers are increasingly using social media platforms to search for information, participate

in collaborative planning and commemorate travel experiences through various forms of publication, messaging and sharing on these media (Zeng & Gerritsen, 2014). From this perspective, social media seems to have a significant impact on customer satisfaction (Agnihotri et al., 2016) not only through the creation of expectations (Narangajavana et al., 2017) but also because a memorable experience contributes to the formation of traveler satisfaction (Kim, 2017). Based on these works, our first hypothesis is as follows:

*H1: Social media has a positive impact on visitor satisfaction*

### ***Effect of Satisfaction on Intent to revisit a tourism destination during COVID-19***

In the tourism sector, a tourist's behavioural intentions refer to his willingness to visit and/or revisit a destination, spend on the purchase or re-purchase of a tourism service or recommend or discourage other users from choosing a destination or service company (Ladhari, 2009). In the literature, traveler satisfaction is likely to have a positive impact on their travel consumption behavior. Levels of tourist satisfaction are closely associated with behavioural intentions (Bigné et al., 2001). Therefore, research in the context of the tourism industry has empirically confirmed the positive association between satisfaction and intention to revisit a destination (Zhang et al., 2018). Thus, we make the second hypothesis:

*H2: Tourist satisfaction has a positive impact on intent to revisit a tourism destination.*

### ***Effect of social media on consumer engagement during COVID-19***

According to Kumar et al. (2010: 297), the customer's commitment refers to the creation of a long-term relationship between the company and the customer. It is also seen as a way to create customer interaction and engagement". This relationship is considered in several research studies to be three-dimensional, both cognitive, emotional and behavioural (Brodie et al., 2013; Hollebeek, 2011). In the field of tourism, for example, Harrigan et al. (2018) point out that deep relationships can be achieved by developing active interactions between tourists and brands. These interactions can reinforce the customer's commitment to the destination brand (So et al., 2021). In this regard, media can provide significant value to service providers to achieve a high level of customer engagement with tourism destinations (Rather, 2021). This includes facilitating two-way interactions between customers and destination brands (Vivek et al., 2012). As a result, social media is seen as the primary enablers in creating a customer commitment to the tourism destination (Harrigan et al., 2018). Therefore, we posit:

*H3: Social media has a positive impact on tourism engagement*

### ***Effect of social media on value co-creation during COVID-19***

Prahalad and Ramaswamy (2004) defined co-creation as the joint and interactive creation of value by the company and the customer; allowing the customer to co-build the service experience according to its context (p. 8). For their part, Lusch and Vargo (2006) affirm that the customer is the main element of this process, which requires active participation on their part to build their offer. Indeed, co-creation of value always implies the active participation of the customer. In this case, customers are no longer seen as mere consumers of products and services; rather, they assume a central role in the development of new products (Hoyer et al., 2010) as in the case of the tourism industry. In this sense, the company plays the role of facilitator rather than inhibitor, since the companies have changed roles, they do not impose co-creation of value on consumers, but they offer them favorable conditions to create their own value (Grönroos, 2008). This co-creation of value between the service organization and its

customer is a central notion of the logic of service dominance (SDL) (Grönroos, 2012) which emphasizes the role of the consumer in the creation of value in particular by developing new concepts, useful recommendations or brand communities (Grönroos & Voima, 2013).

This concept has been the subject of numerous studies in the tourism and hospitality industry (Buhalis & Foerste, 2015). Salvado et al. (2011) present the concept of co-creation of the tourism experience as the process that integrates together tourists and other stakeholders in the definition of personalized and unique experiences, with the ultimate goal of value generation. Recently, numerous studies have highlighted the benefits of using social media to co-create value across different domains. The literature on the role of social media in marketing presents them as a valuable tool for building meaningful relationships through interactions between organizations and their customers (Abeza et al., 2019). Social media platforms allow users to participate in a conversation and share opinions and comments about products and/or services. They thus offer opportunities for customers to contribute to a process of co-creation of value with companies (Sahni & Kenneth, 2019). Thus, social media also play an important role in creating value (Martini et al., 2012). In the same context, various studies have focused on the collaborative aspect of social media platforms that enable consumers to have a better knowledge of products and services and thus facilitate participation in the value creation and therefore better interaction with brands (Chathoth et al., 2014). Thus, we make the following hypothesis:

*H5: Social media has a positive impact on co-created value*

#### ***Effect of co-created value on intent to revisit a tourism destination during COVID-19***

Value co-creation behavior in the tourism sector is also important because it affects the tourism co-creator's loyalty to the destination (Xu et al., 2021; Thiruvattal, 2017). In fact, the participation of customers is likely to create a more favorable attitude towards the destination as well as strong and lasting psychological links resulting from interactive experiences, which would lead to the loyalty of these customers and the proliferation of purchasing intentions. In other words, customer engagement is a positive driver of loyalty and highly engaged consumers are most likely to generate meaningful loyalty to the travel brand (Dwivedi, 2015; Xiao et al., 2020). However, it is the value created by customers in this engagement process that is the source of their enjoyable experience and the determining factor that influences their loyalty (Chan et al., 2010; Wu & Chen, 2017). As a result, through co-creation of value activities, customers are more likely to rate the products and services consumed and acquire a stronger desire to revisit the tourist destination but also to recommend it to others (Chua et al., 2017). Hence, the following hypothesis can be formulated:

*H6: Co-created value has a positive impact on intent to revisit a tourism destination.*

#### ***Mediator effects***

Social media seems to influence tourists' travel intentions (Bhati et al., 2020; Huynh, 2020; Anderson and Agarwal, 2010). They promote satisfaction throughout the consumption experience of a trip (Agnihotri et al., 2016). This satisfaction influences the intention of tourists to revisit a tourism destination (Chen & Chen, 2010). These variables are considered essential to ensure the prosperity of tourist destinations (Prayag, 2009; Quintal & Polczynski, 2010; Seetanah et al., 2020) especially in the pandemic era. Thus, it is important to test the mediating effect of tourist's satisfaction within the relationship between social media and the intention to revisit a tourism destination.

This investigation could shed additional light on the management of this relationship by the managers of tourist destinations, especially in the era of the pandemic. In the same vein, the study of the mediating effect of engagement and co-creation of value is interesting. In fact, we have shown above that social media promotes engagement of travelers with tourism destinations and that this engagement is likely to foster the intention of travelers to revisit these destinations (Rather, 2021a). Previous research has also shown that social media promotes co-creation of value and that co-creation of value is likely to foster the intention to revisit a tourism destination. On the other hand, it is clear that only the mediating effect of the engagement has been considered in the past. This calls for an investigation into the mediating and parallel role of these three key variables. The literature already assigns a mediating role to the co-creation of value between word of mouth that occurs on brand pages on social networks and behavioral intentions towards these brands (Rao et al., 2021), which attests to the relevance of this mediating role of co-creation in our study context. Satisfaction also seems to be associated with a mediating role in the context of tourism, similar to the work of Kim (2017), who tested the mediating role of satisfaction between memorable tourism experiences and behavioural loyalty. Based on these works, we make the following assumptions:

*H7: Customer engagement mediates the relationship between social media and intent to revisit a tourism destination*

*H8: Visitor satisfaction mediates the relationship between social media and intent to revisit a tourism destination*

*H9: Co-creation of media value the relationship between social media and intent to revisit a tourism destination*

### ***Moderating effects of perceived risk during COVID-19***

Risk perception is the subjective judgment referring to individuals' psychological assessments of the likelihood and consequences of an unfavorable outcome (Sjöberg, 2000). It is a suitcase concept in theories explaining health-related beliefs and behaviors, such as Health Belief Model and Protection Motivation Theory (Janz & Becker, 1984; Rogers, 1975). In the tourism industry, risk is therefore considered an essential element of tourist behavior (Çetinsoz & Ege, 2013) because it plays an important role in destination selection (Perpina et al., 2021). Perceptions of risk and feelings of safety during the trip seem to have a more important influence on the avoidance of regions than on the probability of going there (Sönmez & Graefe, 1998). Tourists may avoid traveling when they perceive a high health risk (Aliperti & Cruz, 2018; Khan et al., 2020a; Khan et al., 2022). They would prefer to visit destinations associated with low risk and where the magnitude of the perceived threat is low (Law, 2006). More recently, Rather (2021) considered the perceived risk as a moderating variable respectively on social media relations- CE, CE- co-creation of the brand and CE- intention to revisit the destination during COVID19. On the other hand, just as the perceived risk is supposed to moderate these relationships, it could also play this role between social media- satisfaction and co-value social media as well as between satisfaction-intent to revisit a tourism destination and co-created value- intent to revisit a tourism destination. Hence, we state the following hypotheses:

*H10: Perceived risk has a greater effect on satisfaction when consumers perceive less risk during COVID-19 associated with social media*

*H11: Perceived risk has a greater effect on engagement when consumers perceive less risk during COVID-19 associated with social media*

*H12: Perceived risk has a greater effect on co-creation value when consumers perceive less risk during COVID-19 associated with social media*

*H13: Tourist satisfaction has a greater effect on behavioral intentions when consumers perceive less risk during COVID-19*

*H14: Consumer engagement has a greater effect on behavioral intentions when consumers perceive less risk during COVID-19*

*H15: Co-creation has a greater effect on behavioral intentions when consumers perceive less risk during COVID-19*

The relationships between the different constructs are shown in Figure 1

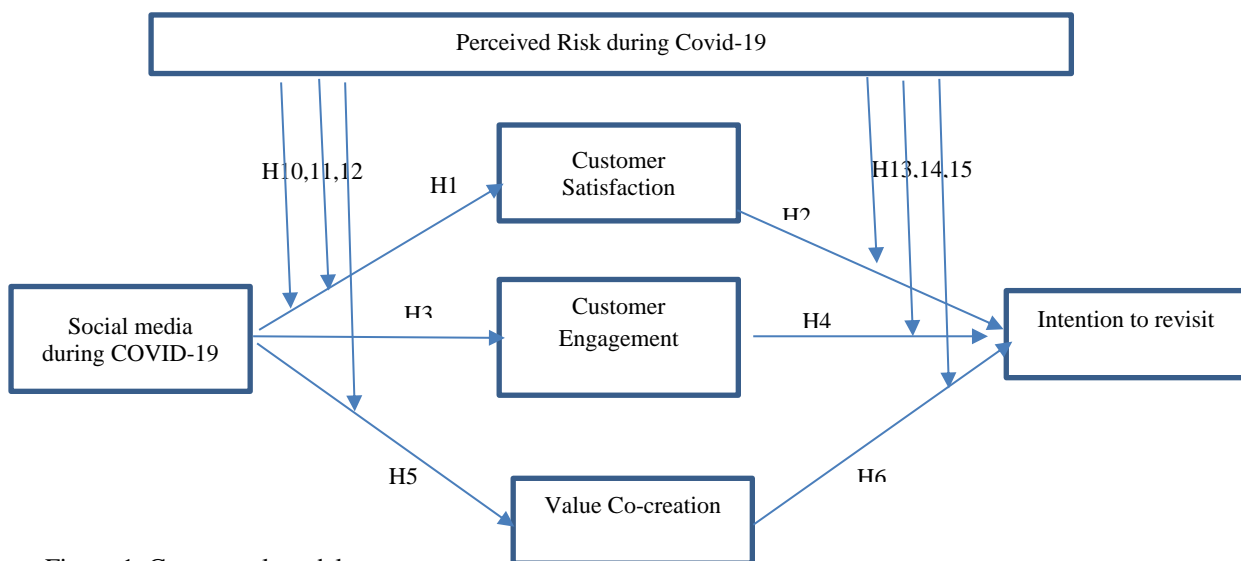


Figure 1. Conceptual model  
 Source: Authors

## Methodology

The aim of this research is to test the effect of social media, in particular Facebook and Instagram, on the intention of visiting a rural tourist destination in Tunisia (Aïn Soltane, Ain Boussaàdia, kesra, etc.) considering in particular the mediating effect of satisfaction, engagement and co-creation of value within this relationship. Next, it aims to test the perceived moderating effect of COVID-19 risk on model relationships in accordance with the following conceptual model:

Data was collected from 597 consumers of which 57.6% are women and 42.4% are men. The sample is of convenience and the questionnaire is self-administered online. To empirically test the conceptual model, we borrowed literature scales of Ebrahimi et al. (2020) for social media and Vivek et al. (2014) for traveler engagement, Gisseman and Stokburger-Sauer (2012) for co-created value, as adapted by Rather (2021). We also used the Nilashi et al. (2022) scale to measure travel consumer satisfaction, the Kim & Kim (2018) scale to measure perceived risk and the Zenker's et al. (2019) scale to measure the intention to revisit a tourism destination. These scales were chosen based on their concordance with the research context.

## Results

In terms of analysis, we first conducted ACPs with a view to exploring the latent structure of these scales tested in the Tunisian context. This exploratory analysis has led to factorial structures faithful to the initial structures except for the scale of engagement which is originally

three-dimensional and whose dimensions are the Enthusiastic Participation (4 items), conscious attention (3 items) and the social connection (3 items). Indeed, the CPA has resulted in a one-dimensional structure of this scale and all items have been retained but brought together on one factor.

Table 1 : Exploratory analysis

Constructs	Items	Quality of representation	Factor loadings
<b>Social media (SM)</b>	SM1	0.849	0.922
	SM2	0.881	0.938
	SM3	0.867	0.931
	SM4	0.859	0.927
KMO = 0.858; Meaning of Bartlett = 0.000			
Cumulative percentage of explained variance = 86.373%			
Cronbach's Alpha = 0.947			
<b>Customer Engagement (CE)</b>	CE1	0.572	0.756
	CE2	0.684	0.827
	CE3	0.622	0.787
	CE4	0.684	0.827
	CE5	0.728	0.853
	CE6	0.718	0.848
	CE7	0.698	0.836
	CE8	0.716	0.846
	CE9	0.655	0.807
	CE10	0.655	0.809
KMO = 0.935 ; Meaning of Bartlett = 0.000			
Cumulative percentage of explained variance = 67.256%			
Cronbach's Alpha = 0.946			
<b>Intention to revisit a tourism destination (INTR)</b>	INTR1	0.844	0.919
	INTR2	0.758	0.877
	INTR3	0.821	0.906
KMO = 0.73; Meaning of Bartlett = 0.000			
Cronbach's Alpha = 0.88			
Cumulative percentage of explained variance =80.786%			
<b>Perceived risk (PRSK)</b>	RRSK1	0.743	0.862
	RRSK1	0.711	0.843
	RRSK1	0.776	0.881
	RRSK1	0.743	0.862
	RRSK1	0.731	0.855
KMO = 0.872 ; Meaning of Bartlett = 0.000			
Cronbach's Alpha = 0.912			
Cumulative percentage of explained variance = 74,043%			
<b>Satisfaction (SAT)</b>	SAT1	0.766	0.875
	SAT2	0.703	0.839
	SAT3	0.737	0.858
KMO = 0.714 ; Meaning of Bartlett = 0.000			
Cumulative percentage of explained variance =73.548%			
Cronbach's Alpha = 0.82			
<b>Cocreated value (COV)</b>	COV1	0.759	0.871
	COV2	0.777	0.881
	COV3	0.795	0.892
	COV4	0.731	0.855
KMO = 0.815 ; Meaning of Bartlett = 0.000			
Cumulative percentage of explained variance =76,534%			
Cronbach's Alpha = 0.897			

Source: Authors

We then conducted a confirmatory analysis using the AMOS 25 software. The corresponding measurement model demonstrated good fit quality (CMIN=2.876; GFI=0.891; AGFI=0.856; CFI=0.96; TLI=0.951 and RMSEA=0.056). Tables 2 and 3 describe the results for the

reliability analysis, the convergent and discriminating validity (Fornell & Larcker, 1981) of all model variables. Jöreskog Rhô show satisfactory values well above the 0.7 threshold (Fornell & Larcker 1981). The Rhô of convergent validity is also well above the minimum threshold of 0.5 for all variables.

Table 2: Reliability and convergent validity

Constructs	Rhô of Jöreskog	Rhô of Convergent Validity
INTR	0.896	0.741
SM	0.944	0.797
CE	0.945	0.631
PRSK	0.912	0.676
COV	0.901	0.694
SAT	0.821	0.605

Source: Authors

Discriminant validity was also verified since the mean variance extracted is greater than the square of the correlation between latent variables (Fornell & Larcker 1981). Thus, we can conclude that the scales used are reliable and valid.

Table 3: Discriminant validity test

	INTR	SM	CE	PRSK	COV	SAT
INTR	0.741					
SM	0.561	0.797				
CE	0.6241	0.7022	0.631			
PSK	0.6691	0.6528	0.613	0.676		
COV	0.7039	0.5387	0.6177	0.5882	0.694	
SAT	0.5358	0.4186	0.4956	0.5083	0.4816	0.605

Source: Authors

The structural model showed good fit quality (CMIN=3.351; GFI=0.899; AGFI=0.86; CFI=0.96; TLI=0.949 and RMSEA=0.063). Table 4 presents the results of the direct link hypothesis test. All these assumptions were confirmed on the basis of the CR test (CR> 1.96) and a significant p (less than 5%).

Table 4: Structural model results

Hypotheses	Paths	CR	Standardized estimates	SIGNIF	Decision
H1	SM → SAT	15.39	0.706	0.000	Supported
H2	SAT → INTR	6.099	0.242	0.000	Supported
H3	SM → CE	23.805	0.877	0.000	Supported
H4	CE → INTR	5.863	0.25	0.000	Supported
H5	SM → COV	19.929	0.791	0,000	Supported
H6	COV → INTR	11.693	0.515	0.000	Supported

Source: Authors

### Mediating effects

To study the mediating role of satisfaction, engagement and co-created value variables (and more specifically the existence of a significant indirect effect of social media on the intention to travel), we chose to apply the Hayes' process (2018). This method is based on the use of an SPSS macro that allows to test all indirect mediation effects while controlling the other variables of the model. Thus, the three mediations were tested simultaneously on this macro, based on 5000 replications generated by the bootstrap method. The results in Table 5 show that total effect of social media on intent to revisit a tourism destination is split into direct and significant effect (0.163) and indirect effect shared between Satisfaction (0.109), Engagement (0.145) and co-created value (0.271). This means that assumptions 8, 9 and 10 are validated.





Table 5: Mediating effects results

Total effect of SM on INTR					
B	SE	T	P	LLCI	ULCI
0.689	0.030	23.173	0.000	0.630	0.747
Direct effect of SM on INTR					
B	SE	T	P	LLCI	ULCI
0.163	0.038	4.308	0.000	0.089	0.238
Indirect effects of SM on INTR					
	B	Boot SE	Boot LLCI	Boot ULCI	
<b>Total</b>	0.525	0.043	0.440	0.611	
<b>SAT</b>	0.109	0.025	0.062	0.160	
<b>CE</b>	0.145	0.044	0.062	0.237	
<b>COV</b>	0.271	0.034	0.204	0.338	

Source: Authors

The results in Table 5 show that total effect of social media on intent to revisit a tourism destination is split into direct and significant effect (0.163) and indirect effect shared between Satisfaction (0.109), Engagement (0.145) and co-created value (0.271). This means that assumptions 8, 9 and 10 are validated.

### Moderation tests

To test the moderation effects, we adopted the Hayes (2018) process. This analysis allowed us to estimate the significance of moderation effects by calculating confidence intervals around each regression on an SPSS macro (MacKinnon et al., 2004). When the confidence interval does not contain zero, the moderating effect is considered significant.

The results showed that the perceived risk-moderating role on the social media-satisfaction relationship is not significant (LLCI= -0.0827; ULCI= 0.0604). However, this moderating role is significant respectively on the social media-engagement relationship (LLCI= 0.0188; ULCI= 0.1284), on the social media-co-created value relationship (LLCI= 0.008; ULCI= 0.1342), on the satisfaction-intent to revisit a tourism destination relationship (LLCI= 0.0639; ULCI= 0.1637), on the engagement-intent to revisit a tourism destination relationship (LLCI= 0.0120; ULCI= 0.1113) and on the co-related value-intent to revisit a tourism destination relationship (LLCI= 0.0408; ULCI= 0.1371). Table 6 describes the intensity of the perceived risk-moderating role on these relationships at a low and high level of perceived risk.

Table 6: Moderation Test Results (Model 1)

Intensity of perceived risk moderation on social media-engagement relationship						
	B	SE	T	P	LLCI	ULCI
Low level	0.4321	0.0501	8.6238	0.0000	0.3337	0.5305
High level	0.5881	0.0438	13.4294	0.0000	0.5021	0.6741
Intensity of perceived risk moderation on social media- co-created value relationship						
	B	SE	T	P	LLCI	ULCI
Low level	0.2496	0.0577	4.3241	0.000	0.1362	0.363
High level	0.4003	0.0505	7.9329	0.000	0.3012	0.4994
Intensity of perceived risk moderation on satisfaction-intent to revisit relationship						
	B	SE	T	P	LLCI	ULCI
Low level	0.1696	0.428	3.9666	0.0001	0.0856	0.2536
High level	0.4108	0.412	9.9706	0.0000	0.3299	0.4917
Intensity of perceived risk moderation on the engagement-intent to revisit relationship						
	B	SE	T	P	LLCI	ULCI
Low level	0.3028	0.0539	5.6182	0.0000	0.1969	0.4086
High level	0.4335	0.0387	11.1998	0.0000	0.3575	0.5095
Intensity of perceived risk moderation on co-created value-intent to revisit relationship						
	B	SE	T	P	LLCI	ULCI
Low level	0.3494	0.0486	7.1944	0.0000	0.254	0.448
High level	0.538	0.0361	14.9189	0.0000	0.4672	0.6088

Source: Authors

The results in Table 6 show that perceived risk positively moderates the relationships between social media and engagement, social media and co-value, satisfaction and intention to revisit a tourism destination, commitment and intention to revisit a tourism destination, and finally co-created value and intention to revisit a tourism destination. In each regression, the effect of the independent variable on the dependent variable increases and becomes more important when the perceived risk is higher.

### ***Discussion***

The results of this study demonstrated that social media has a positive impact on intent to visit a Tunisian rural destination in a pandemic context. This impact is both direct and indirect, that is, mediated by the travelers' satisfaction, their commitment to tourist destination and co-created value on social media. These results converge with the work of (Rather, 2021) notably around the impact of social media on traveler engagement, the impact of this engagement on the intent to revisit a tourism destination and the mediating role of this engagement on the social media-intent to revisit a tourism destination relationship. The results presented above also reflect work that has demonstrated the positive impact of social media on traveler satisfaction (Agnihotri et al., 2016) and co-created value (Sahni & Kenneth, 2019) and work on the effect of satisfaction and co-created value on intention to revisit (Xu et al., 2021).

Moreover, this research has the merit of having demonstrated that the social media – intent to revisit a tourism destination relationship is simultaneously mediated by satisfaction, engagement and co-created value with a pre-eminence of co-value mediating role, which represents the most important mediator effect. This result attests to the role of traveler satisfaction and engagement in the development of an intention to revisit a tourism destination. It also highlights the quest of travel consumers to have a participatory role and to act as a player in consumer activity (Tregua et al., 2020) as set out in the Service Dominance Paradigm (SDL) (Vargo & Lusch, 2004). The role assigned to social media in the development of this intention to re-travel is largely determined by the ability of these media to proliferate traveler satisfaction, his engagement to tourist destination and co-created value around travel experience. Finally, results show that perceived risk positively moderates most of the model's relationships. All these findings have important theoretical and practical implications.

### ***Theoretical contribution***

This study contributes to existing knowledge in tourism studies regarding the effect of social media on intent to revisit a tourism destination in the pandemic context. It sheds additional light on the role of these media in promoting the tourism sector in particular during the COVID-19 health crisis by proposing an integrative model combining mediating and moderating relationships. The results of this study revealed that the effect of social media on the intent to revisit a tourism destination is simultaneously mediated by traveler satisfaction, their commitment to the tourist destination and the co-created value around the destination brand. Indeed, apart from the mediating role of the engagement previously demonstrated by Rather (2021a) and confirmed by this study in a different cultural context, the social media-intention to revisit a tourism destination relationship is also mediated by travelers' satisfaction and co-created value around tourist destination. Social media platforms allow users to participate in conversations around these destinations and to share opinions and comments on the products and services offered. In this way, they offer opportunities for customers to contribute to a process of co-creating value with companies (Sahni & Kenneth, 2019) as well as to live exciting and memorable consumer experiences, which proliferates their level of satisfaction with the

consumption of this service (Quynh et al., 2021) and promotes their intention to revisit a tourism destination even in a pandemic situation.

This research drew more attention to the power of social media and their contribution to better manage tourism in this context of health crisis. Indeed, while this situation refers to a strong perception of risk, the results showed that this perception of risk does not impede the power of social media on the behavior of travelers. On the contrary, at a perceived high level of risk, the impact of social media on travelers' engagement with tourism destinations and their tendency to co-create value is all the stronger and more positive. These results are explained by the fact that in a pandemic situation, the media have become a major source of information and communication (Azer et al., 2021). Consumers tend to look for information that gives them comfort and credibility. This information can be decisive in making a purchase decision especially when it comes to other consumers who have had positive experiences with travel consumption in the pandemic era. Thus, the perception of risk leads consumers in this context to consult more social media and to share their experiences, opinions and advice and not only their fears on these media.

On the other hand, consumer behavior in the face of the crisis deserves to be interpreted in order to justify the results obtained in the context of this study, which appear different from those approved in the past. Indeed, while past work has found that social media has led to a stronger perception of risk among consumers, the proliferation of negative emotions and the development of states of strong fear leading the consumer to renounce travel (Rather, 2021; Naeem, 2021), it is clear that the reaction of consumers, in the face of information's procuring the fear, may be contrary. Travel consumers may manifest a form of panic control conveyed on social media in the age of the pandemic (Kirk & Rifkin, 2020). Several factors also seem to favor this state of resilience (Kirk & Rifkin, 2020). When consumers become aware of the potential of a pandemic, they respond by trying to defend themselves against perceived threats and regain control over lost freedoms (Kirk & Rifkin, 2020). Consumers particularly struggle against these measures when they perceive that they are contrary to their beliefs (Kirk & Rifkin, 2020) or that they threaten their attitudinal and behavioural freedoms, which leads to a state of psychological reactance (Fitzsimons & Lehmann, 2004). To do this, consumers tend to ignore government-imposed social distancing and mask-wearing measures and use public spaces as if nothing were happening (Kirk & Rifkin, 2020). As a result, fear messages on social media may encourage individuals to act in direct opposition to what recommended. They then began to look for alternatives to combat the fear induced and imposed measures that curb the satisfaction of their vital needs, such as the need for belonging (Baumeister & Leary, 1995). These consumers appear to be resilient in meeting this need. Past work has already illustrated this form of resilience, in particular, citing the tendency of many people to leave their own homes to seek refuge with friends or family members at a time when governments have imposed a quarantine to combat the spread of the virus (Hohman, 2020). Similarly, it appears that Tunisian travelers would be interested in freeing themselves from fear and restrictions imposed by the Tunisian government by seeking to travel to rural areas and offering themselves a relaxing stay in the outdoors. These destinations may be particularly privileged because they are less frequented than urban areas. Consumers are looking to be more relaxed and inspired by other consumers sharing their travel experiences in rural areas in the pandemic era.

### ***Practical implications***

In practice, this research recommends that managers of tourist destinations use social media to better manage the crisis imposed by COVID19. In fact, managers in these destinations are first called upon to communicate with consumers, to understand their ever-changing needs, to engage with them in an ongoing dialogue with a view to designing suitable promises in their

favor in relation to the expectations expressed. In this regard, social media allows for real-time information sharing, they offer high levels of immediacy and foresight, that are very useful to customers to reduce their uncertainty about the emergency, as well as to allay their fears and worries. This information also enables managers in tourist destinations to design updated communication to help consumers manage the perceived risk and make a timely decision based on the changing pandemic situation. Communication in the age of crises is a key lever that can enable these managers to build a relationship of trust and fruitful partnership with these consumers. It would also be beneficial to consider communication that conveys trust, resilience and hope (Ertimur & Coskuner-Balli, 2021; Mangiò et al., 2021) rather than risk and danger.

Managers of tourist destinations are also invited to develop interaction platforms (Huerta- Alvarez et al., 2020; Narangajavana et al., 2017) including communities of brands based on virtual reality (Hollebeek et al., 2021; Yu et al., 2020) to welcome and engage potential tourists. They need to identify tourists attracted to this type of destination in order to continue to target them with appropriate content via these platforms (Rather, 2021).

They are also called upon to engage with these customers in meaningful conversations (De Valck, 2020) to learn about customer adoption of destination brand strategies and identify their intention to visit these destinations despite crises (Rather, 2021). In addition, they need to show caring by prioritizing the health and safety of travelers (Neuburger & Egger, 2020) and communicate on efforts to protect tourists from pandemic risks. Managers can also provide travel packages with pre-arranged tours and itineraries planned to generate barriers to ecosystems at risk (Hollebeek et al., 2021). Finally, managers of travel destinations are now invited more than ever to encourage travelers to integrate into value creation (including engaging in conversations about experiences or tourist destinations and sharing opinions and comments on products and/or services offered) to improve the experience (Neuhofer et al., 2013; Buonincontri et al., 2017) and encourage other consumers to visit these tourist destinations. These efforts could promote the satisfaction of travelers and promote favorable behaviors not only in terms of purchasing but also relational fidelity (recommendation, cooperation, etc.)

### ***Limitations and future research***

Despite its contributions, this study is not without limits. First, this study focuses on cross-sectional data. Behavioural intent during the pandemic may not stay the same after the crisis end. Researchers would need to collect additional data for several periods. Second, the results of this study were based on the Tunisian population so it is recommended that the research model be validated in various and varied contexts. This research also admits limitations regarding to the chosen sampling method, which does not allow generalizing the results. In terms of future research paths, this paper invites researchers to investigate whether social media and the different types of information shared there are likely to have a similar impact on travelers' engagement and intent to revisit a tourism destination and to test the model on other types of tourist destinations in Tunisia or abroad. Further research is also needed on travel decision making during crises taking into account other variables such as sustainability, well-being, etc.

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