

## THE DESTINATION MEDIA PROFILE AND TOURIST TRAVEL INTENTIONS: THE MEDIATING EFFECT OF COVID-19 INDUCED PERCEIVED RISK

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### ABSTRACT

Information symmetry is a critical antecedent to tourists' consumptive decision-making and conative behaviour, especially in times of crisis and uncertainty. The present study is novel in its interrogation of whether COVID-19 induced perceived risk has an intervening effect in the destination media profile - travel intentions nexus of tourists. The quantitative study adopted a cross-sectional approach. Data was generated via an online survey of a purposive-convenient sample. The respondent-driven snowball sampling approach resulted in a final international sample of 323 potential tourists. Exploratory and confirmatory factor analyses, linear regressions, and simple and parallel mediation analyses were employed. As it emerged from the study, a destination's media profile, directly and indirectly, influences the conative behaviour of tourists. At the same time, destination media profile has an apparent direct effect on perceived risk-oriented information symmetry. A partial diminishing intervening effect of COVID-19 induced risk is also established in the indirect relationship between destination media profile and tourists' post-crisis travel intentions.

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## INTRODUCTION

The devastating global effects of the ongoing COVID-19 pandemic on tourism bear testament to the susceptibility of tourism to external shocks

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such as pandemics (Bhati et al., 2021; Rather, 2021). Health-related crises have predictably been associated with heightened perceived risk and the significant retardation of tourism demand. Recent history suggests that health-related crisis events significantly diminish tourism demand, buoyed by paradigm shifts in tourist behaviour (Villacé-Molinero et al., 2021). Depending on their duration and severity, natural (Ebola, H1N1; Severe Acute Respiratory Syndrome - SARS) and man-made (September 11 terror attacks) disasters may result in a phobia towards tourism activity, termed 'tourophobia' (Boto-García & Leoni, 2021; Çakar, 2021; Yildirim & Güler, 2022). For instance, the SARS epidemic of 2003 resulted in a 55% decrease in Japanese outbound tourists to international tourist destinations (Hajibaba et al., 2015), while over the same period, Taiwan experienced a 72% decline in inbound tourism (Mizrachi & Fuchs, 2016).

During crisis events, tourists become more circumspect in their consumptive decisions, mainly due to risk perceptions (Cahyanto & Liu-Lastres, 2020; Carballo et al., 2017). Therefore, it is vital to establish a better understanding of tourist behaviour post the crisis to better predict tourist's conative behaviour (Chiu et al., 2019), to utilise the data in the innovation and development of responsive tourism policy and products that support post-crisis tourism recovery and marketing strategies. The key to the formation of risk perceptions is information symmetry. Empirical evidence from the South Korean experience during the 2015 Middle East Respiratory Syndrome (MERS) outbreak shows that information asymmetry during public health crises was correlated to an increased uptake in the consumption of information related to the crisis from various media channels, including social media, interactive networks and online news platforms (Jang & Baek, 2019). This implies that during and post-crisis events, information symmetry from the *media* may be a critical antecedent to the conative behaviour of tourists - whereby information becomes vital to the affirmation or mitigation of risk and uncertainty (Jonas & Mansfeld, 2017; Williams & Baláž, 2015; Yildirim & Güler, 2022). Significantly, the proliferation of innovative technologies has transformed the communications (websites, social networks, mobile applications) landscape within the global tourism market. As a result, both new and traditional media-induced tourism destination media profiles become important heuristic cues that influence the travel intentions of tourists (Koo et al., 2016; Peters et al., 2011). It follows then that understanding the influence of extrinsic antecedents such as the destination media profile on the amplification or mitigation of perceived risk in tourist's post-crisis decision-

making is also essential to the recovery of tourism demand (Adie, 2020; Kapuscinski & Richards, 2016; Khan et al., 2021).

There has, however, been limited academic inquiry into the relationship among destinations' media profiles, perceived risk, and travel intentions due to health-related crises (Al-Gasawneh, 2020; Yu et al., 2021). At the same time, Jonas and Mansfeld (2017) note a corresponding gap in research relating to the influence of media profile-related information on risk perceptions, albeit previous studies establishing the heterogeneity in the effect of various media-sourced information on the perceived risk and travel intentions of tourists, respectively (Al-Gasawneh, 2020; Bhati et al., 2021; Kaulu et al., 2020). The COVID-19 pandemic has re-invigorated academic inquiry into the role and influence of risk perceptions in tourist decision-making. Notwithstanding the emerging research around COVID-19 and its influence on tourism, a substantial proportion of contemporary studies on tourism (Bae & Chang, 2021; Boto-García & Leoni, 2021; Rather, 2021) have to date generally established the influence of pandemic-related risk on the travel intentions and tourist behaviour. However, limited insights have been provided into the impact of crisis-induced risk on the relationship between specific antecedents in tourists' decision-making process and their intended behaviour. To this end, the present study explores and examines the potential intervening effect of crisis-induced perceived risk in the destination media profile - travel intentions nexus.

## LITERATURE REVIEW

### Study premise

There are three major theoretical frameworks relevant to the potential mediation effect of perceived risk in the destination media profile – travel intentions nexus. First, the Theory of Planned Behaviour (TPB) (Ajzen, 1985, 1991) is a seminal explanatory framework in the tourism discourse that attributes tourist behaviour's likelihood to three dimensions: attitude, subjective norms, and perceived behavioural control. Contextually, the TPB implies that despite their intrinsic motives, tourists are more likely to engage in positive conative behaviour towards a destination if the destination: is associated with a positive image or perceptions (does not pose a psychological risk to the tourist); it is acceptable to the pervasive values and norms of the tourist and their social reference groups (represents minimal social risk); and will not result in uncertain or harmful outcomes that are beyond the control of the tourist such as health-related physical risk associated with COVID-19 infection (Lam & Hsu, 2004). Notably, the TPB

acknowledges the susceptibility of tourist behaviour to subjective heuristic cues (Jonas & Mansfeld, 2017; Soliman, 2019).

Second, the role of media in influencing the *travel intentions* and *risk perceptions* of tourists is grounded in the media-centric Use and Gratification Theory (UGT) (Palmgreen & Rayburn, 1979) which posits that the choice of media, its utility and the extent of exposure to it inform the conative behaviour of its consumer(s). Whereby, tourists consume information from specific media channels to achieve the requisite information symmetry to effectively evaluate the destination's attributes (including risk assessment) concerning their intrinsic motives for engaging in tourism activity, thus impact their travel intentions (Koo et al., 2016). Moreover, the evaluation aspect of the UGT supports the role and effect(s) of media consumption in both perceived risk formation and behavioural outcomes, which in crises can be further explained by the third theoretical framework, Rogers' (1975) Protection Motivation Theory (PMT). The PMT propagates that individuals adapt and mediate their conative behaviour based on the subjective perceptions of risk to mitigate uncertainty, as well as their perceived susceptibility to potential health threats to their well-being, more so in post-health crisis travel and tourism contexts (Bhati et al., 2021; Boto-García & Leoni, 2021; Rogers, 1975). These subjective risk perceptions are predicated on the extent of either information symmetry or asymmetry concerning the pervasiveness of the crisis event. Hence, it is reasonable to consider the notion that the contemporary tourist's travel intentions may be particularly susceptible to the influence of a destination's media profile with the potential intervening effect of COVID-19 pandemic induced perceived risk.

### **Media profile and tourist behaviour**

The attitudes of tourists towards tourism destinations are the consequence of the organic and induced stereotypes that tourists are exposed to through various communication channels, including travel and tourism websites (Garg, 2012), social media (Jalilvand et al., 2013), official tourism destination websites (Buhalis & Law, 2015), the traditional mass media (Koo et al., 2016), and entertainment content (Peters et al., 2011). These stereotypes are utilised as heuristic cues catalysing image (cognitive) and perception (affective) formation related to a specific destination (Al-Gasawneh, 2020; Latif et al., 2020). In an increasingly globalised world, tourists interact with various media platforms during their destination information search process (Bhati et al., 2021; Khan et al., 2021); thus positioning media channels as contemporary vectors of both objective and subjective information that tourists utilise to build a destination's media profile, more-

so in situations of uncertainty (Al-Gasawneh, 2020; Jalilvand et al., 2013). As a result, the dual role of *media* in the contemporary tourism context is to reinforce tourists' travel motivations and decision-making process while informing tourists of the potential consequences of engaging in tourism activity (Koo et al., 2016; Oh et al., 2021).

### **Perceived risk and post-crisis travel behaviour**

Risk (Bauer, 1960) in tourist behavioural studies refers to "the individual's feelings of uncertainty about the outcomes of a purchase, risk perception is understood in terms of how predetermined notions about particular places, objects, or activities, influence tourist behaviour," (Williams & Baláž, 2015, p. 274). The risk construct may be dichotomised into two distinct risk typologies: absolute/real and perceived risk. Actual risk is the objective evaluation of the likelihood of a negative outcome from a consumer's consumptive decision (Adam, 2015), while perceived risk may be characterised as an idiosyncratic and subjective belief that an action or decision may have an uncertain or negative outcome (Karl, 2018; Wolff & Larsen, 2016). Although the current COVID-19 pandemic poses an absolute risk to tourist health and safety, conventional wisdom suggests that tourists tend to make their consumptive decisions based on perceived risk, notwithstanding the absolute risk that may or may not exist (Carballo et al., 2017; Yang et al., 2015).

Perceived risk within the tourism context may be decomposed into nine typologies: health, financial, natural, political, physical, psychological, social, satisfaction, and terrorism risk (Deng & Ritchie, 2018; Qi et al., 2009; Sönmez & Graefe, 1998). Implying that risk as a multi-dimensional construct is highly subjective, resulting in a generally heterogeneous effect on tourist decision-making and travel behaviour (Lenggogeni et al., 2019). For instance, Qi et al. (2009) found that US students associated travel to China with safety concerns, cultural violence, socio-psychological, and cultural risk. While a survey of English and German tourists found that international tourists were influenced by health, delinquency, accident, environmental, and natural disaster risk in their decision-making (Carballo et al., 2017). However, another study found that physical risk only influenced German tourists when considering Turkey as a tourism destination (Yağmur & Doğan, 2017). While Wang (2017) found that Chinese tourists were affected by perceived natural and social risk when considering Taiwan as a tourism destination. Considering the COVID-19 pandemic, the present paper's scope is limited to physical, psychological, and social risks.

Several authors (Chiu et al., 2019; Deng & Ritchie, 2018; Fuchs & Reichel, 2006; Khasawneh & Alfandi, 2019) have assimilated health-related aspects as physical risk factors that may harm or endanger the health and well-being of tourists. To this end, physical risk "[...] refers to the possibility that an individual's health is likely to be exposed to injury and sickness because of conditions such as law and order, weather, and hygiene" (Fuchs & Reichel, 2006, p. 86). Psychological risk is associated with the perceived probability that tourism-oriented activity will either not meet the tourist's expectations based on their self-image or, more importantly, create anxiety for their safety, as well as exacerbate the general fear of disappointment (Chiu et al., 2019; Fuchs & Reichel, 2006). While, the social risk is associated with the prospect of the loss of acceptance or respect (social status) within the tourist's reference groups, including family, friends and the broader community as a result of consuming travel and tourism products (Deng & Ritchie, 2018; Hajibaba et al., 2015).

### **Hypotheses formulation**

Prior tourism studies have established a correlation between the media-based profile of destinations and the travel intention of tourists. For instance, Jalilvand et al. (2013) concluded that eWord-of-Mouth through various media platforms positively influenced tourist perceptions and the travel intentions of tourists towards visiting Iran. Correspondingly, in the case of tourism to South Korea, Koo et al. (2016) established a strong positive correlation between international tourists' media exposure to the destination and their travel intentions. While more pertinently, Mizrachi and Fuchs (2016) observe that in crises such as the Ebola outbreak, mass media is critical to disseminating travel-related information as tourists proactively seek information to support their travel decisions and ultimately mitigate perceived risks. Hence, the following hypothesis was tested;

*H1: The destination media profile of a tourism location has a positive direct effect on tourists' travel intentions.*

Prior research has established the primordial role of the media and its various platforms in informing consumer perceptions in public health crises (Jang & Baek, 2019). To this end, from a sample of Israeli backpackers, Jonas and Mansfeld (2017) established the *interplay* between information sourced from various channels (including online travel forums and news sites) and risk perception formation at various stages of tourist's travel consumption process. Correspondingly, Kapuscinski and Richards (2016)

observe that tourists' risk perceptions predicate the *media effect* and how the information is framed. The study with a sample of United Kingdom-based leisure tourists determined that media exposure and framing have an *amplifying* and *attenuating* effect on tourist risk perceptions. Contemporary studies illustrate this dichotomy in the net effect of media on risk perceptions. For instance, Rather (2021) opines that COVID-19 has a modifying effect on tourists, including heightened fear, uncertainty and heightened reactions. Whereas, Al-Gasawneh (2020) concludes the opposite, suggesting that social media, in particular, had a mitigating effect on the perceived risk and uncertainty associated with Saudi Arabia. To test the impact of media on the risk perceptions of tourists, the following hypotheses were formulated;

H2: *The destination media profile of a tourism location has a positive direct effect on perceived physical [H2<sub>a</sub>], psychological [H2<sub>b</sub>] and social [H2<sub>c</sub>] risk associated with the COVID-19 pandemic.*

Perceived risk is a critical antecedent to travel intention formation (Hsieh et al., 2016). Tourists associate risk with threats to their subjective well-being (Holm et al., 2017). To this end, a nexus between perceived risk and both the notion of safety and tourists' intention to travel has been established (Deng & Ritchie, 2018). Prior studies (Cahyanto & Liu-Lastres, 2020; Karl, 2018; Wang, 2017) indicate that perceived risk diminishes tourists' travel intention. More pertinently, there is anecdotal evidence that health crises such as the various avian flu and Ebola outbreaks have an inverse correlation typically with the travel intentions of tourists (Boto-García & Leoni, 2021; Mizrachi & Fuchs, 2016). Thus, lower perceived risk stimulates consumption, whereas higher perceived risk makes consumers more circumspect in their consumptive decisions - prompting mitigating behaviour such as trip delays, cancellations or the avoidance of specific destinations (Cahyanto & Liu-Lastres, 2020; Hasan et al., 2017; Lee et al., 2012; Mizrachi & Fuchs, 2016). Hence, the following hypotheses were tested;

H3: *Perceived physical [H3<sub>a</sub>], psychological [H3<sub>b</sub>] and social [H3<sub>c</sub>] risk associated with the COVID-19 pandemic has a negative direct effect on travel intention.*

There is an established predictive relationship between a destination's media profile and tourist's intention to travel (Jalilvand et al., 2013; Koo et al., 2016; Mizrachi & Fuchs, 2016); destination's media profile and perceived risk (Al-Gasawneh, 2020; Jang & Baek, 2019; Rather, 2021); as well as between risk perception and tourist's travel intentions (Cahyanto & Liu-Lastres, 2020; Hsieh et al., 2016; Karl, 2018). These *prior* relationships

suggest that it may be reasonable to hypothesise an intervening effect of risk perceptions in the destination media profile – travel intentions nexus. Furthermore, PMT supports the intervening impact of crisis-induced risk in tourists' behaviour, including their behavioural intentions (Bhati et al., 2021; Boto-García & Leoni, 2021). Therefore, the following hypotheses were conceived,

H4: *Perceived physical [H4<sub>a</sub>], psychological [H4<sub>b</sub>] and social [H4<sub>c</sub>] risk associated with the COVID-19 pandemic negatively mediate the relationship between destination media profile and travel intention.*

The conceptual framework is illustrated in Figure 1 is based on the hypotheses formulated for the study.

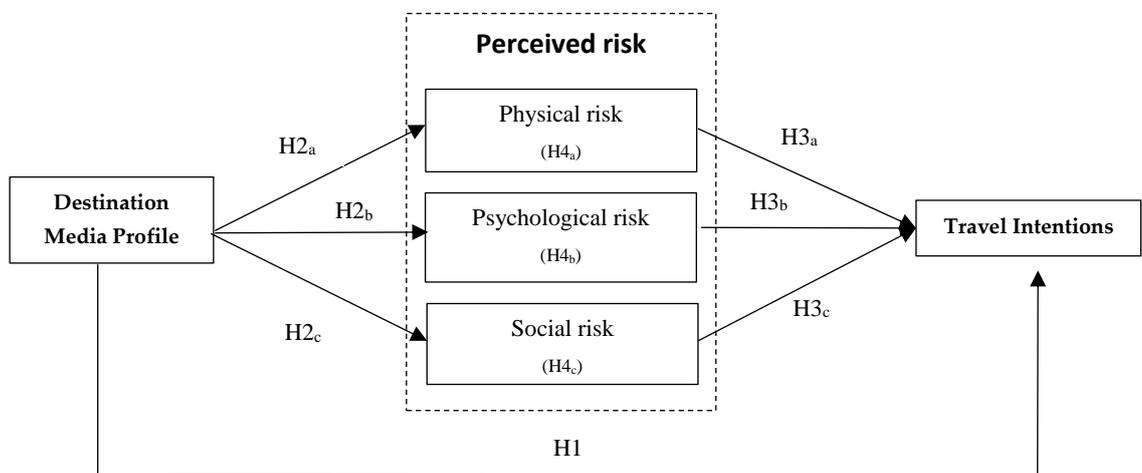


Figure 1. *Conceptual framework*

## METHODOLOGY

A cross-sectional deductive study was conducted. A quantitative survey of potential tourists was conducted between May 7 and June 9, 2020, when a significant proportion of global countries instituted moratoriums on domestic and international travel and tourism. As a result, an online survey was conducted in line with most empirical studies (Li et al., 2021; Neuburger & Egger, 2021) conducted during the COVID-19 pandemic utilising social media platforms. The initial pool of respondents was drawn from Facebook as part of an unrestricted self-selected survey approach (Fricker, 2008; Latif et al., 2020), whereby visitors to North-West University's Tourism Research in Economics, Environs and Society (TREES) research unit Facebook page were invited to voluntarily participate in the study and presented with a link to the online survey hosted on the Google

Forms platform akin to the study by Villacé-Molinero et al. (2021). The TREES Facebook page was suitable for the study's purposes as it comprised international tourists and tourism practitioners with access to multiple social and professional tourism-oriented networks and individuals. Upon completion of the survey, respondents were requested to invite potential tourists within their online networks (Twitter, Instagram, Facebook, LinkedIn) to participate in the study as part of respondent-driven snowball sampling to recruit additional respondents for the survey (Moswete & Darley, 2012; Tyldum, 2020). As a result, 323 responses were generated. The sample achieved logical validity (Forer, 2014) as it was objectively suitable, with 90% of the respondents having travel experience before the pandemic and intending to engage in domestic (82%) and international (98%) travel before the year 2022, despite the COVID-19 pandemic.

### **The measuring instrument**

A novel English language self-administered questionnaire was developed to generate the required data. While the questionnaire comprised five sections, the data generated from four sections was relevant to the present study. The first section solicited the respondents' socio-demographic information (Table 1). Based on a five-point Likert scale of influence, where one = 'Not at all influential' and 5 = 'Extremely influential', the second section asked respondents to what extent of influence any destination's media profile would have on a potential tourist's travel intentions. The five statements for destination media profile were drawn from previous studies (see Adeola & Evans, 2019; Gong & Tung, 2017; Hyun, 2006; Kapuscinski & Richards, 2016; No & Kim, 2015). On a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree', tourists' perceived (physical health-related, psychological, social) risk was measured based on 12 statements adapted from the literature (see Matiza & Kruger 2021). The last section adapted five statements from the literature (see Khasawneh & Alfandi, 2019; Law, 2006; Olya & Al-ansi, 2018; Wang, 2017) to measure the travel intentions of potential tourists on a five-point Likert scale of likelihood, where 1 = 'Extremely unlikely' and 5 = 'Extremely likely'. The measuring instrument was employed with the approval of the North-West University's Economic and Management Sciences Research Ethics Committee (EMS-REC) under ethical clearance number NWU-00625-20-A4.

### **Data analysis**

A three-step data analysis process was undertaken. First, the data were assessed for factorability by employing Kaiser-Meyer-Olkin Measure of

Sampling Adequacy (KMO: >0.50) and Bartlett's Test of Sphericity ( $p < 0.001$ ), before Principle Components Analysis (PCA:  $EV > 1$ ) and Exploratory Factor Analysis (EFA: factor loading coefficient of  $\geq 0.5$ ) reduced the data into discernible factors (Hair et al., 2014; Watkins, 2018). The validity and reliability of the *priori* theoretical constructs established by the EFA were assessed using Confirmatory Factor Analysis (CFA) using IBM AMOS (v.26) (Hair et al., 2014; Wang et al., 2020). The goodness of fit between the model and the observed data was established based on the following statistics: CMIN/DF = between 1 and 3; Comparative Fit Index (CFI  $\geq 0.95$ ), the root mean square error of approximation (RMSEA  $< 0.06$  to  $0.08$ ), and Standardised Root Mean Residual (SRMR  $< 0.08$ ) (Gaskin & Lim, 2016; Schreiber et al., 2006). Composite Reliability (CR  $\geq 0.70$ ) and Average Variance Extracted (AVE  $\geq 0.50$ ) was deemed appropriate to determine the validity and reliability of the constructs (Hu & Bentler, 1999). The second step involved direct effect testing. Adopting Kane and Ashbaugh's (2017) approach, linear regressions assessed the statistical assumptions and subsequent viability of mediation analysis. The final step was the data analysis was, the Mediation Analysis (MA) in SPSS utilising the PROCESS Macro (v3.5) (Hayes, 2013), to explore the factors that may affect tourist's travel intentions as an outcome (Vo et al., 2020).

## RESULTS

Table 1 summarises the socio-demographic profile of the respondents to the survey.

Table 1. *Respondent profile*

Demographic profile	Descriptive statistics
Gender	Male (38.1%); Female (61.3%); Transgender (0.3%); Rather not say (0.3%)
Average age	Between 24 and 44 years old (65.9%)
Highest Qualification	Post-graduate degree (67.8%); Bachelor's degree (19.2%)
Marital status	Single (never married) (44%); Married (44%)
Travel Companion(s)	Family (Adults and children) (26.6%); With my partner (22.6%); Alone (19.2%)
Region of residence	Africa (45.5%); Europe (23.5%)
Travel frequency	More than once (79.6%); Once (10.8%); None, I am yet to travel as a tourist (9.6%)
International travel in the next two years	Yes (82.4%); No (17.6%)
Domestic travel in the next two years	Yes (97.5%); No (2.5%)
Most influential channel for tourism decision-making	The internet (39.9%); Social media (26.3%); Word-of-mouth (20.7%)

Table 1 shows that from the sample of 323 respondents, the majority were female, while most respondents were young to middle-aged. The sample comprised chiefly highly educated individuals who were either single or married. Most respondents indicated that they travelled with their family and resided in Africa when the survey was conducted. A significant proportion of respondents had travelled more than once and, more importantly, indicated that they intended to travel domestically and internationally within the next two years. Table 2 presents the factor analysis results (dimension reduction) for destination media profile, perceived risk, and travel intentions.

Table 2. Means, Standard deviations and EFA

Factor	Items	Mean ( $\bar{x}$ )		Std. Dev ( $\sigma$ )		Comm.		Factor loading Coefficient	
		Min	Max	Min	Max	Min	Max	Min	Max
<b><sup>1</sup>Destination Media Profile</b>	DMP1; DMP2; DMP3; DMP4; DMP5	3.03	3.62	1.155	1.193	0.466	0.595	0.683	0.771
<b><sup>2</sup>Perceived Risk</b>									
<i>Physical Risk</i>	PHR 1; PHR 2; PHR 3; PHR 4	3.38	4.20	1.081	1.321	0.625	0.754	0.674	0.896
<i>Psychological Risk</i>	PSR 1; PSR 2; PSR 3	2.20	2.25	1.277	1.307	0.817	0.892	0.848	0.912
<i>Social Risk</i>	SCR 1; SCR 2; SCR 3; SCR 4	2.11	3.15	1.183	1.322	0.639	0.811	0.708	0.842
<b><sup>3</sup>Travel Intention</b>	TRI 1; TRI 2; TRI 3; TRI 4	2.59	3.67	1.235	1.477	0.635	0.746	0.797	0.864

Oblimin rotation with Kaiser Normalisation [Factor loading coefficient ( $\geq 0.50$ )]

<sup>1</sup>KMO = 0.785; Bartlett's test of Sphericity = ( $\chi^2$  (10) = 448.661,  $p < 0.000$ )

<sup>2</sup>KMO = 0.813; Bartlett's test of Sphericity = ( $\chi^2$  (66) = 2199.928,  $p < 0.001$ )

<sup>3</sup>KMO = 0.723; Bartlett's test of Sphericity = ( $\chi^2$  (10) = 928.887,  $p < 0.000$ )

As Table 2 indicates, as a result of the EFA (Oblimin rotation with Kaiser Normalisation:  $\geq 0.50$ ), all five Destination Media Profile (*DMP*: Eigenvalue = 2.729,  $\alpha = 0.789$ ) items loaded on a single factor, explaining 54.57% of the variance in the data. Three perceived risk factors explaining a cumulative 69% of the variance in the data were also extracted by the EFA, namely: Physical Risk (*PHR*: Eigenvalue = 4.683,  $\alpha = 0.838$ ); Psychological Risk (*PSR*: Eigenvalue = 1.945,  $\alpha = 0.928$ ); and Social Risk (*SCR*: Eigenvalue = 1.673,  $\alpha = 0.842$ ). Five travel intention (*TRI*: Eigenvalue = 3.335,  $\alpha = 0.874$ ) items loaded on a single factor, explaining 67% of the variance in the data. The results of the EFA were reliable within the parameters recommended by Hair et al. (2014).

The CFA (maximum likelihood estimations) goodness of fit for *DMP*, Perceived risk factors, and *TRI* concludes that the constructs extracted by the EFA were valid (Gaskin & Lim, 2016; Hu & Bentler, 1999; Schreiber et al., 2006) within the fit index parameters indicating good fit between the respective models and the observed data as follows:  $\chi^2=357.324$ ;  $p < 0.001$

$\chi^2/df=2.077$ ; CFI=0.950; SRMR=0.058; and RMSEA=0.058. Table 3 summarises the validity and reliability tests.

Table 3. *CFA validity tests*

Latent construct	Observed variables	Composite Reliability (CR)	Average Variance Extracted (AVE)	DMP	PHR	PSR	SCR	TRI
<b>DMP</b>	5	0.777	0.417	<b>0.646</b>				
<b>PHR</b>	4	0.843	0.574	0.297†	<b>0.758</b>			
<b>PSR</b>	3	0.930	0.816	-0.092	0.335†	<b>0.903</b>		
<b>SCR</b>	4	0.851	0.597	0.105	0.488†	0.352†	<b>0.772</b>	
<b>TRI</b>	5	0.879	0.596	0.225†	-0.323†	-0.340†	-0.346†	<b>0.772</b>

\* $p < 0.050$ ; \*\* $p < 0.010$ ; †  $p < 0.001$

As Table 3 indicates, the CR for all constructs was  $\geq 0.70$  threshold (Hu & Bentler, 1999), while the AVE was above the  $\geq 0.50$  threshold, except for *DMP* (AVE = 0.417). However, the CR for *DMP* is  $\geq 0.60$ , indicating adequate convergent validity of the construct (Fornell & Larcker, 1981). The diagonal coefficients extracted were within the recommended parameters and less than the squared AVEs, suggesting that discriminant validity was achieved for the perceived risk construct (Chang, 2004, Wang et al., 2020).

### Direct effect testing

Table 4 shows that *DMP* (IV) was correlated to *PHR*, *SCR* (MVs) and *TRI* (DV). The *DMP-PSR* correlation was the exception, reporting a non-significant outcome suggesting a potentially non-significant *PSR* mediation path between *DMP* and *TRI*.

Table 4. *Pearson-product correlation matrix*

Variable	DMP	PHR	PSR	SCR	TRI
<b>DMP</b>	<b>1</b>				
<b>PHR</b>	0.227**	<b>1</b>			
<b>PSR</b>	-0.054	0.326**	<b>1</b>		
<b>SCR</b>	0.116*	0.426**	0.347**	<b>1</b>	
<b>TRI</b>	0.221**	-0.297**	-0.347**	-0.363**	<b>1</b>

\* 0.05 level (2-tailed), \*\*0.01 level (2-tailed)

All the perceived risk factors were cognate - reporting moderate correlations between  $r = 0.326$  and  $r = 0.426$ . Intriguingly, perceived risk factors and travel intention reported moderate inverse correlations (Hasan et al., 2017; Karl, 2018). Subsequently, the data was assessed to ensure it met the statistical assumptions of linearity, homoscedasticity, normality and independence of observation before the mediation analysis could be conducted (Kane & Ashbaugh, 2017). Additionally, the data in Table 4 reported correlations below  $r = .50$ ; hence multicollinearity was not a

concern in the subsequent analyses (Kaulu et al., 2020). In Table 5, linear regressions showed the predictions: path c - X [*DMP*] on Y [*TRI*]; path a - X on M; path b - M [*M*<sub>1</sub> is *PHR*; *M*<sub>2</sub> is *PSR*; *M*<sub>3</sub> is *SCR*] on Y [*TRI*].

Table 5. *Direct effect verification*

	Unstandardised coefficients		Standardised coefficients		t-value	Sig.	Hyp.
	B	Std. Error	$\beta$				
X ( <i>DMP</i> ) – Y ( <i>TRI</i> ): path c	0.277	0.068	0.221	4.051	0.000***	H1	
<b>Physical risk (PHR)</b>							
X ( <i>DMP</i> ) – M <sub>1</sub> ( <i>PHR</i> ): path a	0.253	0.061	0.227	4.166	0.000***	H2 <sub>a</sub>	
M <sub>1</sub> ( <i>PHR</i> ) – Y ( <i>TRI</i> ): path b	-0.335	0.060	-0.297	-5.578	0.000***	H3 <sub>a</sub>	
<b>Psychological risk (PSR)</b>							
X ( <i>DMP</i> ) – M <sub>2</sub> ( <i>PSR</i> ): path a	-0.074	0.076	-0.054	-0.971	0.332	H2 <sub>b</sub>	
M <sub>2</sub> ( <i>PSR</i> ) – Y ( <i>TRI</i> ): path b	-0.321	0.048	-0.347	-6.620	0.000***	H3 <sub>b</sub>	
<b>Social risk (SCR)</b>							
X ( <i>DMP</i> ) – M <sub>3</sub> ( <i>SCR</i> ): path a	0.134	0.064	0.116	2.095	0.037*	H2 <sub>c</sub>	
M <sub>3</sub> ( <i>SCR</i> ) – Y ( <i>TRI</i> ): path b	-0.394	0.057	-0.363	-6.969	0.000***	H3 <sub>c</sub>	

Statistically significant: \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

The models suggested no statistical violations in linear regression relationships (Field, 2013, Hayes, 2013; Kane & Ashbaugh, 2017). Table 5 shows statistically significant direct relationships on all paths, except for *DMP* predicting *PSR* (X on M: path a). Therefore, the following hypotheses were accepted: H1, since *DMP* is a statistically significant positive ( $\beta = 0.221$ ,  $p < .001$ ) predictor of *TRI*; H2<sub>a</sub> and H2<sub>c</sub>, as *DMP* is a statistically significant positive predictor of *PHR* ( $\beta = 0.227$ ,  $p < .001$ ) and *SCR* ( $\beta = 0.116$ ,  $p < .05$ ); as well as H3<sub>a</sub>, H3<sub>b</sub>, and H3<sub>c</sub>, the perceived risk (*PHR*:  $\beta = -0.297$ ,  $p < .001$ ; *PSR*:  $\beta = -0.347$ ,  $p < .001$ ) and *SCR*:  $\beta = -0.363$ ,  $p < .001$ ) dimensions associated with the COVID-19 pandemic direct negatively predicted *TRI*, respectively. Notably, the regressions confirmed the statistical insignificance ( $\beta = -0.054$ ,  $p = 0.332$ ) of *DMP* as a predictor of *PSR*, corroborating the correlation statistic (Table 4). Thus, hypothesis H2<sub>b</sub> was rejected and excluded *PSR* from the mediation analysis. Ultimately, H4<sub>b</sub> was rejected, as no mediating effect was possible between *DMP* and *TRI* via *PSR* (see Mascha et al., 2013).

### Mediation analysis

The MA proposed that COVID-19 induced perceived risk factors as respective mediators (*M*<sub>1</sub> = *PHR* and *M*<sub>2</sub> = *SCR*) intervened in the relationship between the *DMP* (X) and *TRI* (Y). The paths were relabelled as follows, *PHR*: X on *M*<sub>1</sub> =  $a_1$ ; *M*<sub>1</sub> on Y =  $b_1$  and *SCR*: X on *M*<sub>2</sub> =  $a_2$ ; *M*<sub>2</sub> on Y =  $b_2$ , respectively. Table 6 summarises the mediation analyses' results

utilising Model 4 of the PROCESS Macro (v3.5) plugin in SPSS (Hayes, 2013).

Table 6. *Mediation via perceived risk factors*

Path	B	SE	95% BootCI		$\beta$	t-value	Sig.
			Lower Limit CI	Upper Limit CI			
<b>DMP-TRI</b>							
Path c: DV = TRI							
R <sup>2</sup> =0.0486, F(1,321.0000)16.4069, p=0.0001							
IV = DMP							
	0.2774	0.0685	0.1472	0.4122	0.2205	4.0505	0.0001***
<b>DMP-PHR-TRI</b>							
Path a1: DV = PHR							
R <sup>2</sup> =0.051, F(1,321.0000)17.3586, p=0.0000							
IV = DMP							
Path b1 and c: DV = TRI							
R <sup>2</sup> =0.1757, F(1,320.0000)34.1063, p=0.0000							
IV = DMP (c')							
	0.3817	0.0656	0.2527	0.5107	0.3034	5.8228	0.0000***
IV = PHR (b1)							
	-0.4126	0.0587	-0.5282	-0.2971	-0.3660	-7.0239	0.0000***
Effect: a1b1							
	-0.1043		-0.1678	-0.0507			
<b>DMP-SCR-TRI</b>							
Path a2: DV = SCR							
R <sup>2</sup> =0.0135, F(1,321.0000)4.3888, p=0.0370							
IV = DMP							
Path b2 and c: DV = TRI							
R <sup>2</sup> =0.2013, F(2,320.0000)40.3308, p=0.0000							
IV = DMP (c')							
	0.3349	0.0633	0.2104	0.4594	0.2662	5.2924	0.0000***
IV = SCR (b2)							
	-0.4277	0.0547	-0.5353	-0.3202	-0.3934	-7.8217	0.0000***
Effect: a2b2							
	-0.0575		-0.1174	-0.0002			

Note: N=323, statistically significant at \*p < .05, \*\*p < .01, \*\*\*p < .001

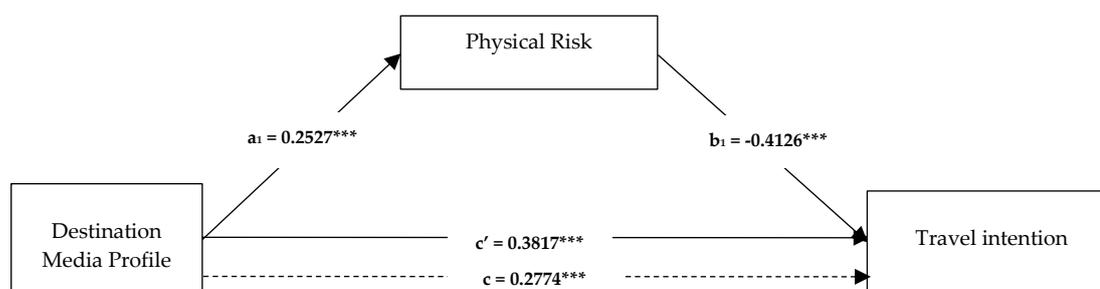


Figure 2. *Mediation via physical risk*

Statistical significance: \*p < .05, \*\*p < .01, \*\*\* p < .001

Note: The mediating effect of physical risk (PHR) in the relationship between a destination's media profile (DMP) and travel intention (TRI). Effects are unstandardised; a1 is the effect of destination media profile on physical risk; b1 is the effect of perceived physical risk on travel intention; c is the direct effect of destination media profile on travel intention; c' is the total effect of destination media profile on travel intention.

Statistically significant effects were established in both models for the intervening variables PHR and SCR in explaining the relationship between DMP and TRI. The mediation path coefficients utilise unstandardised coefficients in line with the literature (Fairchild &

McDaniel, 2017; Hayes, 2013; Preacher & Kelley, 2011). All the effects reported 95% bias-corrected confidence intervals (CI) based on 5000 bootstrap samples (Preacher & Hayes, 2004) did not include zero between the Lower limit (LL) and Upper Limit (UL); therefore, all the effects were significant.

As shown in Table 6 and illustrated in Figure 2, *DMP* had a positive direct effect on *PHR* ( $a_1 = 0.2527, p < 0.001$ ), while *PHR* had a negative direct effect on *TRI* ( $b_1 = -0.4126, p < 0.001$ ). The MA also indicates a significant negative indirect effect ( $a_1b_1 = -0.1043, p = 0.000$ ) of *DMP* on *TRI* via *PHR*, 95% bootstrap CI (LL = -0.1678, UL = -0.0507). The range from the LL to the UL did not include zero; thus, the negative indirect effect was significant. Therefore, hypothesis H4<sub>a</sub> was supported; the influence of a destination's media profile on a tourist's travel intentions (likelihood to engage in tourism) was indirectly diminished by COVID-19 induced perceived physical risk. Figure 3 shows the mediating effect of *SCR*.

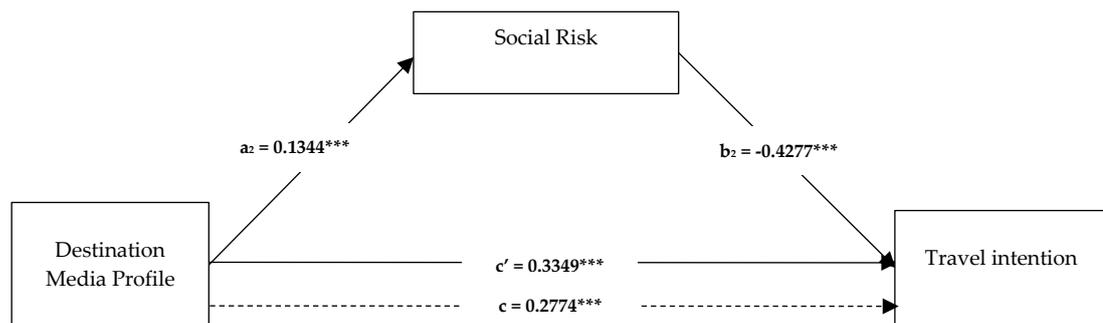


Figure 3. Mediation via social risk

Statistical significance: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\*  $p < 0.001$

Note: The mediating effect of social risk (*SCR*) in the relationship between a destination's media profile (*DMP*) and travel intention (*TRI*). Effects are unstandardised;  $a_2$  is the effect of destination media profile on social risk;  $b_2$  is the effect of social risk on travel intention;  $c$  is the direct effect of destination media profile on travel intention;  $c'$  is the total effect of destination media profile on travel intention.

Also shown in Table 6 and illustrated in Figure 3, *DMP* had a positive direct effect on *SCR* ( $a_2 = 0.1344, p < 0.001$ ), while *PHR* had a negative direct effect on *TRI* ( $b_2 = -0.4277, p < 0.001$ ). The MA revealed a significant negative indirect effect ( $a_2b_2 = -0.0575, p = 0.000$ ) of *DMP* on *TRI* via *SCR*, 95% bootstrap CI (LL = -0.1174, UL = -0.0002). The range from the LL to the UL did not include zero; therefore, the negative indirect effect was significant. Therefore, hypothesis H4<sub>c</sub> was supported; the influence of a destination's media profile on a tourist's travel intentions (likelihood to engage in tourism) was indirectly diminished by COVID-19 induced perceived social risk. In both mediation models, the  $R^2$  statistic increased significantly with both *PHR* and *SCR*'s intervening effect, respectively. In the *PSR* mediation

model, the  $R^2$  statistic increased from 5% to 18%. In contrast, in the *SCR* mediation model, the  $R^2$  statistic increased from the initial 5% to 20%, suggesting that both models were respectively ideal and had practical effect significance (Colignatus, 2018; Ferguson, 2009) and that *PSR* and *SCR* increased the proportion of variance in *TRI* that *DMP* may explain albeit being a diminishing effect. This inclination supported further analysis to explore whether a model incorporating *PHR* and *SCR* as parallel intervening variables would increase the proportion of variance in *TRI* that *DMP* may explain. The results of the parallel mediation analysis are illustrated in Figure 4.

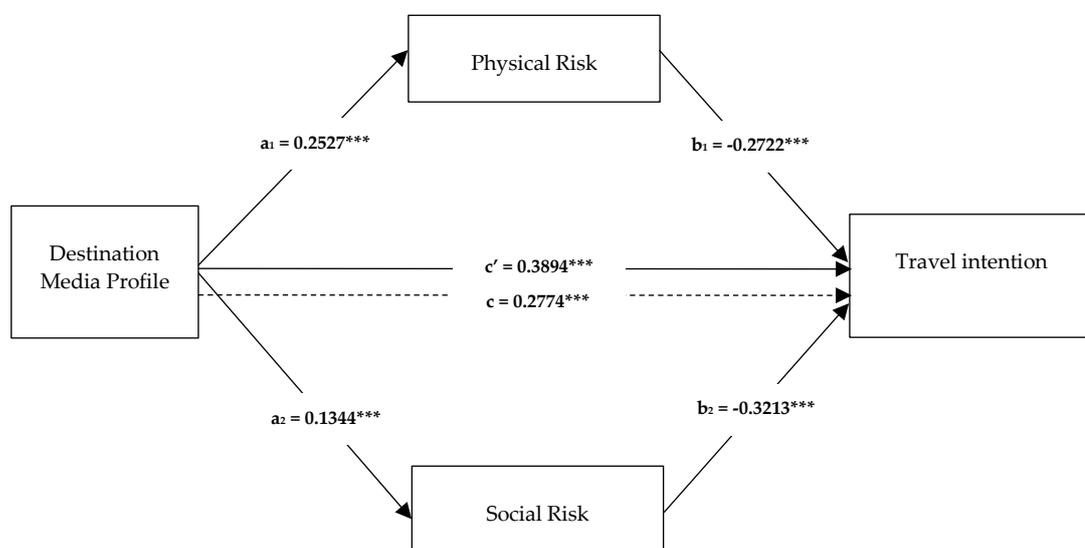


Figure 4. *Parallel mediation via physical and social risk*

Statistical significance: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\*  $p < 0.001$

Note: The mediating effect of physical risk (*PHR*) and social risk (*SCR*) in the relationship between a destination's media profile (*DMP*) and travel intention (*TRI*). All presented effects are unstandardised;  $a_1$  is the effect of destination media profile on physical risk;  $b_2$  is the effect of physical risk on travel intention.  $a_2$  is the effect of destination media profile on social risk;  $b_2$  is the effect of social risk on travel intention.  $c$  is the direct effect of destination media profile on travel intention;  $c'$  is the total effect of destination media profile on travel intention with physical and social risk in the model.

The parallel mediation analysis results (95% bias-corrected CI based on 5000 bootstrap samples) did not include zero between the LL and UL; therefore, all the parallel mediation effects were significant. Figure 4 shows that the effect of *DMP* on *PHR* and *SCR*, respectively, held constant to the simple mediation models. However, paths  $b_1$  and  $b_2$  were different from the preceding models. *PHR* reported a weaker negative effect on *TRI* ( $b_1 = -0.2722$ ,  $p < 0.001$ , LL = -0.3937 and UL = -0.1507), while *SCR* also reported a weaker negative effect on *TRI* ( $b_2 = -0.3213$ ,  $p < 0.001$ , LL = -0.4362 and UL = -0.2064). On the other hand, bootstrapping analyses with 5000 samples,

revealed a stronger significant negative total indirect effect of *DMP* on *TRI* through *PHR* and *SCR* ( $-0.0688 + -0.0432 = -0.1120$ ,  $p = 0.000$ ), 95% bootstrap CI (LL =  $-0.1889$ , UL =  $-0.0445$ ), compared to the respective preceding individual indirect effects. *PHR* and *SCR* as intervening variables increased the proportion of variance in *TRI* that *DMP* may explain ( $R^2 = 0.2472$ ,  $F(3,319.000) 34.9103$ ,  $p=0.000$ ) to 25%, indicating the practical effect significance of the parallel mediation model (Colignatus, 2018; Ferguson, 2009).

## DISCUSSION

The empirical evidence from the simple mediation analyses demonstrates the expected sign, reporting the partial negative mediation effect of perceived *PSR* and *SCR* in the influence of *DMP* and the *TRI* of potential tourists, respectively. Furthermore, slightly superior results were achieved with parallel mediation analysis (Figure 4), showing a stronger significant negative indirect intervening effect of *PSR* and *SCR* on the relationship between *DMP* and the *TRI* of tourists. Figure 5 is the summative model of the intervening effect of risk perception in the *DMP*-*TRI* nexus.

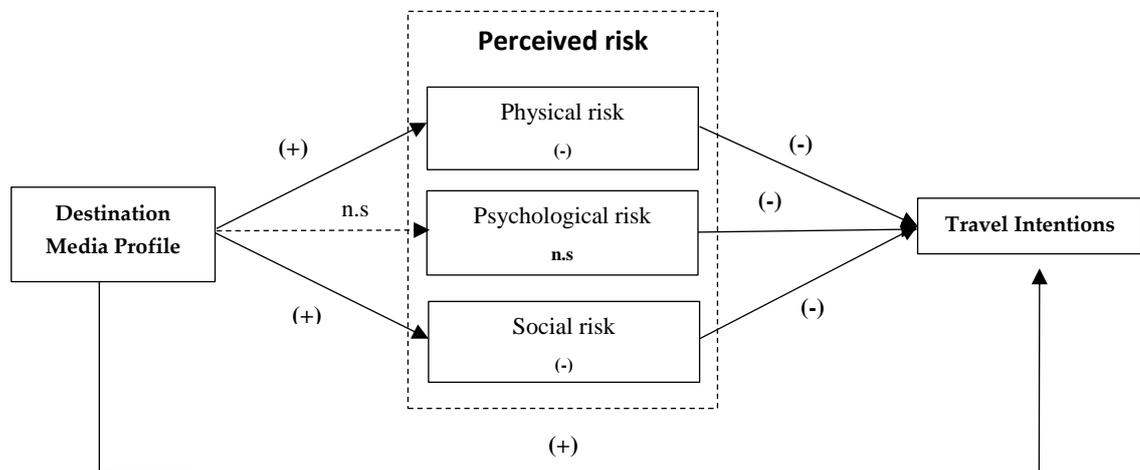


Figure 5. Summative model for the mediating effect of perceived risk

The influence of *DMP* on *TRI* despite the intervening influence of perceived risk corroborates with the UGT (Palmgreen & Rayburn, 1979) whereby, tourists actively seek a destination's information and utilise the destination's profile as a heuristic cue to achieve information symmetry to inform their travel behaviour and decision-making (Al-Gasawneh, 2020; Bhati et al., 2021; Koo et al., 2016). The partial negative mediation effect of

*PSR* is primarily buoyed by the *PMT* (Rogers, 1975), whereby health-related risk is associated with intervening need to avoid or mitigate the risk in their travel behaviour (Bhati et al., 2021; Boto-García & Leoni, 2021; Fuchs & Reichel, 2006). The partial negative mediation effect of *SCR* on tourist travel behaviour corroborates *TPB* (Ajzen, 1985, 1991) and is consistent with previous findings that suggest subjective norms and the inherent social risk induced by the COVID-19 pandemic are integral to tourist decision-making and ultimately influence tourist behaviour (Deng & Ritchie, 2018; Soliman, 2019; Wang, 2017).

The findings (Figure 5) also indicate the direct positive effects of the *DMP* on specific COVID-19 induced (*PSR* and *SCR*) risk perceptions, respectively. Previous studies (Jang & Baek, 2019; Kapuscinski & Richards, 2016; Rather, 2021) support the positive correlation between a destination's media profile and risk perception, where increased media exposure is associated with corresponding heightened perceived risk, particularly in the context of health crises. In line with contemporary studies (Boto-García & Leoni, 2021; Çakar, 2021; Li et al., 2021) on the impact COVID-19 induced risk on tourist behaviour, our study establishes a direct effect of perceived physical (Matiza & Kruger, 2021), psychological (Han et al., 2020) and social (Richard et al., 2020) risk on tourist behaviour such as travel intentions. As a result, a key preposition from our study is that the perceived risk induced by the COVID-19 is multi-dimensional - espousing physical health-related and social risk factors. Significantly, the heightened risk perceptions associated with COVID-19 have a discernible, albeit partial, negative intervening effect on the influence of a destination's media profile on the travel intentions of tourists. The study findings point to a potential paradigm shift in place branding and country image in the consumptive decision-making of tourists in the era of COVID-19.

## CONCLUSION AND IMPLICATIONS

The present study is one of the first to establish the interaction of the triad of dimensions [media profile, perceived risk, travel intentions] within the African tourism context in the era of COVID-19. Particularly, physical and social risk are parallel mediating risk factors in the influence of destinations' media profiles and international tourists' travel intentions. The results cast a new light on the sustained role and relevance of a destination's (media) profile on tourists' travel behaviour in a post-COVID-19 crisis context, albeit in an environment characterised by heightened crisis-induced risk.

### **Theoretical implications**

Theoretically, the findings enrich the extent of the academic literature by contributing empirical evidence that illustrates the interplay between TPB, UGT and PMT: thus, implying the extension of the seminal theory to the COVID-19 pandemic by modelling the relationship between a destination's media profile and the travel intentions of tourists via perceived COVID-19 induced physical and social risk. From a tourism research perspective, the study establishes the media profile as first, an antecedent to the post-crisis travel behaviour of tourists, and second, as an antecedent to perceived risk formation in times of crisis. Moreover, the empirical evidence contributes to the emerging literature - the multi-dimensional nature of the risk induced by the pandemic, more so its intervening effect in the contemporary destination media profile – travel intentions nexus.

### **Practical implications**

From a practical managerial perspective, our findings provide vital and timely insights into tourist behaviour by predicting their travel intentions after the crisis. Media is critical to the success of risk mitigation strategies (Kapuscinski & Richards, 2016); however, this role has been amplified by the sheer scale, duration, and severity of the COVID-19 pandemic and its inherent impact on the psyche of tourists. The empirical evidence supports the prudence of tourism marketers proactively managing their destination media profiles. This may be achieved by maximising information dissemination and symmetry via a concerted multi-channel approach that incorporates social media, formal websites, and created content platforms. This approach must be complemented by incorporating crisis recovery communications with information about their destinations (Bhati et al., 2021; Rather, 2021). The seamless integration of destination (marketing) platforms with crisis recovery communication strategy would facilitate a more comprehensive approach to implement post-crisis marketing strategies associated with risk mitigation measures to curb the uncertainty and fear associated with travel and tourism.

Relatedly, for the foreseeable future, tourist behaviour and destination marketing post-COVID-19 will significantly be influenced by tourist well-being in terms of health and safety (physical risk), as well as the inherent influence of subjective norms (social risk) associated with the spread of the coronavirus (Çakar, 2021). By being more cognizant of the pandemic's complex cognitive and affective impact on tourists, tourism practitioners and suppliers will better manage the tourism demand

recovery process (Oh et al., 2021). Whereby the effective harnessing of media content across various media platforms as a vector for *socially oriented tourism marketing* will complement both government and public health agency policy and strategy responses to the pandemic (social re-engineering); including the promotion of non-pharmaceutical interventions such as social distancing, sanitising, and mask-wearing in travel and tourism (Yu et al., 2021). Such an approach provides further impetus for integrating crisis management and recovery with the destination's media profile - promoting a more positive, safer and socially responsive destination image.

Conventional tourism products may not overcome the effects of the COVID-19 pandemic suggesting the need for innovative products that will satisfy tourists' evolving contemporary scenario or the *new normal*. Such innovations must extend to managing a destination's media profiles since a destination's media profile is often the first point of contact between the tourist and the destination. Constraints on travel and related activity correlate with tourists' increased reliance on media to provide the heuristic cues necessary to inform their consumptive decisions. As a result, destination marketers need to adopt responsive, location-specific online approaches to creating and promoting real-time value and product innovations (Khan et al., 2021). One approach may be engaging potential tourists through virtual reality (VR) and virtual tours. Whereby, by combining online platforms with more traditional forms of media such as entertainment content creation and co-creation through social media content (pictures, videos), tourism marketers can facilitate virtual tours and tourism product experiences as an immersive approach to information dissemination and product sampling during and post-the-crisis period (see El-Said & Aziz, 2021).

### **Study limitations and future research**

Notwithstanding the study's significant theoretical and managerial contributions, three limitations are noted. First, the study was non-specific in terms of a particular source market or destination. However, the two characteristics were not associated with the explorative nature of the study's objectives. Additionally, the COVID-19 pandemic has had a generally homogenous effect on tourism destinations; hence a general exploratory approach was feasible for the present study. While a generic perspective was the aim of the study, future destination or source market-specific studies may benefit tourism practitioners within their respective localised contexts. Second, the study is cross-sectional, and the findings

present a deductive snapshot of tourist behaviour at a specific time. This limitation is apparent in many previous tourist behavioural studies, and longitudinal comparative studies are recommended to consistently measure and detect changes in tourist behaviour, given the ongoing and complex nature of the COVID-19 pandemic. Third, the survey instrument was developed and administered in English due to funding and expertise constraints. It remains unclear to which degree language may have attributed to respondent participation or the final sample size; however, it is anticipated to have been minimal due to the universal nature of the English language.

Going forward, it will be critical for tourism researchers to acknowledge and map the trajectory of the paradigm shift in the psyche of tourists. In the period immediately preceded by the COVID-19 pandemic, reflexive policy and marketing strategies will significantly impact tourism recovery. More so when informed by evidence-based data from advanced tourism research on the pandemic and its effects on the consumptive decision-making process of tourists. More so, how the multifaceted effects of the pandemic influence the role of conventional heuristic cues such as destination profiles and destination brand image in tourists' decision-making and behavioural intentions.

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