Motivating or manipulating: The influence of health-protective behaviour and

media engagement on post-COVID-19 travel

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Abstract: COVID-19 (Coronavirus Disease) is a contagious global pandemic that has impacted tourism in 2020. Tourist behaviour and destination image are significantly influenced by the tourist's perception of safety and risk. This research letter focuses on post-pandemic travel behaviour through an understanding of how mediating factors can change the relationship of destination perception and travel intentions post-crisis. Drawing from the Protection Motivation Theory model, it proposes an adapted model and provides new insights with the addition of mediating roles of tourist health-protective behaviour and media engagement in influencing tourists' post-COVID-19 travel.

1. Introduction

COVID-19, a pneumonic disease, has engulfed the global community in a pandemic in 2020 (Gössling et al., 2020). With travel and mobility contributing to its rapid spread globally, lack of a vaccine, spiralling infections and deaths, the World Health Organization declared it a pandemic on 11 March 2020. Past pandemics have not caused such global economic disruption. The unprecedented health situation resulted in travel restrictions and countries going into lockdown, affecting the tourism industry, particularly due to its dependence on human mobility. Pandemic diseases intensify the sense of personal risk in travel. The World Tourism Organization 'COVID-19 Tourism Recovery Technical Assistance Package' (UNWTO, 2020) offers tourism sector stakeholders guidance and technical assistance in areas such as impact assessment, roles and responsibilities. But the guidelines are not binding. Countries may differ in implementation owing to financial constraints, varying standards of healthcare and shortage of key resources such as water and waste management. In the competition for

tourists, richer countries with good healthcare systems and hygiene practices would fare better. Understanding travel motivators and factors influencing tourists' behaviour and intention in choosing a travel destination is beneficial to tourism planning and marketing (Lam & Hsu, 2006). Wong & Yeh (2009) emphasise perceived health risk as an important aspect of travel behaviour and Protection Motivation Theory (PMT) as the preferred framework to study it. Among different personal risks, health-related risk has been the most prominent as travellers think twice before deciding to travel, especially in pandemics (Cochrane, 2008). While the perception of health-related risk may vary among different tourists, it is considered a key element in the decision-making process when choosing destinations (Reisinger & Mavondo, 2005). Hence, this research letter presents the mediating role of health-protective behaviour and tourists' media engagement on the relationship between health-related risk image of a destination and tourists' intention to travel.

2. Background

Protection Motivation Theory

Protection Motivation Theory (PMT) was proposed by Rogers (1975) as a cognitive framework of behaviour for the purpose of predicting and mediating health-related behaviour. It was developed from fear appeal or awareness of a threat to wellbeing of an individual and change of attitude. In 1983, it was improved as a more common theory of cognitive change, providing a broader scale of information to start a coping process. The revised model accepts that a person's decision to undertake preventive behaviour is due to their motivation to protect themselves from threats. This decision is based on two aspects: threat appraisal and coping (Rogers & Prentice-Dunn, 1997; Janmaimool, 2017).

Higher perception of vulnerability and severity will motivate an individual towards risk preventive behaviour, while higher perception of rewards despite current risk will display influenced behaviour (Janmaimool, 2017). On the other hand, coping appraisal includes self-efficacy (perceived individual capability to exhibit behaviour), response efficacy (perceived effectiveness of suggested risk-preventative behaviour) and response cost (cost of acting on the suggested behaviour) (Rogers, 1983; Janmaimool, 2017). The PMT framework has been utilised in many studies to understand and predict protective behaviour in mostly health-related threats and in the general decision-making process (Maddux, 1993). In tourism, PMT has been applied to explore climate change-related threat, carbon reduction behaviour of tourists (Horng et al., 2014); perceived risk in tourism (Williams & Baláz , 2013); destination choice (Cismaru, 2011); and tourist intentions, prediction of tourist activity and adapted response behaviour (Verkoeyen & Nepal, 2019).

Findings from the application of PMT theory in various contexts imply threat- and coping-appraisal components of PMT are important in predicting health-related intentions. Health-protective behaviour as a precondition for safe travel is seen in both tourism research and industry practices. Hygiene and physical health have been the most important aspects of health-protective behaviour, while mental health has become another crucial aspect during the current scenario of racial discrimination and prejudices stemming from the virus' origin (Zheng et al., 2020). It is expected that those who already have high consideration of health, hygiene and mental health-related factors will perceive the current health risk at a much higher level. A study by Ivanova et al., (2020) showed that hygiene, disinfection and a reliable health system in a destination will be significant factors in travellers' decisions.

Although the PMT framework has sometimes been criticised for not providing consistent predictive relations, its usefulness has nevertheless been acknowledged. A survey of related literature also shows that most studies on PMT were based on a positivist paradigm (Kothe et al., 2019). This research letter extends the theory and proposes an adaptation of the model by recognising the influence of different mediators. This would enable a more pragmatic approach in future empirical studies.

3. Discussion
Advancing the PMT model in the context of COVID-19

The perceived risk level and impact on individuals during an epidemic can vary greatly depending on their past experience. Tourists' attitude towards health and hygienic conditions is regarded as an important factor for increasing destination competitiveness and attracting tourists (Williams & Baláz, 2013; Frost et al., 2019). Tourists expect clean drinking water, good sanitary conditions, hygiene of accommodation, environment, and in restaurants (Liu et al., 2014). Inadequate cleaning may be problematic because studies have suggested that infectious diseases may be transmitted during air travel. In a recent study by Park & Almanza (2020), almost one-third of the respondents reported taking active measures during air travel to prevent themselves from becoming sick. Guidelines on public health risk mitigation measures (International Civil Aviation Organization, 2020) could help to allay travellers' fears, since operational areas such as airport, aircraft and crew are included. Hygiene perception and safety are equally important for food choices, which are integral to tourism (Liu et al., 2014), as is the perception of hotel-based environmental comfort factors (Cicerali et al., 2017). The effect of different psychological and mental health factors such as tourists' concern, anxiety, fear, discomfort and even discrimination also add to the risk perception, in turn affecting their future travel intentions (Wen et al., 2020). PMT has also been applied in studying tourists'

behaviour as they are influenced by perception of safety and risk of a destination (Wong & Yeh, 2009; Dillette et al, 2020).

Although there are various studies on the tourism industry's response and management of health-related risks, few deal with consumer-related health risks during travel or post-pandemic (Novelli et al., 2018). Therefore, focusing on different aspects of existing health-protective behaviour as a mediator between perceived risk and travel intention further enhances the PMT model.

Mass media, parasocial interactions on social media and travel blogs tend to influence perception of risks in tourist destinations (Garg, 2012). In the digital age, online communications are popular and highly influence tourists' travel intention and behaviour. In the past decade, many destination marketing campaigns have been conducted through digital platforms, especially social media. These diverse media messages – depictions from both supplier and user-generated perspectives – lead to destination image formation and meaning making, which eventually influence tourist perceptions. Media interactions especially through social media as well as interactive websites and traditional media tend to influence perception (Buhalis & Law, 2015). Intense search for reliable information, recently related to the pandemic, has been quite high, especially in traditional media and owned media (Edelman Trust Barometer, May 2020). Negative, sensational media coverage on COVID-19 by leading channels, statements by world leaders such as President Trump, and discriminatory labelling of COVID-19 as a "Chinese virus" have resulted in physical attacks on individuals of Chinese descent (Zheng et al., 2020) and negatively influenced Chinese travellers' mental health as well as travel intentions (PATA survey, 2020).

The context (COVID-19) is equally important due its huge impact on tourism globally. Although previous health crises such as Severe Acute Respiratory Syndrome

(SARS, 2003) and Middle East Respiratory Syndrome (MERS, 2015) have affected tourism, COVID-19 has been the most disruptive, leading to a longer-term decline in global tourism development (Gössling et al., 2020). Extensive COVID-19 coverage in mainstream and social media may influence tourists' perception of risk, thus altering their perception, attitude and behaviour (over-reaction, public fear, pessimism). Hence, it is important to consider media's mediating role (Huynh, 2020).

Several studies use PMT to examine the effectiveness of marketing communication techniques (Anderson & Agarwal, 2010). Current literature suggests that destinations use marketing communication to ease and allay guests' fears and influence their destination perception (Huynh, 2020). This paper extends PMT to the COVID-19 context to understand the role of mediators (media engagement and health-protective behaviour) in influencing travel intentions.

The model below (Figure 1) proposes the mediating role of two factors in the existing PMT model: health-protective behaviour before travel and tourist media engagement. Health-protective behaviour is measured by three sub-factors – hygiene, physical health and mental health – while media engagement is measured by mass media, social media (with focus on parasocial interactions) and destination websites. Parasocial interaction is a form of interpersonal engagement with the content and producers of social media content which act like a word-of-mouth tool (Harnish & Bridges, 2016). The overall model proposes that tourists' perception of health risk factors and their self-efficacy jointly influence the perceived destination image. The model explores if health-related destination image may affect the pre-travel behaviour or travel intention of tourists. Regarding risk perception and reactionary behaviours, we adopted three risk-based behaviours from Kovačić et al., (2019) and Thapa et al., (2013); namely lower risk

(courageous traveller), middle risk (conscious traveller) and higher risk (cautious traveller).

As discussed earlier, perceived risks are strong predictors of avoiding destinations for future travel. The proposed model examines this relationship in the context of COVID-19 and extends it further by adding the two contextually important mediators.
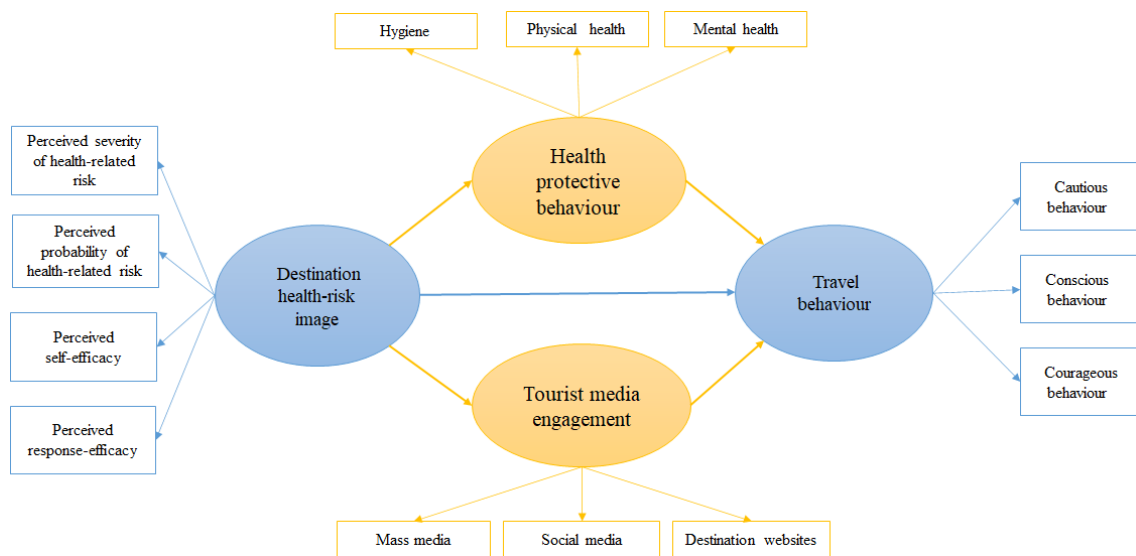

Figure 1: Enhanced Protection Motivation Theory Framework

4. Conclusion

Dealing with COVID-19 in the post-digital era makes it different from previous pandemics. While travellers' protective behaviour can affect their perception of the health-related risk of this ongoing pandemic, the mass media, parasocial interactions on social media and destination websites can also influence and manipulate future travel intentions and behaviour. Our study builds upon the well-established PMT model and proposes meaningful implications for tourism researchers to apply these additional mediators to the theory based on the COVID-19 pandemic. Although previous linear studies focused on theories of planned behaviour and reasoned action are often used in

behavioural studies in tourism, this study adapts Prevention Motivation Theory, based on its affective and cognitive factors which cover the pandemic situation. It advances existing theory by introducing tourists' media engagement through various channels as a non-pharmaceutical intervention in addition to health-related protective behaviour in pandemic outbreaks such as COVID-19. Recognition of the interrelationship among these factors may contribute towards developing economic resilience in the tourism industry.

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