

RISK PERCEPTION AND PARTICIPATION INTENT IN  
**CHINA'S DOMESTIC TOURISM SECTOR**

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ASIA-EUROPE INSTITUTE  
UNIVERSITI MALAYA  
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**RISK PERCEPTION AND PARTICIPATION INTENT  
IN CHINA'S DOMESTIC TOURISM SECTOR**

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## ABSTRACT

Travel intention can be described as a customer's perceived likelihood of engaging in actions related to a tourism service, such as taking a trip. In the context of travel and tourism, intention to travel is studied as part of trip planning behaviour, which involves complex and dynamic decision-making processes with multiple interconnected determinants. The nature of tourism makes it susceptible to various risks, especially pandemics that can seriously undermine tourism. Tourists' perception of risk affects their travel intentions. With the spread of COVID-19, tourists are paying greater attention to the risks associated with travel, which may prevent them from traveling abroad. Due to the restricted measures on international travel worldwide, increasingly tourists prefer to choose safer and more convenient ways to travel for leisure purposes. Governments have started to implement strategies for attracting people to travel domestically.

This study aims to understand tourists' travel intentions during the COVID-19 pandemic using the Theory of Planned Behaviour (TPB) and the Tripartite model of risk perception. An online survey was conducted in China during the pandemic that generated 400 usable responses. Using structural equation modelling, eight hypotheses were developed to evaluate the objectives of the study. The key outcomes of this research are: multidimensional risk perception has a significant influence on attitude and subjective norm. However, multidimensional risk perception did not influence perceived behavioural control, as Chinese people's perceived capability of engaging in domestic travel is not based on perceived risk. The results also show that multidimensional risk perception is positively associated with the intention to engage in domestic tourism. That is, the perception of the likelihood of a threat as a driving factor positively change individual's behaviour. Moreover, travel intention is positively and significantly correlated with attitude, subjective norm, and perceived behavioural control. Attitude and

subjective norm are significant mediators in the relationship between multidimensional risk perception and travel intention. However, perceived behavioural control only mediates the relationship between experiential risk perception and travel intention but has a weak effect. Lastly, perceived behavioural control had a moderating effect on the relationship between attitude and travel intention and the relationship between subjective norm and travel intention, meaning that the predictive power of attitude and subjective norm tends to increase with perceived behavioural control.

The novelty of this research lies in the verification of the extended model of TPB with multidimensional risk perception, which has helped deepen our understanding of the TPB model. The study offers both theoretical and empirical contribution to travel behaviour intention research during the COVID-19 pandemic. Theoretically, the study applies the extended TPB model with multiple risk perceptions to fill the gaps found in the tourism risk perception literature. Practically, the study provides valuable insights for the Chinese tourism industry, which has been heavily damaged by the COVID-19 pandemic and can help tourism practitioners develop effective strategies to encourage domestic tourism to support the industry.

**Keywords:** COVID-19, travel intention, risk perception, theory of planned behaviour, TRIRISK model, domestic tourism.

## ABSTRAK

Niat melancong boleh dihuraikan sebagai kebarangkalian persepsi pelanggan untuk menyertai kegiatan perkhidmatan pelancongan, seperti perjalanan. Dalam konteks perjalanan dan pelancongan, niat untuk menjelajah ditinjau sebagai gelagat perancangan perjalanan, yang mengandungi proses pembentukan keputusan yang kompleks dan dinamik dengan pelbagai penentu. Alam pelancongan mendedahkan pelancong kepada berbagai risiko merbahaya. Persepsi risiko mempengaruhi niat menjelajah pelancong. Penyebaran pandemik COVID-19 telah menambahkan risiko perjalanan pelancong. Sekatan keatas perlanjanaan antarabangsa telah mensyaratkan pelancong untuk memilih tapak yang selamat dan mudah didekati bila mereka mensasarkan masa lapang. Kerajaan juga telah melaksanakan strategi demi menarik penduduk untuk menjelajah secara dalaman.

Tinjauan ini cuba memahami niat jelajah pelancong semasa bencana pandemik COVID19 melanda dengan menggunakan Teori Gelagat Dirancang (TPB) dan model persepsi tiga hala. Satu tinjauan dalam talian di jalankan pada tempuh pandemik COVID19 yang menghasilkan 400 maklum balas. Dengan menggunakan permodelan persamaan struktural, lapan hipotesis di bentuk dan diuji untuk mencapai matlamat kajian ini. Dapatan utama kajian ini merupakan: persepsi pelbagai dimensi risiko menunjukkan pengaruh bererti dengan sikap dan norma subjektif. Namun, persepsi risiko pelbagai dimensi tidak mempengaruhi persepsi kawalan gelagat kerana penduduk China tidak buat keputusan berasaskan risiko persepsi. Dapatan juga memperlihatkan bahawa persepsi risiko pelbagai dimensi mempunyai hubungan positif untuk menyertai pelancongan dalaman, iaitu persepsi ancaman kebarangkalian menjadi faktor pemandu positif keatas seseorang individu. Tambahan pula, niat menjelajah menunjukkan

hubungan positif berarti dengan sikap, norma subjektif, dan kawalan persepsi gelagat. Sikap dan norma subjektif memainkan peranan perantara yang signifikan dalam hubungan antara persepsi risiko pelbagai dimensi dan niat menjelajah. Akan tetapi, kawalan persepsi gelagat hanya mengantara hubungan dengan risiko persepsi pengalaman dan niat menjelajah dengan pengaruh yang lemah. Akhirkita, kawalan persepsi gelagat menunjukkan pengaruh sederhana dengan sikap, niat menjelajah dalam hubungan antara sikap dan niat menjelajah, dan norma subjektif dengan niat menjelajah, bermakna kuasa ramalan sikap dan norma subjektif menambahkan persepsi gelagat terkawal.

Pembaharuan ilmu kajian ini terletak pada pengesahan sejauh mana model TPB dapat menjelaskan risiko persepsi pelbagai dimensi, yang dapat mencerahkan pemahaman model TPB. Kajian ini dapat menyumbang kepada baik teori mahupun sokongan bukti empirik terhadap kajian gelagat jelajah ketika dunia dilanda pandemik COVID-19. Kajian ini menggunakan model TPB yang dipanjangkan untuk mengisi jurang yang kelihatan dalam sorotan kajian berkaitan risiko persepsi pelancongan. Secara praktikal, kajian ini memberi dapatan yang bermakna terhadap industri pelancongan di China, yang telah menerima tamparan besar daripada pandemik COVID-19 dan membantu pengamal pelancongan untuk membangunkan strategi yang berkesan demi mendorong pelancongan dalaman sambil menyokong industri ini.

**Kata kunci:** COVID-19, niat jelajah, persepsi risiko, teori gelagat yang dirancang, model TRIRISK, pelancongan domestic.

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## LIST OF SYMBOLS AND ABBREVIATIONS

|          |   |
|----------|---|
| AGFI     | : Adjusted Goodness of Fit Index                          |
| AMOS     | : Analysis Of Moment Structures                           |
| ARP      | : Affective Risk Perception                               |
| ATT      | : Attitude  |
| AVE      | : Average Variance Extracted                              |
| BTS      | : Bartlett's Test Of Sphericity                           |
| CB-SEM   | : Covariance-Based Analysis Structural Equation Modelling |
| CFA      | : Confirmatory Factor Analysis                            |
| CFI      | : Comparative Fit Index                                   |
| CIS      | : Confidence Intervals                                    |
| CMV      | : Common Method Variance                                  |
| COVID-19 | : Coronavirus Disease of 2019                             |
| CR       | : Composite Reliability                                   |
| DRP      | : Deliberative Risk Perception                            |
| EFA      | : Exploratory Factor Analysis                             |
| EPPM     | : Extended Parallel Process Model                         |
| ERP      | : Experiential Risk Perception                            |
| GFI      | : Goodness-Of-Fit Index                                   |
| HBM      | : Health Beliefs Model                                    |
| IRST     | : Institute for Scientific and Technological Research     |
| ITI      | : Incremental Fit Index                                   |
| KMO      | : Kaiser-Meyer-Olkin                                      |
| NFI      | : Normed Fit Index  |
| OECD     | : Organisation For Economic Co-Operation and Development  |

|         |  |
|---------|--|
| PBC     | : Perceived Behavioural Control                  |
| PMT     | : Protection Motivation Theory                   |
| RMSEA   | : Root Mean Square Error of Approximation        |
| RPA     | : Risk Perception Attitude                       |
| SARS    | : Severe Acute Respiratory Syndrome              |
| SE      | : Standard Estimation                            |
| SEM     | : Structural Equation Modelling                  |
| SN      | : Subjective Norm                                |
| SPSS    | : Statistical Package for The Social Sciences    |
| SRMR    | : Standardized Root Mean Square Residual         |
| TI      | : Travel Intention                               |
| TRGP    | : Theory of Reasoned Goal Pursuit                |
| TRIRISK | : Tripartite Model of Risk Perception            |
| UMREC   | : University of Malaya Research Ethics Committee |
| UNWTO   | : United Nations World Tourism Organization      |
| VAF     | : Variance Accounted For                         |
| VIF     | : Variance Inflation Factor                      |
| WHO     | : World Health Organization                      |
| WTO     | : World Tourism Organization                     |
| WTTC    | : World Travel & Tourism Council                 |

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## **CHAPTER 1: INTRODUCTION**

### **1.1 Introduction**

This thesis seeks to explore the relationship between risk perception and participation intent in the domestic tourism sector of China. The purpose of this study is to examine the impact of three risk perception dimensions, namely deliberative, affective, and experiential, on the domestic travel intentions of Chinese tourists. The extended model of Theory of Planned Behaviour (TPB) will be utilized as the theoretical framework for the analysis. The present chapter provides an overview of research on risk perception and travel intention. It begins with a brief background on the study and the problem within the tourism context, followed by identification of the research gap and specification of the research questions. The objectives, hypotheses, significance, scope, and methodologies of the study are then summarized. Finally, the chapter includes definitions of key terms and a brief outline of the thesis structure.

### **1.2 Background of study**

In accordance with the United Nations World Tourism Organization (UNWTO), "tourism" refers to a social, economic, and cultural phenomenon whereby individuals undertake journeys to destinations outside of their usual locale for various purposes (UNWTO, n.d.). UNWTO defines the Tourism Sector as a collection of various industries focused on tourism, which offer products and services with characteristics specific to the tourism industry (UNWTO, n.d.). UNWTO has identified twelve tourism industries that are generally considered to serve tourists. These industries include accommodation for visitors, food and beverage serving activities, railway passenger transport, road passenger transport, water passenger transport, air passenger transport, transport equipment rental, travel agencies and other reservation services activities, cultural activities, sports and recreational activities, retail trade of country-specific tourism characteristic goods, and other country-specific tourism characteristic activities

(UNWTO, n.d.). The tourism industry holds immense significance for the multitude of benefits it brings, and due to its pivotal role as a commercial activity that triggers demand and growth for numerous other industries. It is not merely a means of contributing towards more economic activities, but also generates greater employment opportunities, revenues and plays a vital role in development. The tourism sector serves as a catalyst that creates demand as an activity and subsequently satisfies that demand through a cluster of industries. The sector is known to have a positive impact on the overall economic landscape, particularly in terms of job creation and income generation. Hence, the tourism industry is regarded as a crucial driver of economic growth in many countries across the globe.

Tourism is an individual activity that involves traveling and visiting places, and has given rise to various styles or types of traveling and travellers. These travellers are commonly referred to as tourists, who visit different tourist destinations and play a crucial role in making those places popular. As a result, tourists bring in a host of earning opportunities, which in turn stimulate the development of not only the tourist destinations but also nearby regions and the country as a whole. This unique aspect of tourism creates demand for economies on a global scale, particularly for each country and also creates demand and growth opportunities at the city and local level for various communities. Therefore, tourists are of great importance to a country, as their role and significance extend beyond just driving economic growth. Tourists are one of the best brand ambassadors for a country, as they come from different parts of the world and carry back with them images and perceptions of the country. They also share these impressions with many more people. Hence, tourists are important as growth drivers and brand ambassadors.

Tourism is also a commercial activity, as it involves the consumption of services and products. Tourists thus add to the consumer population of a country, who for a short period of time, consume most of the services and products which a country's native population or consumers do. In essence, tourism grows the overall demand in a country's economy on a sustainable basis. The significance, impact, and importance of tourism cannot be overstated. The tourism sector is an essential driver of economic growth in many countries, and tourists play a crucial role in promoting tourism as well as being brand ambassadors for their respective countries.

The tourism industry has undergone significant expansion in recent years, both in terms of domestic and international travel. According to the Organisation for Economic Co-operation and Development (OECD) report of 2020, the tourism sector is a crucial contributor to the global economy, generating hundreds of millions of dollars in annual revenue (OCDE, 2020). The expansion of the tourism industry is attributed to various factors such as globalization, increased accessibility, and affordability of travel, technological advancements, and the rising middle-class population in many parts of the world. As a result, more people have been able to travel domestically and internationally, creating a robust demand for tourism services and products. The revenue generated by the tourism industry not only benefits the tourism sector but also the wider economy, as it stimulates the development of various industries, such as hospitality, transportation, and retail. Additionally, the tourism industry generates employment opportunities, particularly in the service sector, which is often labor-intensive. The tourism industry also contributes to the preservation and conservation of natural and cultural heritage sites, as well as the creation of infrastructure and amenities that benefit both tourists and locals alike. The benefits of the tourism industry extend beyond the sector itself, as it stimulates the development of various industries and generates employment opportunities.

Prior to the COVID-19 (Coronavirus Disease of 2019) pandemic, it was estimated that tourism had become one of the largest industries in the world (WTTC [World Travel & Tourism Council], 2020). Due to its direct, indirect, and induced effects, it was responsible for the creation of one in every four new jobs globally, 10.6% of the total number of workers, and 9.2 trillion dollars in global GDP in 2019 (WTTC, 2020). The spending value of international visitors during 2019 amounted to US\$1.7 trillion, accounting for 6.8% of global exports and 27.4% of global services exports (UNTWO, 2020). In accordance with the World Tourism Organization's (UNWTO) long-term forecast analysis, it is anticipated that between 2010 and 2030, there will be an increase of 1.8 billion international visitors, with an average annual growth rate of 3.3% (UNWTO, 2017). Consequently, the tourism industry has emerged as one of the foremost service industries, making a notable contribution to global economic growth (UNWTO, 2017). However, the industry must address its challenges through sustainable tourism practices to ensure long-term viability.

The main goal of most tourism marketing strategies is to increase the number of tourist arrivals by changing consumer behaviour and raising the likelihood of travel. According to Vijay and Ravichandran (2019), consumer behaviour is critical in assessing the quality, effectiveness, and suitability of work in tourism or other activities in competitive and global market, as it refers to the actions people take when obtaining, consuming, and disposing of products and services. Therefore, researchers are interested in these activities, the variables affecting them, and their implications on society and consumers. Because destination marketers and tourism service suppliers face a range of consumer behaviour concerns daily, they require a solid understanding of consumer behaviour, particularly that of tourists. As a result, tourist behaviour has become a central focus of marketing strategies and activities, and relevant research on tourist behaviour is now an essential component of tourism research.



According to Peter and Olson (1996), consumer behaviour is determined by their beliefs of the advantages of performing a specific activity, such as purchasing a product or visiting a destination, and their subjective evaluation of whether or not other people support that behaviour. The results of these reflective processes are combined to assess potential actions and reach a conclusion. Researchers and tourist marketers should be aware of all factors affecting tourists' decision-making processes. Research has shown that behavioural intention, which measures tourists' expectations and plans for future behaviour, is the most accurate predictor of behaviour among the various factors affecting tourists' actions (Fishbein & Ajzen, 1975). Moreover, behavioural intention is widely acknowledged as a critical factor that has a strong correlation with actual behaviour, and improving the prediction and explanation of intention can lead to a better understanding of observable behaviour (Baloglu, 2000). Destination marketers need to predict future tourist behaviour, understand when and how target market's behavioural intentions are formed, and identify the factors influencing these intentions in order to build efficient marketing strategies.

According to Makhdoomi and Baba (2019), travel intention is a type of behavioural intention that results from a mental process that translates motivation into action. Both academics and tourism practitioners consider it a crucial study topic. Therefore, understanding why people travel and what influences their travel intention is essential for tourism marketers. To comprehend people's behaviours, the factors behind their intentions must also be recognized. In recent years, a large body of research has been conducted on the determinants of travel intention in the tourism industry. The results have revealed a general agreement among tourism scholars that there are several key antecedents that have a significant impact on an individual's travel intention. These antecedents are considered to be crucial drivers of travel intention and have been widely studied and discussed within the tourism academic community. Despite some differences

in the specific factors considered to be the most influential, there is a general consensus among tourism researchers that these antecedents play a critical role in shaping travel intentions. These include:

- **Personal factors:** Personal factors such as demographic characteristics (e.g., age, gender, education), travel experience, and lifestyle play a role in determining travel intention (Dann, M, 1981; Mckercher & Cros, 2012). These elements help to explain individual differences in travel behaviour and decision-making (Bigné et al., 2000)
- **Psychological factors:** Motivation, risk perception, and attitudes are key psychological factors that impact travel intention (Hosany et al., 2006; Baloglu, 2000). For example, motivation refers to the underlying reasons why individuals travel, such as the desire for adventure, relaxation, or cultural experiences (Bagozzi & Dholakia, 2002). Risk perception refer to concerns about safety, health, and security while traveling (Kim & Richardson, 2003) Attitudes towards travel refer to individuals' overall evaluation of travel, including their opinions and beliefs about different aspects of travel (Ryan et al., 1998).
- **Economic factors:** Income, travel costs, and exchange rates are economic factors that play a role in travel intention (Agiomirgianakis et al., 2015). For example, income and travel costs affect the affordability and accessibility of travel for individuals. Exchange rates can impact the purchasing power of travellers and influence their decision-making.
- **Social factors:** Social influence from family, friends, and media is an important factor in determining travel intention (Oye et al., 2019). For example, individuals may be influenced by the opinions of their friends and family about different destinations, which can impact their travel decision-making (Baloglu, 2000).

Media, such as advertisements and online reviews, can also play a role in shaping individuals' perceptions and attitudes towards travel (Oye et al., 2019).

- Destination attributes: Image, reputation, facilities, and services are key attributes of a destination that impact travel intention (Echtner & Ritchie, 2003). Destination attributes shape individuals' perceptions of a destination and play a role in the decision-making process. For example, a destination with a positive image and reputation can attract more tourists, while a destination with poor facilities and services may deter potential visitors (Echtner & Ritchie, 2003).
- Trip purpose: Business, leisure, and visiting friends and relatives are common trip purposes that impact travel intention (Baloglu, 2000). Trip purpose helps to explain why individuals travel and the type of travel experience they seek. For example, a business trip may have different motivations and requirements compared to a leisure trip (Baloglu, 2000).
- Marketing and promotional activities: Advertisements, packages, and deals are marketing and promotional activities that impact travel intention. These activities play a role in shaping individuals' perceptions and attitudes towards travel and influence the decision-making process (Oye et al., 2019). For example, a well-designed advertisement can create positive associations with a destination, while a poor promotion can have the opposite effect.

Further research is needed to expand the understanding of these factors and their impact on travel behaviour, but the existing literature suggests that these determinants of travel intention have been widely researched and various factors have been identified as having a role in shaping an individual's travel decisions.

Tourism researchers face both opportunities and challenges in their pursuit of understanding the vast array of human behaviours and experiences from a social psychology perspective (Pearce & Packer, 2013). To that end, it is critical to examine the

applicability of theories in social psychology as well as their methodological suitability. Previous research in the tourism literature has extensively utilized several social psychology theories (e.g., Cheng & Cho, 2011; Harris et al., 2018; Lim, 2009; Song et al., 2012; Wu et al., 2017). A multitude of authors have proposed that tourism is a complex phenomenon encompassing diverse fields, such as marketing, economics, geography, sociology, social psychology, anthropology, business, and communications (Fridgen, 1984; Pearce & Butler, 1993; Tang, 2014). In line with this, Pearce and Stringer (1991) highlighted that tourism, as a whole, is fundamentally a social psychological phenomenon. Nonetheless, most theories have limitations in terms of testing and validation, which implies that certain areas are yet to be explored (Pearce & Packer, 2013).

To address the gaps in the literature, the Theory of Planned Behaviour (TPB) has been employed as one of the most prominent and widely used social-psychological models for explaining human behaviour (Armitage & Conner, 2010; Han & Stoel, 2017; Yuriev et al., 2020). In the behavioural sciences, TPB has been utilized in more than 2000 empirical studies, spanning various domains, including healthy eating behaviour (Norman et al., 1999), suicide behaviour (Conner et al., 2001), education (Arranz et al., 2017), smoking cessation (Norman et al., 1999), green consumerism (Han et al., 2010), and online retailing (Kureshi & Thomas, 2019). The TPB has been cited more than 25,000 times since its publication in 1991, according to Web of Science results, and almost 115,990 times as of February 2023, according to Google Scholar search results. Therefore, TPB is a useful tool for predicting intentions and behaviours in a wide range of contexts, including the tourism industry, and can provide new insights and directions for future research.

Therefore, the Theory of Planned Behaviour has been primarily used in the literature's extensive studies of travel intention. The eight latent variables that make up the theory of planned behaviour's primary constructs are attitude, subjective norm, perceived

behavioural control, behavioural intention, behavioural beliefs, normative beliefs, control beliefs, and actual behavioural control (Ajzen, 1991). Han et al. (2010) and Yeh et al. (2021) employed the full set of eight constructs in their research, whereas Han et al. (2020) and Tommasetti et al. (2018) utilized only a subset of the theoretical framework. The most immediate predictor of human actual behaviour, according to theory of planned behaviour, is behavioural intention. The Theory of Planned Behaviour (TPB) is considered an excellent model for explaining both intention and behaviour, as it comprises both volitional and non-volitional elements (Ajzen, 1991; Han et al., 2020). The volitional component of the model consists of attitude and subjective norm, while perceived behavioural control represents the non-volitional aspect (Ajzen, 1991). The Theory of Reasoned Action was another name for the former volitional component (Ajzen, 1991; Tommasetti et al., 2018). The Theory of Planned Behaviour states that an individual's behavioural intention develops concurrently through attitude, subjective norm, and perceived behavioural control (Tommasetti et al., 2018). As a result, the Theory of Planned Behaviour is regarded as one of the most widely used models to help understand human decision-making and behaviour (Han et al., 2020). It has been widely used to explain human intentions in the travel behaviour and businesses that are associated to it, such as hotels (Han et al., 2010), restaurants (Kaushal & Srivastava, 2021), national parks (Seong & Hong, 2021), and others (Bianchi et al., 2021).

### **1.3 Problem statement**

However, within tourism, risks are the possibility of unfavourable incidents threats, shocks, and disasters that could impair the tourism business (Reisinger & Mavondo, 2005; Cahyanto et al., 2016; Law, 2006). The UNWTO (2003) identifies four key risk factors that can impact tourist destinations. These include the human and institutional environment outside of the tourism industry, the tourism sector itself and the linked

economic sectors, travellers, and the natural environment. These risks can have a negative impact on travellers, the tourism sector, and local communities (Lehto et al., 2008). To examining actual threats, tourists' behaviour is frequently examined through their risk perceptions (Hajibaba et al., 2015; Isaac, 2020; Isaac & Velden, 2018; Reisinger & Mavondo, 2005). Tourism researchers have extensively studied the impact of risk perception on travel decision-making and tourist behavior since the 1990s (Bae & Chang, 2021). Individuals' innate pursuit of safety often leads to the influence of safety and security concerns in decision-making in uncertain risk situations (Beirman, 2002). Risk perception in the context of tourism has been defined as the assessment of the probability that an action will expose an individual to danger that can impact their travel decisions if the perceived danger exceeds an acceptable level (Chew & Jahari, 2014). Additionally, the intangible and experiential nature of tourism often leads to a heightened perception of unsystematic risks (Fuchs et al., 2013). These risks may include physical, psychological, financial, and health risks from events such as accidents, terrorism, natural disasters, political instability, and epidemics (Chew & Jahari, 2014). This can result in both physical harm and a significant effect on travel choices. For instance, research has shown that risk is a major concern for international tourists in tourism (Chew & Jahari, 2014; Kozak et al., 2007). The findings of previous studies have demonstrated that risk perception plays a crucial role in shaping tourists' decision-making processes and their subsequent behaviour. Tourists' perceptions of risk can influence their willingness to travel and their behavioural intention to visit certain destinations (Huang et al., 2020). This highlights the importance of understanding the role of risk perception in shaping travel decisions and behaviour, as it has far-reaching implications for both the tourism industry and individual travellers.

Disasters and crises can significantly impact the tourism industry and influence travellers' plans, as numerous studies have shown (Floyd et al., 2004; Sonmez & Graefe,

1998). For instance, terrorism and political instability are among the main variables affecting tourists' travel intentions (Floyd et al., 2004; Sonmez & Graefe, 1998). Moreover, health crises, such as the Spanish flu, SARS, MERS, Ebola, swine flu, Zika, and yellow fever, have also had an impact on the tourism industry and travellers' plans (Aydın & Ari, 2020). The impact of pandemics on the tourism industry and their influence on travel intentions have been widely studied (Floyd et al., 2004; Lee et al., 2012). In December 2019, the presence of a newly discovered virus was reported in Wuhan, China, leading to a comprehensive health emergency response in the country and affecting over 1.2 billion people (Zhang et al., 2021). To prevent the spread of the virus, the Ministry of Culture and Tourism of China disallowed large gatherings and visits to scenic areas, and some areas were put under lockdown (Zhang & Shaw, 2020). Subsequently, the World Health Organization (WHO) announced the emergence of a novel disease, referred to as Coronavirus disease (COVID-19), caused by the SARS-Cov-2 virus, as a global health emergency of international concern (Bae, 2021; Foo et al., 2020; Neuburger & Egger, 2020). The WHO declared COVID-19 a pandemic on March 11, 2020, which prompted several nations to halt the issuance of travel visas and related tourism activities (WHO, 2020; Petersen et al., 2020). As of January 31, 2023, COVID-19 has caused 753,479,439 confirmed cases and 6,812,798 deaths worldwide, with 98,495,039 confirmed cases and 111,574 deaths in China (WHO, 2023).

The COVID-19 pandemic has resulted in unprecedented challenges for the modern tourism industry (Arbulú et al., 2021; Williams, 2020) and will have significant, long-term consequences on the sector (Zhang et al., 2005; Zhu & Deng, 2020). Over 200 countries and nearly 100% of destinations were affected by the outbreak of COVID-19 (UNWTO, 2020), negatively impacting all enterprises worldwide (Alvarez-Risco et al., 2021; Meyer et al., 2022; Ratten, 2021; Sahu et al., 2020; Seetharaman, 2020; Yan et al., 2021). International travel restrictions impacted 96% of the world's population

(Neuburger & Egger, 2020), causing the greatest decline in tourism the sector has ever seen, with an estimated loss of 22 billion dollars in 2020 (Zhu & Deng, 2020). Health communication strategies and measures (e.g., social distancing, travel bans, lockdowns, stay-at-home campaigns, quarantine) have halted global travel, tourism and leisure (Sigala, 2020). The tourism industry must plan for future action during the pandemic, as it is vulnerable to crises (Cro & Martins, 2017; Ritchie & Jiang, 2019). The crisis also presents opportunities for the industry to become more sustainable and responsible (Stankov et al., 2020; Niewiadomski, 2020). To rebuild the tourism sector, it is essential to consider sustainability and resilience (Abbas et al., 2021; OECD, 2020), examining tourism risks at multiple scales to improve knowledge of crises and disasters (Williams & Balaz, 2015). Therefore, governments have formulated tourism-specific policies which stimulate domestic tourism in order to alleviate the tourism industry crisis due to the COVID-19 regulations that restrict international travel during the pandemic (Arbulú et al., 2021). The countries with a higher share of domestic tourism such as China, are likely to recover earlier and faster (UNWTO, 2020). As a way to boost the tourism industry, the domestic market can provide an opportunity for citizens to travel within their country. In light of this, it is necessary to examine domestic tourism in the perspective of the COVID-19 pandemic.

As the most important stakeholder in any form of tourism development, tourist is the main topic in tourism research. COVID-19 is an extremely severe disease that can cause physical harm to humans. Tourists can spread the virus while traveling and can also be victims of infection by other carriers (Shao et al., 2021). Consequently, tourists may have to make important decisions regarding their traveling plans. In addition, tourists are more prone to focus on threats that affect their sense of safety and security (Lehto et al., 2008). Therefore, intangible impacts of the pandemic on the behaviour of tourists and on consumer psychology around tourism are something that should be considered (Huang et



al., 2021). Concerning market demand, it may be more important to comprehend the psychological impact of the COVID-19 pandemic on tourists (Huang et al., 2021). Therefore, research focuses on pandemic as a risk to tourists in light of the preceding discussion. In other terms, this research investigates how domestic tourists' risk perceptions of COVID-19 pandemic impact their travel intention. A number of research papers (Ajzen, 1991; Chow & Murphy, 2011; Fishbein & Affleck, 1975; Goulias, 2009) emphasise the significance of predicting travel behaviour, particularly in the COVID-19 situation, as it can impact a tourist company's entire strategy. Although the demand for travel in 2020 and 2021 declined dramatically and unexpectedly, it is crucial for tourism firms to analyse future demand in depth. According to them, the objective of travel behaviour study is to comprehend how passengers' values, norms, attitudes, and constraints influence their observed behaviour (Goulias, 2009). It primarily refers to the description and analysis of tourism demand, which in turn refers to scientific ideas and models. For this reason, the analysis in this research uses the framework provided by Ajzen's (1991) theory of planned behaviour.

The Theory of Planned Behaviour aims to predict consumers' intention and actual behaviour. The model acquired popularity as a result of its adaptability to varied study situations through the addition of new effects. According to above discussion, another important element that was used in this research was risk perception, as a serious health crisis like COVID-19 severely restricts travel (Cui et al., 2016). Risk perception instantly impacts decisions, leading to people evaluating the risk of a simple trip to the supermarket, the doctor, or other daily destinations, let alone tourism destinations. Whether the next touristic trip will be during the pandemic or after is up to each individual's risk perception. Domestic tourism is also on the rise, according to Chebli and Ben Said (2020), Gössling, Scott and Hall (2020), and OECD (2020). While Ivanova, Ivanov and Ivanov (2020) speak of consumer optimism after the pandemic, OECD (2020) expect a drop in

tourism demand and consumption because of traveller confidence. Given the unexpected spread of the coronavirus, safety and hygiene are expected to become significant factors in the coming years, as people have been left without resources, jobs, or a sense of security (Chebli & Ben, 2020; OECD, 2020; Schlagwein, 2021). The OECD (2020) has also identified potential changes in travel behavior resulting from the pandemic. Therefore, the purpose of this research is to examine the travel intentions of Chinese domestic tourists in light of their risk perceptions in travelling due to COVID-19 pandemic.

The most substantial theoretical and practical contribution to research could be realized by identifying areas that have yet to be explored or have been under-explored, referred to as research gaps. There is a scarcity of studies in the research on tourist behavior during the COVID-19 pandemic. Firstly, studies on this subject are still limited in number from 2019 to 2021. Secondly, few studies have utilized a quantitative research design and among those, only 12 studies using the structural equation model were published in Q1, Q2, and Q3 Scopus indexed journals. Thirdly, the review found that there is a scarcity of research on certain behavioral antecedents. These include (1) antecedents related to environmental responsibility, specifically perceived response effort, (2) antecedents related to affection such as desire (Xu et al., 2021) and perceived self-efficacy (Meng et al., 2020), and (3) antecedents related to attitude, such as non-pharmaceutical intentions (Xu et al., 2021). It should be noted that all of the behavioral factors studied in this research have only been explored once by the same researcher (Ernawati & Kiswanto, 2022). The aim of this study is to examine the relationship between tourists' multidimensional risk perception and their intention to travel domestically in China during the COVID-19 pandemic.

#### 1.4 Research questions

Despite the fact that domestic tourism has become the key to tourism recovery, the researchers have yet to be able to use the fundamental theoretical framework of planning behaviour models and risk perception theory in order to predict potential Chinese tourists' travel intentions during the pandemic for domestic tourism. Therefore, how to predict tourists' intention to travel and attract more domestic tourists has become a significant challenge for academics and industry practitioners (Chen et al., 2020). The present study aims to expand the Theory of Planned Behaviour (TPB) by incorporating multidimensional risk perceptions, with the goal of predicting the behavioural intentions of prospective Chinese tourists with respect to domestic travel. In order to examine perceptions of risks, researchers have analysed them on the basis of three factors, deliberative, affective, and experiential, referred to as the tripartite model of risk perception (TRIRISK) (Ferrer et al., 2018). Deliberative, experiential, and affective risk perceptions determine health behaviours independently (Thorneloe et al., 2019).

In addition, according to the theory of planned behaviour, a person's intention is viewed as the immediate antecedent of their behaviour (Ajzen & Driver, 1991). Ajzen and Driver (1991) propose that a person's behavioural intention is influenced by three critical factors: their attitude towards the behaviour, their subjective norm regarding engagement or avoidance of the behaviour due to perceived social pressure, and their perceived behavioural control, which refers to the individual's belief in their ability to execute the behaviour successfully. In general, the more positive attitudes and subjective norms are considered, the greater the willingness to carry out the behaviour (Suo & Zhang, 2016). Consequently, this study was done to improve the Theory of Planned Behaviour in forecasting the intentions of Chinese tourists for domestic travel by incorporating multidimensional risk perception. The present study has been designed to achieve four specific questions based on the preceding discussion.

Research question 1: What is the correlation between an individual's intention to participate in domestic tourism and their perception of the multiple dimensions of risk perception associated with COVID-19?

Research question 2: What is the relationship between intention and attitude toward domestic tourism, subjective norm, and perceived behavioural control for domestic tourism?

Research question 3: Is the relationship between multidimensional risk perception of COVID-19 and travel intention to engage in domestic tourism during the pandemic mediated by the individual's attitude towards domestic tourism, their subjective norm regarding domestic tourism, and their perceived behavioural control?"

Research question 4: Is there a significant moderated effect of perceived behavioural control for domestic tourism on the relationship between attitude toward domestic tourism and travel intention to domestic tourism and the relationship between subjective norm concerning domestic tourism and travel intention to domestic tourism?

## **1.5 Research objectives**

The primary aim of this research is to examine current situation with domestic travel in China. To achieve these aims, the following research objectives have been generated:

Research objective 1: To quantify the strength and direction of the influence of multidimensional risk perception on attitude, subjective norm, perceived behavioral control, and travel intention within the second year of the COVID-19 pandemic.

Research objective 2: To quantify the strength and direction of the influence of attitude, subjective norm, and perceived behavioral control on travel intention using a validated measurement tool within the second year of the COVID-19 pandemic.

Research objective 3: To build the mediate effects of attitude, subjective norm and perceived behavioural control on multidimensional risk perception (i.e., deliberative, affective, and experiential) - travel intention.

Research objective 4: To build the moderate effect of perceived behavioural control on the relationship of attitude- travel intention and relationship of the subjective norm- travel intention.

## **1.6 Research hypotheses**

Based on the existing literature, research objectives, and research questions, this study presents the following hypotheses. There are three hypotheses on the relationship between risk perception (independent variables), travel intention (dependent variable) and its three antecedents (mediating variables).

Hypothesis 1 (H1): Deliberative risk perception exerts a significant influence on attitude, subjective norm, perceived behavioural control and travel intention.

Hypothesis 2 (H2): Affective risk perception exerts a significant influence on attitude, subjective norm, perceived behavioural control and travel intention.

Hypothesis 3 (H3): Experiential risk perception exerts a significant influence on attitude, subjective norm, perceived behavioural control and travel intention.

There is one hypothesis on the relationship between travel intention (dependent variable) and its three antecedents (mediating variables).

Hypothesis 4 (H4): Attitude, subjective norm, and perceived behavioural control exerts a significant influence on travel intention.

There are three hypotheses on the mediating effect of the its three antecedent of travel intention (mediating variables) on the relationship between risk perception (independent variables) and travel intention (dependent variable).

Hypothesis 5 (H5): Attitude is a significant mediator between risk perceptions (i.e., deliberative/affective/experiential) and travel intention.

Hypothesis 6 (H6): Subjective norm is a significant mediator between risk perceptions (i.e., deliberative/affective/experiential) and travel intention.

Hypothesis 7 (H7): Perceived behavioural control is a significant mediator between risk perceptions (i.e., deliberative/affective/experiential) and travel intention.

There is one hypothesis on the moderating effect of perceived behavioural control on the relationship between travel intention (dependent variable) and its two antecedents (mediating variables).

Hypothesis 8 (H8): High perceived behavioural control would strengthen the relationship between attitude and travel intention and the positive relationship between subjective norm and travel intention.

## **1.7 Scope of research**

This study is conducted in the context of tourist's travel intention from China's domestic tourism sector. There are a few reasons for selecting domestic tourism sector in China to conduct this research.

### **1.7.1 Why domestic tourism matters?**

The concept of domestic tourism refers to travel within one's own country and is defined by (IRTS, 2010). It surpasses international tourism in terms of scale, with an estimated 9 billion trips taken domestically in 2018, with over half of those occurring in Asia and the Pacific (UNTWO, 2020). The size of the domestic tourism market is influenced by a variety of factors, including income, demographics, transportation, and accommodation. While many countries prioritize international tourism due to its export revenue, domestic tourism remains a critical component of most major economies, accounting for over 80% of all tourist arrivals and 73% of total global tourism spending (WTTC, 2018). Despite country-specific differences, domestic tourism typically holds the leading position in terms of scale and economic impact. Various factors, such as the rise in the middle-class population, increased spending power, global population growth, and better infrastructure and economic connectivity within countries have all played a role in the growth of domestic tourism (Canavan, 2012). The relative contribution of

domestic tourism to overall tourism expenditure differs among countries. In some countries, which heavily depend on domestic tourism, attracting international tourists may be challenging due to security concerns, visa limitations, insufficient air transport connections, or inadequate infrastructure (WTTC, 2018).

It is crucial to note that although domestic tourism can help alleviate the decline in international tourism during pandemic crises, it does not fully compensate for the reduction in international tourism or the loss of foreign exchange (WTTC, 2018). According to TIAA (2005), countries possessing strong domestic tourism sectors are more capable of withstanding any disruptions in demand that may emerge from external market crises, whereas those with weaker domestic tourism sectors may encounter greater challenges in coping with the consequences of a crisis.

Furthermore, domestic tourism provides a chance for residents, who face financial or time restrictions preventing them from engaging in international vacations, to partake in tourism-related pursuits. Given the closer distance of domestic locales and reduced travel expenses, in comparison to international travel, domestic tourists could still manage to tour other domestic regions if a domestic pandemic crisis occurs (Kumar & Nagpal, 2016; Bassil et al., 2017). Domestic tourism also provides a way for participants to escape anxiety and promotes cultural and national pride, while also spreading visitors more evenly across different regions (Ghimire, 2001). Domestic tourism is one of the few options left for people to explore their country while also practicing social distancing.

### **1.7.2 Why China matters?**

A variety of tourism statistics show that India, China, and the United States of America have the world's largest domestic markets for tourists' trips, mostly because of their large populations and geographical size (UNWTO, 2020). It is expected that the Asia-Pacific region will grow at the fastest rate in terms of the number of domestic travellers globally, especially for China in north-eastern Asia (which includes Hong Kong, Macao, and

Taiwan) (UNWTO, 2020). China is one of these emerging countries that deserve special attention as the country's domestic tourism market continues to grow. Tourism has become an essential component of the domestic economy of China since the reform and opening up of the early 1980s (UNWTO, 2020). The three primary reasons that tourists travel have remained unchanged, and the largest proportion is still leisure vacations; second is visiting family and friends, health, religion, and others; third is business, which is still growing. With the continuous expansion of the national economy, as well as the gradual adjustment of the national statutory holiday system, people's living standards have steadily improved, leading to an increase in discretionary income, leisure time, and tourism that has gradually become a way of life for the majority of citizens of the country. Thus, tourism demand is expected to grow as a consequence. According to the National Bureau of Statistics of China (n.d.), the number of Chinese tourists arriving domestically increased from 1102 million to 5540 million between 2004 and 2018. Compared to China's inbound tourist arrivals (109 million to 141 million from 2004 to 2018), its domestic tourism growth is greater (Ma, 2020). The scale of China's domestic tourism market far exceeds its inbound tourism market. In the year 2019, there were six billion people who travelled within the country, which represents an exponential increase when compared to ten years ago (Ma, 2020). This situation puts China at the number one spot for domestic trips each year globally (GlobalData, 2020). Domestic tourism contributes significantly to China's national economy (Lebrun et al., 2021).

The first confirmed case was detected in China, in December 2019. It is meaningful to study on Chinese tourists' behaviour during this pandemic time. It should be noted that China's domestic tourism market is much larger than that of its inbound tourism market. In 2019, the number of domestic arrivals reached 6 billion, a significant increase compared to ten years ago when the number of domestic arrivals. With such a situation, it is no surprise that China tops the list of countries in the world for domestic trips every



year. With its large population and geographical size, China's domestic tourism market deserves to be looked at because of its growth potential. Due to the drastic changes in the economic situation and the international environment caused by the COVID-19 pandemic, the development of China's tourism economy is inevitably facing a new situation under the "new normal" with pandemic. For this research, only Chinese potential tourists who were 18 years of age or older and knew some basic information about COVID-19 were surveyed.

### **1.8 Significance of the study**

This research holds significance from three perspectives: theoretical, practical, and policy. Theoretically, this study introduces a novel conceptual model that combines the Tripartite model of risk perception (TRIRISK) and the Theory of Planned Behaviour to address the gaps in earlier research on risk and tourism. This model can contribute to the application of tourism in health-related risk research and serve as a crucial reference for risk assessment in tourism or other industries. Additionally, this research advances the literature on tourism risk by examining the relationship between multidimensional risk perception and travel intention towards domestic tourism during the pandemic. The study's findings provide empirical evidence for the mediating role of attitude and subjective norm and the moderating role of perceived behavioural control in the extended model of the theory of planned behaviour.

From a practical perspective, this study has significance for practitioners and destination marketing organizations. The study's results provide valuable insights into the impacts of the COVID-19 pandemic on the travel intentions of domestic tourists in China. This information can assist Chinese domestic tourism marketers in understanding the preferences of tourists amid the pandemic, leading to the development of appropriate strategies to enhance attraction and provision of services to Chinese tourists. Such

measures are critical for the continued growth of the domestic tourism market during the pandemic.

Finally, from a policy perspective, this research has significance for policymakers and regulatory bodies. By exploring the relationship between multidimensional risk perception and travel intention, the study provides empirical evidence to inform the development of public policies aimed at enhancing the resilience of the tourism industry during crises such as the COVID-19 pandemic.

Overall, this study provides a comprehensive understanding of the role of risk perception in shaping tourists' decision-making process during the COVID-19 pandemic, making a significant contribution to the literature from multiple perspectives.

## **1.9 Definition of terms**

The concept of attitude, subjective norm, perceived behavioural control, behavioural intention, affective risk perception, deliberative risk perception, and experiential risk perception are central to the study of travel behaviour. The literature defines the terms used within this research on the Theory of Planned Behaviour and multidimensional risk perception. The Theory of Planned Behaviour involves four constructs that require definition: intention, attitude toward behaviour, subjective norm, and perceived behavioural control (Ajzen, 1985; Lindsay et al., 2004). The Tripartite model was defined as a model of multidimensional risk perception that consisted of three dimensions of risk perception: deliberative, affective and experiential risk perception (Ferrer et al., 2018).

### **1.9.1 Travel intention**

Behavioural intention is a psychological concept that has been widely studied in various fields, including marketing, psychology, and consumer behavior. It refers to the internal inclination that influences an individual's behavior and represents the likelihood of an individual taking a particular action in line with their goals (Fishbein & Ajzen, 1975).

Travel intention, a specific type of behavioral intention, is crucial to understand the behavior of tourists, as it sheds light on their willingness to engage in tourism-related activities (Makhdoomi & Baba, 2019).

The travel intention of a customer is determined by various factors, such as their level of confidence in the destination they plan to visit, their experience with similar trips, and potential inhibitors that may hinder their behavior. For example, if a tourist perceives that a destination is unsafe, they may have low travel intention, which can affect the tourism industry. In addition to these factors, the determinants of trip planning behavior, such as destination awareness, options for accommodation, transportation, and food, can also impact travel intention. Scholars have long studied the factors that shape travel intention, with several researchers focusing on trip planning behavior and the impact of various determinants on travel intention. For instance, Baloglu and McCleary (1999) explored the effect of destination image on travel intention, while Chen and Tsai (2007) investigated the role of travel motivation on travel intention.

Given the significance of travel intention in understanding the behavior of tourists, it is not surprising that scholars and the tourism industry consider it essential. In the current study, the dependent variable is travel intention, which represents the Chinese tourists' intention to participate in domestic tourism during the COVID-19 pandemic. The study aims to examine the impact of various factors on Chinese tourists' travel intention and provide insights into their travel behavior during the pandemic.

### **1.9.2 Attitude**

Attitude is an individual's overall evaluation of a particular behavior or outcome, and in the theory of planned behavior, it is considered one of the antecedents of intention. Ajzen (2019) defines attitude as the degree to which a behavior's performance is regarded favorably or unfavorably. Moreover, Alam and Sayuti (2011) explain that attitude toward behavior refers to the positive or negative assessment of performing a specific behavior,

and it also involves an individual's affective states when contemplating the behaviour (Hagger & Chatzisarantis, 2005). These attitudes are shaped by personal experiences, beliefs, and social norms (Fishbein & Ajzen, 1975).

In the context of travel, attitude refers to an individual's overall evaluation of travel or specific travel destinations. In the present study, attitude toward a behavior refers to the participant's attitude toward domestic tourism in China. It is crucial to understand the participants' attitudes toward domestic tourism in China to enhance the tourism industry in the country. Therefore, the study will investigate the factors influencing attitudes towards domestic tourism in China and provide insights to improve the industry.

### **1.9.3 Subjective norm**

Subjective norms represent an essential construct in the theory of planned behavior, referring to an individual's perception of social pressure to engage in or avoid a specific behavior (Ajzen, 1991). In other words, it captures the influence of social context on an individual's decision-making process. The subjective norm construct is considered a critical antecedent of intention formation, shaping individuals' behavior based on their perception of others' expectations (Ajzen, 2019).

Yoon (2011) defines subjective norms as the social pressure an individual perceives regarding performing or not performing a behavior. This construct has been linked to an individual's perception of their peers, family, and community expectations towards certain behaviors. In the context of domestic tourism, Hagger and Chatzisarantis (2005) found that subjective norms are affected by the attitudes of significant others, including family members and close friends, towards travel.

With the rise of social media, the influence of subjective norms has expanded to include social media influencers and celebrities who share their travel experiences. Social media is a vital platform for individuals to share their opinions and recommendations on

tourist destinations and activities, shaping people's perception of what is popular or acceptable. In the context of travel, subjective norms can influence an individual's destination choice and activities, based on their perception of what is socially acceptable or desirable.

Therefore, in this study, subjective norm is defined as the social pressure that an individual perceives concerning domestic tourism. The study aims to examine the influence of subjective norms on individuals' travel intentions, considering the impact of various sources of social pressure, including family, peers, and social media influencers. By understanding the influence of subjective norms on individuals' travel decisions, policymakers and marketers can design more effective strategies to promote domestic tourism.

#### **1.9.4 Perceived behavioural control**

Perceived behavioural control is a crucial construct in the theory of planned behavior, referring to an individual's perception of the ease or difficulty of engaging in a specific behavior (Ajzen, 1991). Ajzen (2019) defines perceived behavioral control as people's perceptions of their capacity to perform a specific behavior. This construct is considered a critical antecedent to both intention and behavior, shaping individuals' decision-making process.

In the context of travel, perceived behavioral control refers to an individual's perceived ease or difficulty in making travel plans and executing them (White et al., 2010). This includes various factors, such as financial constraints, availability of transportation, and time availability, among others. In the current study, perceived behavioral control was defined concerning domestic tourism. Therefore, perceived behavioral control refers to

the extent to which individuals in China perceive they have the capacity and opportunity to travel domestically.

Perceived behavioral control is considered a significant antecedent of behavior and intention formation (Ajzen, 1987). Understanding perceived behavioral control is essential for developing effective strategies to promote domestic tourism. By identifying the factors that influence individuals' perceived behavioral control, policymakers and marketers can design strategies that address these factors and encourage domestic travel.

In conclusion, perceived behavioral control is a crucial construct in the theory of planned behavior that plays a significant role in shaping individuals' behavior and intention formation. In the context of travel, it is essential to consider the factors that influence an individual's perceived ease or difficulty in making travel plans and executing them. The present study defined perceived behavioral control for domestic tourism and aims to explore its influence on individuals' travel intentions, providing insights that can inform strategies to promote domestic tourism.

### **1.9.5 Deliberative risk perception**

Deliberative risk perception is a vital construct used in various decision-making models and health behavior theories, referring to the cognitive assessment of risk, considering the likelihood and potential consequences of negative events (Flynn et al., 1994). In the context of individual decision-making, deliberative risk perception is primarily concerned with individuals' perception of their susceptibility to a specific risk (Ferrer et al., 2018; Ouyang et al., 2020).

To assess deliberative risk perception, researchers often use questions that ask individuals to evaluate their likelihood of experiencing a particular event. For example, in the field of health behavior models, one can ask individuals, "How likely is it that you will get COVID-19?" (Ferrer et al., 2016). By measuring deliberative risk perception,

researchers can better understand how individuals perceive the likelihood and severity of a particular risk and how these perceptions may influence their decision-making processes.

In the context of travel, deliberative risk perception pertains to the cognitive evaluation of travel-related risks, such as the likelihood of contracting a disease or experiencing a terrorist attack, and the potential outcomes of such occurrences. The assessment of deliberative risk perception in the travel context is critical, as it can influence individuals' decisions to travel, destination choice, and the precautions they take during their trips.

During the pandemic, understanding the factors that influence risk perception became crucial in promoting safe and responsible travel. Policymakers and marketers implemented various communication strategies to help travelers evaluate risks accurately and make informed decisions. For example, travel companies and tourism boards disseminated information about the risks associated with travel during the pandemic, such as the spread of the virus in different regions, local restrictions, and safety measures in place. They used different communication channels like websites, social media, and email newsletters to reach potential travelers. By providing transparent and up-to-date information, individuals could develop a more accurate assessment of the risks involved in traveling and take appropriate precautions. This included understanding the importance of wearing masks, practicing social distancing, and following hygiene guidelines. It also involved being aware of the risks in specific destinations and being informed about any travel advisories or restrictions imposed by authorities. The aim was to empower travelers to make responsible decisions based on accurate risk perception. By effectively communicating travel risks and safety measures, the travel industry could promote safe travel during uncertain times and help protect both the individuals traveling and the communities they visited.

In conclusion, deliberative risk perception is a vital construct that plays a crucial role in various decision-making models and health behaviour theories. In the context of travel, it pertains to the cognitive evaluation of travel-related risks, which can significantly influence individuals' travel decisions and behaviours.

#### **1.9.6 Affective risk perception**

Affective risk perception is a crucial factor to consider when examining the decision-making processes of travellers. The valence and level of arousal are common ways of measuring affective risk perceptions, which reflect an individual's emotional response to a perceived risk (Ferrer et al., 2016, 2018). Affective risk perception pertains to the emotional dimension of risk perception, encompassing an individual's feelings of worry, anxiety, or fear towards a potential risk or hazard (Bae & Chang, 2020; Ouyang et al., 2020). In the context of travel, affective risk perception refers to the emotional response of travellers towards perceived risks associated with travel, such as the fear of contracting an illness or being a victim of terrorism.

A real-life example that demonstrates the importance of understanding the affective responses of travelers towards perceived risks can be seen in the implementation of safety measures in the aviation industry following the 9/11 terrorist attacks. After the tragic events of September 11, 2001, there was a significant increase in the perceived risks associated with air travel. Travelers experienced heightened anxiety, fear, and emotional concerns about the safety of flying. Understanding these affective responses was crucial in developing effective risk communication strategies and risk management plans to mitigate the negative impacts of risk on travel behavior. To address these concerns and restore confidence in air travel, policymakers, airlines, and airport authorities implemented various strategies. They focused on transparent communication and enhanced security measures to alleviate the emotional concerns of travelers and



encourage safer travel practices. For instance, airports and airlines introduced strict security protocols such as enhanced passenger screening, baggage checks, and reinforced cockpit doors to enhance security and reduce the perceived risks. This information was effectively communicated to passengers through various channels, including signage, announcements, and security briefings. By providing clear information about these safety measures, travelers were better able to understand the steps taken to mitigate risks and make informed decisions about their travel. Additionally, campaigns were launched to promote awareness and educate passengers about the safety measures in place. Airlines and airports utilized marketing and communication strategies to emphasize the effectiveness of these measures and reassure travelers about their safety. By understanding the affective responses of travelers and implementing comprehensive risk communication strategies, the aviation industry was able to alleviate the emotional concerns associated with perceived risks. This approach helped restore confidence in air travel and encouraged safer travel practices, ultimately mitigating the negative impacts of risk on travel behavior.

The emotional responses of travellers to perceived risks can significantly influence their travel behaviour, including the decision to cancel or postpone travel plans (Bae & Chang, 2020). For example, during the COVID-19 pandemic, travellers who experienced high levels of fear and anxiety were more likely to avoid travelling altogether or change their travel plans (Chen et al., 2020). Thus, understanding the affective responses of travellers towards perceived risks is essential in developing effective risk communication strategies and risk management plans to mitigate the negative impacts of risk on travel behaviour. Such strategies can help alleviate the emotional concerns of travellers and encourage safer travel practices.

### 1.9.7 Experiential risk perception

Experiential risk perception is a crucial construct in the field of risk perception, as it involves an individual's direct and personal experience with a particular risk, which can influence their future perceptions of risk. This construct has been described as a type of heuristic thinking, in which individuals rely on their "gut-level" feelings of vulnerability when assessing risk (Ferrer et al., 2016, 2018). Additionally, experiential risk perception has been associated with holistic processing, which involves the use of learned associations to evaluate one's susceptibility to a risk (Ouyang et al., 2020).

For instance, an individual who has personally experienced a severe illness or loss of a loved one due to a particular risk may have a heightened sense of vulnerability towards that risk in the future. This experience may shape their attitudes, beliefs, and behaviours towards the risk, influencing their future decision-making processes.

A real-life example that illustrates the concept of experiential risk perception in the field of tourism can be seen in adventure tourism activities such as bungee jumping. When individuals engage in bungee jumping for the first time, they have a direct and personal experience with the risk involved. This experience becomes a crucial factor in their future perceptions of risk associated with the activity. Experiential risk perception involves relying on "gut-level" feelings of vulnerability when assessing risk. For example, imagine a person who has never tried bungee jumping before but decides to give it a try. As they stand on the edge of the platform, preparing to jump, they may experience a rush of emotions such as fear, excitement, and a sense of vulnerability. The direct experience of taking the leap and free-falling creates a powerful experiential risk perception. This firsthand encounter with the risk of bungee jumping influences their future perceptions of risk associated with the activity. If the individual has a positive experience and feels safe during the jump, their future risk perception may be influenced by that positive experience. They may perceive bungee jumping as less risky or even as a thrilling

adventure they would be willing to repeat. Conversely, if the individual has a negative experience, such as feeling unsafe or encountering an equipment malfunction during the jump, their future risk perception may be influenced by that negative experience. They may perceive bungee jumping as riskier and be less likely to engage in the activity again.

Experiential risk perception is closely related to holistic processing, which involves using learned associations to evaluate one's susceptibility to a risk. Individuals who have a positive experiential risk perception of bungee jumping may associate the activity with positive outcomes, such as overcoming fears or experiencing an adrenaline rush. On the other hand, those with a negative experiential risk perception may associate the activity with negative outcomes, such as accidents or injuries. In summary, experiential risk perception in adventure tourism activities like bungee jumping involves an individual's direct and personal experience with the risk, which influences their future perceptions of risk associated with the activity.

It is important to note that experiential risk perception differs from deliberative risk perception, which is a more cognitive and deliberate assessment of risk that takes into account the likelihood and consequences of negative events (Ferrer et al., 2016). Thus, it is essential to consider both experiential and deliberative risk perceptions when studying risk perception in various contexts.

In conclusion, these concepts are important in understanding travel behaviour, as they help explain the factors that influence an individual's decision to travel. The Theory of Planned Behaviour is a prominent theoretical framework in social psychology that aims to elucidate the motivational factors that underpin human behaviour (Ajzen, 1991). This intention is shaped by an individual's attitude and subjective norms towards a behaviour and perceived behavioural control. Attitude refers to a positive or negative perception of engaging in a behaviour, determined by beliefs about the outcomes of the behaviour. Subjective norms refer to the perceived social pressure to engage in or not engage in a

behaviour. Perceived behavioural control, which is the perception of the ease or difficulty of performing a behaviour. The Theory of Planned Behaviour (TPB) is a theoretical framework that accounts for both social and psychological factors in individuals' decision-making processes (Ajzen, 1991). Additionally, the notion of risk perception holds a significant role in predicting one's likelihood to engage in health-related behaviours. Affective, deliberative, and experiential risk perception are different components of an individual's overall risk perception. Traditionally, these frameworks have focused on deliberative risk perceptions, which are systematic and reason-based judgments concerning the likelihood of developing a disease. However, recent research has highlighted the distinction between deliberative and affective risk perceptions, which refer to the emotional response to the possibility of developing a disease, often involving worry or fear. Affective risk perceptions have been found to be more robust predictors of preventive health behaviours than deliberative risk. Experiential risk perception represents a form of risk assessment that relies on rapid, heuristic-based judgments and holistic processing, which are based on an individual's gut-level reactions. Experiential risk perception is distinct from both deliberative and affective risk perceptions and can be assessed through self-report. These components can vary greatly between individuals, and can impact their decision-making when it comes to travel. Understanding the nuances between these different types of risk perception is important for tourism researchers and practitioners, as it can inform the development of effective marketing strategies and the design of safe and enjoyable tourist experiences.

### **1.10 Structure of research**

This thesis consists of six chapters. Following this introductory chapter, Chapter Two reviews the literature related to the constructs of the Theory of Planned Behaviour and the TRIRISK model. This chapter also highlights the development of the hypothesized

model and elaborates on the study's conceptual framework. Chapter Three deals with critical methodological issues in the study, including research philosophy, research approach, research strategy, research design, data collection, and data analysis. Chapter Four presents the significant findings from the online survey, focusing on modelling and hypothesis testing. Chapter Five in this thesis discusses the outcomes or findings in the previous chapter. Finally, Chapter Six concludes the study, and this chapter highlights the contributions and practical implications of this thesis, followed by the limitation and recommendations for future research.

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## CHAPTER 2: LITERATURE REVIEW

### 2.1 Introduction

Central to understanding the travel intentions of domestic tourists during the COVID-19 pandemic is the need to understand what risks are perceived by tourists. This chapter reviews literature on theories such as tourism risk perception, multidimensional risk perception, and the theory of planned behaviour. It also explains the selection of seven constructs, including deliberative risk perception, affective risk perception, experiential risk perception, attitude toward domestic tourism, subjective norm, perceived behavioural control, and travel intention, in the context of China during the pandemic. Justifications and discussions on hypotheses development are provided.

### 2.2 Theoretical foundation

#### 2.2.1 Theory of risk perception

In 1895, John Haynes gave the definition about “risk”. He wrote:

*“The word risk has acquired no technical meaning in economics, but signifies here as elsewhere chance of damage or loss. The fortuitous element is the distinguishing characteristic of a risk. If there is any uncertainty whether or not the performance of a given act will produce a harmful result, the performance of that act is the assumption of a risk.”*

Haynes' casual treatment of the definition gives the impression that he considered it to be the generally accepted meaning. His use of the word "uncertainty" in the explanation of his definition does not make uncertainty a part of the definition, but emphasizes the chance aspect of risk. It may be argued, though, that the use of the term "uncertainty" in Haynes' discussion means that when there is "doubt" as to whether or not any harm might result from the performance of an act, there is risk. This does not however, appear to be

what Haynes intends risk to mean. Haynes' discussion of risk gives the impression that the "chance of loss" definition had general acceptance in 1895.

According to a number of scholars (Rohrmann, 1996; Macquarie, 1999; Reisinger and Mavondo, 2006), the term "risk" can be defined as the potential for incurring physical, financial, or social harm or loss due to a perceived threat within a particular timeframe. Risk is "the unpredictability that consumers face when they cannot foresee the consequences of their purchasing decisions," according to Park and Reisinger (2010), who defined it from a marketing point of view. Rosa (2003) stated that risk is an uncertain condition or occurrence in which anything of value to humans is at stake. Risk, according to Morakabati (2007), is "a perception of the future, a perception of how threatening a scenario might be". Bostrom et al. (2008) contend that risk is not exclusively unfavourable and must not solely be avoided, such as in cases of danger, sickness, or life-threatening events. Therefore, according to Bostrom et al. (2008), the definition of risk must encompass the potential for either negative or positive outcomes. Risk, commonly associated with negative events or outcomes, can also serve as a neutral or positive term in certain contexts such as positive risk. Positive risk or good risk, as highlighted in health sciences, finance, and economic studies, has been defined and addressed positively (Robertson and Collinson, 2011; Seale et al., 2012; Steve et al., 2016). According to Morakabati (2007), risk should not be limited to a particular outcome, but instead should encompass the possibility of both positive and negative consequences due to its probabilistic nature. Therefore, risk is defined as the potential, likelihood, or possibility of gaining or losing something of value, tangible or intangible, as a result of a specific action or inaction.

It is noteworthy that although the terms risk and uncertainty are sometimes used interchangeably, they have distinct meanings (Toma et al., 2012). Knight (1921) found the distinction between risk and uncertainty. He stated that risk is a type of uncertainty

which is measurable (Wood, 1964). Risk generally refers to the potential gain or loss that may occur from a course of action or inaction (Macquarie, 1999). According to Adams (1995), risk involves the potential for experiencing harm or loss due to internal or external factors that can be quantified and managed. On the other hand, uncertainty is characterized by the absence of knowledge or certainty about a given situation (Epstein et al., 2008). Even if there may be several outcomes that could occur from an event or condition in an unclear situation, the likelihood of those outcomes is not known (Toma et al., 2012). Since the probabilities are unknown, neither uncertainty nor probability can be used to the potential outcomes (Surbhi, 2017). Toma et al. (2012) have noted that the level of certainty regarding future events is the fundamental difference between risk and uncertainty. Additionally, Surbhi (2017) highlighted several significant differences between these two concepts based on the following reasons:

- Risk is the possibility of gaining or losing something of value. In a state of uncertainty, there is no knowing regarding future events.
- Risk is measurable and quantifiable using theoretical models. In contrast, it is not possible to quantify uncertainty due to the unpredictability of future events.
- In the case of risk, the potential consequences are known, but they are unknown in the situation of uncertainty.
- Risk can be managed provided the appropriate steps are implemented. On the other side, uncertainty is out of a person's or company's control because the future is unpredictable.
- By adopting the appropriate precautions, risk can be reduced to the absolute minimum. In the event of uncertainty, this is not feasible.
- In risk, a collection of situations is given probabilities; this is not achievable in the case of uncertainty.



Haynes also mentioned that every risk facing human beings belongs to the scope of economics. Therefore, risk is a key economic factor (Haynes, 1895). After that, risk has been examined across a range of disciplines (Quintal et al., 2010). For example, Bauer (1960) initially introduced the concept of risk or perceived risk in buying behaviour research. He believed that “consumer behaviour involves risk in the sense that any action of a consumer will produce consequences which he cannot anticipate with anything approximating certainty, and some of which at least are likely to be unpleasant.” In other words, consumers' purchase decision involves the uncertainty of the outcome. Therefore, risk perception is described as "a combination of uncertainty plus seriousness of outcome involved" or “an individual's subjective evaluation based on the likelihood of negative consequences of an event” (Bauer, 1960).

According to Slovic and Macgregor (2012), risk perception research examines the subjective assessments individuals make when evaluating or describing the intensity of risk. Individuals' risk perceptions are shaped by their personal experiences and beliefs (Slovic & Macgregor, 2012; Rohrman, 2008), which in turn shape their view of the world. Despite variations in susceptibility, existing research on risk perception highlights that individuals form opinions regarding all risks (Slovic & Macgregor, 2012; Rohrman, 2008). These perceptions of risk have a significant influence on decision-making and subsequent behaviour. The study of risk perception has its origins in the nuclear debates of the 1960s, which saw a shift in public opinion towards greater opposition to the rapid development of nuclear technology. Observations by experts highlighted the potential threat posed by both technological and natural hazards (Sjoberg & Wahlberg, 2000). The public's opposition to the new technology was largely driven by concerns over the long-term impact on the environment and the possibility of a catastrophic radioactive disaster. This opposition sparked extensive discussions among scientific and political communities regarding the public's apprehensions towards nuclear technology (Douglas, 1982).

Early approaches to risk perception assumed that individuals would engage in careful analysis of all available information before making a decision. According to Douglas (1982), individuals are more likely to understand the nature of a particular risk and decrease their perception of it if they are presented with sufficient information. However, some critics, including Freudenburg (1993) and Fuchs et al. (2013), have argued that this assumption has limited practical value. Research has shown that the presentation of new information alone is often insufficient to alter risk perceptions, and that individual differences in risk perception and response exist (Morakabati, 2007; Fuchs et al., 2013).

According to Simon (1995), Ropeik (2010), and Fuchs et al. (2013), human behaviour and risk perception lack consistency and rationality. Ropeik (2010) argues that the notion that people can make informed decisions based on risk information is naive and overlooks the complex nature of human cognition. Furthermore, Ropeik (2010) contends that individuals' perceptions of risk are subjective and often contradicted by evidence in an irrational manner. As a result, providing more information may not necessarily lead to more accurate or reasonable decisions. Ropeik (2010) suggests that the study of risk perception can be approached from both psychological and anthropological/sociological perspectives. (Simon, 1995; Ropeik, 2010; Fuchs et al., 2013).

Risk perceptions are considered important antecedents to actions recommended by experts to mitigate or prevent hazards, such as vaccinations, hand hygiene, seatbelt utilization, and early screening for diseases. Various behavioural change models have incorporated risk perception-related variables. Notably, the Health Belief Model, Protection Motivation Theory, Extended Parallel Process Model, and Risk Perception Attitude framework are among the theories that seek to anticipate behaviour in this context.

According to the Health Belief Model (HBM), people strive to avoid illness and are likely to adopt health-related behaviour they believe will protect them from illness. The

HBM proposes four forms of risk perceptions - perceived susceptibility, perceived severity, perceived benefits, and perceived barriers - as determinants of health behaviour. Perceived susceptibility represents people's subjective beliefs regarding their vulnerability to a disease or other health risk, whereas perceived severity relates to the perceived negative physical and social consequences of a health risk (Janz & Becker, 1984; Rosenstock, 1974). Perceived benefits correspond to people's confidence that a health practice can help them manage a health risk, while perceived barriers refer to their beliefs about the obstacles or disadvantages of adopting a health behaviour (Rosenstock, 1974).

Protection Motivation Theory (Rogers, 1983) and the Extended Parallel Process Model (Witte, 1992) consider perceived susceptibility and severity as important components of an individual's perceived threat, which is necessary for adopting recommended health behaviour. However, a high level of perceived threat alone is not enough to promote the desired behaviour. Individuals must also possess self-efficacy and response efficacy to perform the suggested behaviour (Witte, 1992; Rogers, 1983). The Risk Perception Attitude (RPA) model, similar to EPPM, assumes that risk perceptions, including perceived susceptibility and severity, are crucial in promoting changes in people's health behaviour (Rimal & Real, 2003). While EPPM focuses on understanding the process of how fear appeals work, RPA is useful in predicting individual motivations and self-protective behaviour, and classifying audience characteristics according to these predictions. These theories and health behaviour models underscore the importance of comprehending risk perceptions as factors influencing preventative and protective health behaviour.

According to some scholars, the concept of risk perception should be known as risk judgment, since it encompasses cognitive, affective, and behavioural elements besides perceptual ones, and the term "risk perception" is unduly intricate and ambiguous

(Dunwoody & Neuwirth, 1991). However, the notion of risk judgment appears to underscore the cognitive and rational components of risk evaluations, while neglecting the various emotional reactions people have to risks. Health behaviour theories such as the HBM, PMT, EPPM, and RPA framework also reflect this emphasis on the rational and cognitive aspects of risk perceptions. Perceived susceptibility and perceived severity are frequently incorporated into these theoretical models, and they consider these risk perceptions as precursors to healthy behaviours. Nevertheless, some researchers contend that other dimensions must be examined even on the cognitive side of risk perceptions.

### **2.2.2 Multidimensional risk perception model**

As the central constructs in many frameworks, risk perceptions were typically designed to predict engagement in health-related behaviours (Ferrer et al., 2016). They suggest that previous studies of risk perception were primarily based on logical, rule-based judgements about individuals' propensity to acquire a disease or illness, which is interpreted as deliberative risk perception. Moreover, this type of judgement is also known as "systematic and reason-based, extensional, cognitive, dispassionate, or rational" in deliberative risk perception (Ferrer et al., 2016). Paek et al. (2017) also mentioned that research concentrate on people's cognitive assessments of risk magnitude and probability when initially exploring risk perception. For example, in the field of tourism, Jurado and Matovelle (2019) define risk perception as a traveller's perception of the portion beyond a threshold of negative consequences or negative impacts during travel. Researchers have also discovered the crucial part that feelings of dread, anxiety, and outrage play when assessing risks. When people judging risk, they rely on current emotions which is called affective heuristics (Paek et al., 2017). People are more prone to view it as threatening and pervasive when they feel intense dread perceiving risk. The risk-as-feelings hypothesis, according to Loewenstein et al. (2001), predicts that

emotional responses to risks are frequently independent of evaluations and stronger predictors of people's behaviour.

Therefore, Slovic et al. (2012) pointed out that risk is perceived in two main ways, including a cognitive "analysis" of the probability judgment of danger and an affective element which is called "affect heuristic." Their research also mentioned that decision-making involves integrating "both modes of thought." Cognitive risk perceptions refer to how susceptible individuals are to a particular risk (namely, perceived susceptibility) and how severe the consequences of the risk are namely perceived severity (Rosenstock, 1974). By contrast, affective risk perceptions pertain to how worried or anxious individuals are about their exposure to risk (Sjöberg, 1980). The bidimensional models of risk perception have been applied to research to predict behavioural intention. It has been shown that Shim and You's (2015) study examined the role of perceived risk (cognitive risk perception) together with worry (affective risk perception) in predicting intention to consume food in regards to major food outbreaks in neighbouring countries. They pointed out that cognitive and affective risk perception had a significant association with food consumption intention to reduce the likelihood of getting a foodborne illness. Bae and Chang (2020) investigated the relationship between COVID-19 risk perception, including cognitive and affective dimensions, and the intention to engage in "untact" tourism in South Korea amid the pandemic. Their findings indicate that both cognitive and affective risk perceptions significantly influence individuals' behavioural intentions.

However, Tripartite model of risk perception (TRIRISK) makes the traditional distinction between deliberative risk perceptions (likelihood judgments) and affective risk perceptions (fear or worry), but also establishes experiential risk perception ('gut-level reactions to health risks) as the third component of risk perception (Ferrer et al., 2016). As a result of their findings, they concluded that using the TRIRISK model rather than

one-dimensional or two-dimensional models would improve the predictive validity of health behaviour change interventions, health communication methods, and decision aids. Furthermore, a study conducted by the researchers determined that the three components of risk perception, namely deliberative, affective, and experiential, predicted unique variances in intentions to practice prevention behaviour. It was the first study to demonstrate the difference between the deliberative, affective, and experiential aspects of perceived risk. As compared to dual-factor and single-factor models, the TRIRISK model provided a better fit to the data than the other models.

As per Ferrer et al., (2018) and Ouyang et al., (2020), deliberative risk perception pertains to an individual's judgement of their susceptibility to a risk and is often linked to decision-making models or health behaviour theories, such as assessing the likelihood of contracting COVID-19. On the other hand, affective risk perception is focused on a person's emotional response to a possible future risk, such as anxiety, worries, or fears (Bae & Chang, 2020; Ouyang et al., 2020). and describes how a person feels about a risk (Peters & Slovic, 1996) (e.g., “I am worried about the possible consequences of COVID-19”) (Ouyang et al., 2020). Experiential risk perception, as described by Ferrer et al., (2016) and (Ouyang et al., 2020), involves a holistic assessment of vulnerability to a risk that depends on learned associations (e.g., “I feel very vulnerable to COVID-19”). Moreover, experiential risk perceptions differ from deliberative risk perceptions (Ferrer et al., 2016). The results of confirmation factor analyses confirm the discriminant validity of all three components of risk perception (deliberative, affective, and experiential), despite often conflating these components. Ferrer et al. (2016) also demonstrated that each of the three components was independently associated with behaviour. Riedinger et al. (2022) analysed how cancer risk perception and behaviour are related in the UK using the TRIRISK model. Kaufman et al. (2020) measured the link between cigarette smoking behaviour and risk perceptions. Their study identified three risk perception dimensions:

perceived likelihood based on deliberative thoughts, experiential risk perception, and affective risk perception.

Lahiry et al. (2020) applied the TRIRISK model to predict COVID-19 Social Distancing during the pandemic. Therefore, the TRIRISK model was selected as one of the theoretical frameworks.

### **2.2.3 Travel risk perception**

Tourism risks refer to the possibility of unfavourable events, threats, shocks, and disasters that could have a detrimental impact on the tourism industry (Reisinger & Mavondo, 2005; Cahyanto et al., 2016; Law, 2006). Tourism, sometimes, overlaps with other activities, interests, and processes like pilgrimage. This gives rise to shared categories, such as “business tourism,” “sports tourism,” and “medical tourism” (international travel undertaken for the purpose of receiving medical care). The tourism literature has identified various risks associated with tourism, including “natural disasters” (Walters and Mair, 2012), “war and political instability” (Sonmez et al., 1999), “crime” (Dimanche & Lepetic 1999), “functional, physical, cultural, and language difficulties” (Basala and Klenosky, 2001; Korstanje, 2009), “terrorism” (Sonmez & Graefe, 1998), “situational” (Korstanje, 2009), and “the risk of opportunity loss” (Fuchs & Reichel, 2011). Reisinger and Mavondo (2006) have identified additional categories of risks associated with tourism. These include crime, cultural, equipment, financial, health, performance, physical, political, psychological, satisfaction, social, terrorism, and time-related risks. Crime risks refer to the possibility of becoming a victim of robbery, assault, or murder. Cultural risks include experiencing difficulties in communication, cultural misunderstanding, and inability to adjust to foreign customs. Equipment risks refer to the possibility of mechanical or organizational problems occurring during travel. Financial risks include not receiving value for money and losing or wasting money if travel expectations are not fulfilled. Health risks include becoming sick or dying while traveling

or at the destination. Performance risks refer to not receiving holiday benefits due to poorly performing travel products or services. Physical risks include the possibility of accidents, injuries detrimental to health, or even death. Political risks refer to the possibility of becoming involved in political turmoil. Psychological risks include not reflecting the traveller's personality or self-image, damaging self-image, or reflecting poorly on personality. Satisfaction risks refer to the possibility of not achieving personal satisfaction and self-actualization with travel experience. Social risks include disapproval of vacation choices or activities by friends, families, or associates, lowering personal and social status, and appearing unfashionable. Terrorism risks refer to the possibility of being involved in a terrorist act. Time-related risks include the possibility of travel experiences taking too much time, products not performing on time, or travellers losing or wasting time. Although many of the risks associated with tourism have been identified in the literature on consumer behaviour, the tourism literature emphasizes the relevance of certain risks. According to Roehl and Fesenmaier (1992) and Sonmez and Graefe (1998), satisfaction, financial, psychological, and time risks are particularly pertinent to tourism. Other experts, such as Korstanje (2009) and Quintal et al. (2010), have added that psychological, functional, social, and physical risks are also important in the context of tourism. The abundance of risks related to tourism highlights the industry's exceptional susceptibility to risk.

Lehto et al. (2008) noted that the UNWTO (2003) has identified several risk factors that can significantly impact tourism destinations. These factors include the human and institutional environment beyond the tourism industry, the tourism sector itself, the linked commercial sectors, tourists, and the natural environment. Negative impacts of these risks can be experienced by tourists, the tourism industry, and local communities. Lehto et al. (2008) further argued that risks affecting tourists' sense of safety and security are more likely to draw their attention. Moreover, while assessing actual risks is important,



analyzing tourists' perceptions of risk to understand their behaviour is also important (Hajibaba et al., 2015; Isaac, 2020; Isaac & Velden, 2018; Reisinger & Mavondo, 2005).

Sonmez and Graefe (1998) have argued that poor management of risks may severely damage tourists' risk perception and the image of a destination, which in turn can hinder tourism. Thus, safety is of significant importance to the tourism sector, as tourists' perception of safety substantially influences their travel intentions and destination selection (Kapusinski, 2014). In terms of destination selection, it has been observed that tourists tend to substitute a perceived risky destination with one they consider to be safer (Seabra et al., 2013; Adeloye & Brown, 2018).

Tourism risk perception is defined by Zhu and Deng (2020) as “the subjective judgment made by consumers that lead to negative results for tourism, which resulted from the asymmetry objective existent in tourism safety information and of the subjective perception that tourists have.” In this research, we will adopt the definition of Zhu and Deng (2020) as it is the most suitable for exploring COVID-19-related tourism risk perceptions. Tourists' perceptions of risk have a profound effect on the tourism sector, particularly during times of crisis, as it can influence their travel decisions (Hajibaba et al., 2015) and their selection of a destination or product. Furthermore, tourists' future behaviour and purchasing intentions, as well as their destination image, are influenced by their perceived risks (Hasan et al., 2017; Isaac, 2020).

As a service-oriented industry, tourism is considered as a consumer activity (Moutinho, 1987). In regards to unsystematic risks, tourists often perceive them as higher due to the nature of tourism (Fuchs et al., 2013). Tourism risk is that the product or service does not meet the expectations of tourists, or it is a combination of factors beyond the control of the tourism during the consumption process (Cui et al., 2016). Tourists may perceive negative results during their travel due to tourism risk (Fischer et al., 1991). Therefore,

travel decision-making is a complicated process that is risky and uncertain (Sirakaya & Woodside, 2005). When making travel decisions in uncertain risk situations, an individual may be influenced by concerns about their safety because they are born with a need for safety within them (Beirman, 2002). According to Kozak et al., (2007), International travellers have been examined as being concerned about risk as a main concern.

Bauer (1960) strongly emphasizes that he is concerned only with subjective (perceived) risk and not "real world" (objective) risk. According to Roehl and Fesenmaier (1992) tourists make travel decisions based on perceptions rather than reality. Consequently, researchers usually measure how people perceive risk, rather than how real the risk is, because of the fact that willingness to accept risk is the most influential factor in human behaviour (Bae & Chang, 2020). It has been shown in previous studies that individuals were able to use available heuristics to evaluate risk in order to predict the likelihood of future events (Bae & Chang, 2020; Dillard et al., 2012). Hence, most of the risk studies in tourism focus on perceived or subjective risk instead of real or objective risk as tourists are only able to experience risk that is related to themselves or risk that they can perceive (Quintal et al., 2010). The Table 2.1 shows the literatures related to the travel risk perception.

**Table 2.1: The related literatures about the travel risk perception**  
**The related literatures about the travel risk perception**

| <b>Authors</b>               | <b>Concepts related to travel risk perception</b>  |
|------------------------------|--|
| Sonmez and Graefe (1998)     | The level of travel risk perception is the risk type and value perceived by potential tourists during international travel.  |
| Reisinger and Mavondo (2005) | Tourism risk perception as an evaluation of the situation regarding risks to make travel decisions purchase and consume travel products or experiences.  |
| Reichel et al. (2007)        | Tourists' risk perception can be defined as their perception of the adverse effects of an event that exceed the acceptable level of tourism behaviour for them as consumers.   |
| Huang et al. (2008)          | Tourist risk perception as the psychological distress and unease that arises from spiritual or paranormal beliefs, which may affect tourists' decisions to purchase and engage in tourism services in specific destinations. |
| Wong & Yeh (2009)            | Tourist risk perception can be conceptualized as the probability with which tourists anticipate unfavourable   |

|                        |  |
|------------------------|--|
|                        | outcomes, as well as the extent of uncertainty associated with the decision to acquire a product or service at a particular destination.   |
| Chew & Jahari (2014)   | Travel risk perception as an individual's perception of "the likelihood that, if the perceived risk is considered to be above acceptable levels, it may expose them to a risk that may influence travel decisions"   |
| Cui et al. (2016)      | Tourism risk perception was summarized into three views: <ol style="list-style-type: none"> <li>1. Risk perception in tourism is the subjective judgement of the tourists in terms of the negative outcomes or effects of consuming tourism services.</li> <li>2. Tourism risk perception can be defined as the systematic assessment made by tourists of the adverse consequences or unfavourable impacts that may occur when they engage in the consumption of tourism services.</li> <li>3. Tourism risk perception refers to the perception among tourists that the unfavourable outcomes or harmful impacts that may emerge in tourism exceed the threshold.</li> </ol> |
| Petersen et al. (2020) | The perception of travel risk refers to how tourists react to unknown events or processes in tourism, which can have a significant impact on their decision-making behaviour, regardless of whether they feel the perceived risk to be acceptable.   |

As stated in Chew & Jahari (2014), tourism risks are classified as “physical, psychological, financial, and health risks that could result from accidents, injuries, natural disasters, political instability, and diseases”. As a result of tourism risks, there can be physical harm as well as a significant effect on travel decisions (Chew & Jahari, 2014). Therefore, it is possible to conclude that COVID-19 is an extremely severe disease that can cause physical harm to humans. Consequently, travellers may have to make important decisions regarding their traveling plans.

Building on the preceding discussion, the present thesis centres on the COVID-19 as a potential risk for tourists, and specifically aims to investigate and analyse the impact of the COVID-19 outbreak on domestic tourists' risk perceptions and travel intentions.

#### 2.2.4 Theory of Planned Behaviour (TPB)

It is a difficult point and a hot spot in social psychology to determine which factors affect individual behaviour and how to explain and predict individual behaviour accurately. As the core concept of social psychology, the attitude was once considered the core element of determining individual behaviour. Allport (1935), after evaluating general attitude theory and research, found that the majority of academics believe that attitude is a learned expectation utilised to consistently like or dislike an object or collection of objects. This scholar also noted that the polarities of attitudes (such as likes and dislikes) are typically regarded as the most significant aspect of this concept. Nevertheless, not all researchers view attitude as a unidimensional concept. Fishbein (1967) states that with the advancement of attitude-related studies, attitude has become a complex and multidimensional notion that encompasses cognition, emotion, and intention. Researchers typically conceptualise attitudes into three dimensions: cognition, emotion, and behaviour, in order to more clearly explain the multidimensional and complex characteristics of attitudes (Mcdougall & Munro, 1987). The cognitive part of an attitude includes an individual's beliefs and knowledge about a specific object or the way they perceive it; the affective part is an individual's liking or disliking a specific object; the behavioural part reflects the actions or expressions that an individual makes about a specific target object.

When early researchers used attitude to predict or explain individual behaviour, they regarded attitude as a relatively simple one-dimensional concept, containing only the emotional part of this multi-dimensional concept (Fishbein, 1967). These scholars define attitudes' cognitive and intentional parts as external influencing factors related to attitudes. However, Lapiere (1934) has already pointed out in his study that attitude is not always consistent with the individual's actual behaviour, and there must be other factors that affect the individual's behaviour. Fishbein (1967) assumes that beliefs and willingness to

act are attitude determinants and consequences, respectively. Wicker (1969) also believes that research attitudes alone cannot explain individual behaviour. Bandura (1977) first proposed the concept of self-efficacy and then believed that the individual's behaviour, environment and human cognition are ternary interactions, and the intensity of their interaction is also different, which can change with a variety of factors. Schwartz (1977) removed attitude factors from the research and focused on individual altruistic behaviour, proposing that individual norms are the decisive factor affecting individual behaviour, and individual norms are affected by the sense of consequences and the attribution of responsibility. But how about the behaviour of non-altruism? Stern (1999) extended the factors that affect individual norms, added new value orientation factors, and avoided the shortcomings that Schwartz's research is only considered applicable to altruistic behaviour. Fishbein and Ajzen investigated human behaviour and found that certain factors contributed to behaviour. In order to forecast people's behaviour, they came up with a theory called the Theory of Reasoned Action (Fishbein & Ajzen, 1975). This conclusion of Fishbein led to the Theory of Reasoned Action, which is famous and widely used in consumer behaviour research. Ajzen and Fishbein, in their proposition of the Theory of Reasoned Action, postulated that an individual's behavioural intention is influenced by their attitude toward the behaviour and the subjective norm, which, in turn, reflect the individual's motivation to engage in the behaviour. This theory can well predict consumers' behavioural intentions and actual behaviours within the assumptions of the original model (Sheppard et al., 1988). Thus, it contributes significantly to understanding the relationship between attitude and behaviour.

The Theory of Reasoned Action holds that an individual's behaviour is determined by the intention to act. Behavioural intention is influenced by two factors, namely, attitude and subjective norms. An individual's attitude toward an object is determined by assessing his or her beliefs of salient attributes that an object has and evaluating each attribute

(Fishbein & Ajzen, 1975). Attitude can be defined as the overall positive or negative judgement of behaviour and is the derivative of the salient behavioural beliefs of an individual, which can be considered the perceived likelihood of particular outcomes occurring (Lam & Hsu, 2006). Individuals with a positive attitude are more likely to participate in an activity or perform a particular behaviour. Subjective norms are the perception of general social influences to engage in or refrain from a specific behaviour. Subjective norms are created through the combination of two elements. Salient references' social pressure is the first, and being driven to follow those referents is the second (Lam & Hsu, 2006). Individual attitudes toward engaging in a behaviour are believed to be influenced by behavioural beliefs, whereas an individual's subjective norm for the behaviour is influenced by normative beliefs (Madden et al., 1992). The Theory of Reasoned Action model has been frequently applied to predict behavioural intentions related to marketing and consumer behaviour areas because of its power. The Theory of Reasoned Action, as modified by Kim et al. (2011) was applied to investigate tourists' revisit intentions to a Low Country Oyster Festival in Charleston in South Carolina. Their research demonstrated that the intention of tourists to revisit could be explained and predicted using the perceived value and satisfaction elements of the modified Theory of Reasoned Action model. Additionally, their results offered strong evidence for the association between emotional (affective) responses and the cognitive assessment ( Kim et al., 2011).

Ajzen (1991) added a variable, "perceived behavioural control", based on the Theory of Reasoned Action, forming the theory of planned behaviour. The Theory of Planned Behaviour believes that perceived behavioural control indirectly or directly determines the actual behaviour of individuals through its influence on subjective behavioural intention. From the studies related to attitude and consumer behaviour, it can be seen that attitude is the determinant of consumer behaviour, but in the process of predicting

consumer behaviour, other factors represented by perceived behaviour control also play an essential role (Ajzen, 1991). The Theory of Planned Behaviour integrates the exogenous variable of perceived behaviour control into the theoretical model, thus effectively expanding the application of the Theory of Reasoned Action. These two theories—the Theory of Reasoned Action and the theory of planned behaviour—have been examined scientifically, and the findings show that include perceived behavioural control improves the prediction of behavioural intention and behaviour (Madden et al., 1992). The theory proposes that individual's intentions to undertake a behaviour may be accurately anticipated by evaluating attitudes toward the behaviour, subjective norms, and perceived behavioural control. It has been demonstrated that these combined considerations explain the significant variance in behaviour, and the hypothesis has been validated by empirical results (Ajzen, 1991).

According to the theory of planned behaviour, behavioural intention directly leads to actual behaviour, and three variables influence behavioural intention: attitude, subjective norm, and perceived behaviour control. In general, the more favourable attitudes and subjective norms, the greater the perceived behaviour control, the more people expect to execute their intentions, and the higher the probability of actual behaviour. The present study provides the following definitions for attitude, subjective norms, perceived behavioural control, and behavioural intention:

- **Attitude:** Attitudes are the degree to which individuals like or dislike the behaviour object and react, and people often try to engage in actions that bring about "good" results and avoid those that lead to "bad" results (Fishbein & Ajzen, 1975; Gross & Niman, 1975). Generally speaking, attitude is one of the most reliable variables explaining behavioural intention (Ajzen, 1991).
- **Subjective norm:** The subjective specification is the second key concept of the TPB theory. Subjective norms initially refer to people's understanding of the

occurrence of other behaviours and the view that others agree with or disagree with certain behaviours. However, social norms are mainly conceptualized as perceived social pressures in the TPB framework. That is, when predicting the behaviour of others, whether an individual finally implements a particular behaviour is influenced by the outside world (including individuals and groups). Like attitudes and perceived behavioural control, subjective norm is considered not to influence behaviour directly but indirectly through their influence on behavioural intent. Terry & Hogg (1999) found that subjective norms had the weakest influence on behavioural intention among all the variables.

- **Perceived behaviour control:** Perceived behavioural control is an individual's judgment of their ability to control a particular set of behaviours (Ajzen, 1991). Specifically, it is an individual's judgment of how easy it is to complete or perform a specific behaviour, roughly equivalent to social cognitive theory's self-efficacy. Ajzen (1991) pointed out that perceived behavioural control may change with the context. The reason for considering perceived behavioural control is that it can help predict behaviour where it is true.
- **Behavioural intention:** In theoretical models of TPB, behavioural intention is considered the most direct predictor among the many influencing factors of tourist behaviour, reflecting the possibility that tourists' expectations and plans for future tourist behaviour can be operationally defined as actions (Fishbein & Ajzen, 1975). The behavioural intention has consistently been recognized as an important mediating variable between behavioural determinants and actual behaviour. The importance of intention stems from the Theory of Reasoned Action and the Theory of Planned Behaviour and the wide application of these two theories in the study of social behaviour (Ajzen, 1988; Ajzen & Fishbein, 1980; Armitage & Conner, 2001). Both theories believe that behaviour can be predicted directly



through behavioural intention. Some scholars believe that theories can effectively predict different social behaviours, especially those controlled by individuals (Corby et al., 1996). Some scholars have also suggested that in addition to attitude, subjective norms and perceived behaviour control, other variables can also affect behaviour intention, such as previous experience, satisfaction, perceived value, image and motivation (Lam & Hsu, 2006; Baker & Crompton, 2000; Chen & Chen, 2010; Um, Chon & Ro, 2006; Fan & Hsu, 2014).

The Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB) are both social psychological models that help explain why people behave in certain ways. The key divergence between the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB) lies in their respective emphases on the factors that predict behaviour. While the TRA prioritizes an individual's attitude and subjective norms (i.e., the perceived social pressure to conform to a specific behaviour), the TPB extends the TRA by including the construct of perceived behavioural control (i.e., the belief in one's capability to execute the behaviour) as an additional predictor of behaviour. In other words, the TPB views behaviour as being influenced not only by attitudes and social norms, but also by a person's perceived control over performing the behaviour.

The problem is that although the Theory of Reasoned Action can effectively predict behaviour controlled by the subjective will of the individual, the social behaviour of interest to the vast majority of researchers is not entirely controlled by subjective will. An apparent defect is that the default human idea is rational, and the individual behaviour is the concrete manifestation of the results of his rational thinking. However, human behaviour is sometimes produced by external stimuli, not the behaviour after rational thinking or irrational behaviour. Therefore, the Theory of Reasoned Action still has big considerable limitations. Because of these limitations, the TPB framework is well-known and popular among researchers, and it has been widely applied to numerous fields.

The validity of the Theory of Planned Behaviour model in explicating consumer behaviour has been confirmed by a multitude of studies, including research conducted in the context of the tourism industry (Chaulagain et al., 2020; Maichum et al., 2017). A large number of studies related to tourist behaviour are based on the theory of planned behaviour, which holds that behavioural intention is controlled by attitude, subjective norm and perceived behavioural control (Ajzen, 1991).

In 2019, Reasoned action in the service of goal pursuit, an effort by Ajzen and Kruglanski, sought to broaden the TPB's scope of application and increase its explanatory and predictive power. Typically, the researcher selects the behaviour to be examined, primarily for practical reasons. Rarely, if ever, is an attempt made to investigate the degree to which the behaviour under consideration is actually of concern to the participants in research. Consequently, in an effort to address highway congestion or a parking shortage, a researcher may attempt to determine what motivates people to use public transportation, regardless of whether the participants, left to their own devices, would have considered traffic congestion and the parking shortage, or whether they would have considered using public transportation had they not been asked about this behaviour (Ajzen & Kruglanski, 2019). In other words, investigators who rely on the TPB and comparable models typically pay insufficient attention to the reasons why people consider participating in a certain action in their everyday lives. Goal systems theory is combined with the TPB in the study of Ajzen and Kruglanski to go beyond the TPB and highlight the intimate relationship between the desire to achieve a certain goal and behaviour performed in pursuit of that goal. The combination of these two theories, which they propose calling the theory of reasoned goal pursuit (TRGP), is intended to broaden the variety of behaviours that can be addressed.

Compared with TPB, TRGP focuses on the role of goals in shaping behaviour and decision making. It assumes that individuals are motivated by goals and make decisions

based on their personal reasons, which are linked to their goals. The TRGP also considers the importance of personal resources (e.g., skills, knowledge) in the pursuit of goals. However, the TPB focuses on the role of attitudes, subjective norms, and perceived behavioural control in shaping behaviour and decision making. It assumes that individuals are goal-oriented and make decisions based on their intentions, which are influenced by their attitudes, subjective norms, and perceived behavioural control. TPB is more suitable for examining the travel intention in terms of the purpose of this study. Consistent with prior research, the present study employed the Theory of Planned Behaviour as a theoretical framework.

#### **2.2.5 Application of Theory of Planned Behaviour to tourism research**

Given the extensive utilization of the Theory of Planned Behaviour (TPB), there exist multiple prospects to broaden the model through the inclusion of supplementary variables in exploring the conduct of customers, particularly tourists, across diverse settings. Conceptually, it is possible to refine TPB by adapting its paths to align with the context at hand, as argued by Han and Kim (2010). By integrating pertinent antecedent variables, TPB may offer an enhanced capacity to predict both intention and behaviour (Han & Kim, 2010). Notably, the application of TPB has proven successful in a variety of tourism and hospitality domains. An overview of the aforementioned expanded TPB models is presented in Table 2.2

**Table 2.2: The previous research on the application of TPB**

| <b>Authors</b>       | <b>Model Framework</b> | <b>Incorporated variable</b> | <b>Findings</b>   |
|----------------------|------------------------|------------------------------|---|
| Lam and Hsu (2004)   | TPB                    | Past Behaviour               | Past behaviour is a robust predictor of tourists' intention to select a destination. The study found that behavioural intention was directly influenced by past behaviour, subjective norm, and perceived behavioural control but not attitude. |
| Lam and Hsu (2006)   | TPB                    | Past Behaviour               | Past behaviour had a direct influence on future behaviour (choosing among travel destinations).   |
| Chen and Peng (2012) | TPB                    | Moderating Variables         | Attitudes and intentions are directly impacted by subjective norms. The study emphasized the significance of moderator  |

|                        |     |                                       |  |
|------------------------|-----|---------------------------------------|--|
|                        |     |                                       | variables such as country image, food image, destination image, and travel constraints.  |
| Chew and Jahari (2014) | TPB | Perceived Risks and Destination Image | The cognitive and affective destination images were influenced by perceived socio-psychological and financial risks, while perceived physical risk did not have a significant impact on destination image. Nevertheless, perceived physical risk had a direct effect on revisit intention.   |
| Hsieh et al. (2016)    | TPB | Perceived Risk & Visit Experience     | Attitudes are a more potent predictor of overall behavioural intentions than subjective norms and perceived behavioural control. Furthermore, the study identified perceived risk as a precursor to behavioural intentions, and past visit experience as a moderator of the connections between TPB dimensions and perceived risk on behavioural intentions. |

|                       |     |   |  |
|-----------------------|-----|---|--|
| Park et al. (2017)    | TPB | Destination Image                             | Destination image has a direct influence on travel intention as well as the three TPB constructs (attitude, subjective norms, and perceived behaviour control).  |
| Jordan et al. (2017)  | TPB | Time Horizons and Positive/Negative Attitudes | The study demonstrated the impact of time horizons and positive/negative attitudes on travel behaviour and found that an individual's intention to visit a destination is not necessarily diminished by a negative attitude toward that destination. |
| Chen and Peng (2018)  | TPB | Food Image                                    | This study incorporated a "food image" variable into a TPB model to investigate the dining intentions of travellers at luxury restaurants.   |
| Japutra et al. (2019) | TPB | Tourist Thoughts                              | Tourists' mindsets predict attitudes, subjective norms, and perceived behavioural control.   |

### **2.3 Linking theory of risk perception with theory of planned behaviour**

The objective of this thesis is to formulate a conceptual framework that elucidates the impact of risk perception on the travel intention of Chinese tourists within the context of domestic tourism. According to previous studies (see Table 2.3), by combining the concepts of risk perception and the Theory of Planned Behaviour can provide a more comprehensive understanding of travel decision-making and the factors that influence it. This research integrates risk perceptions as antecedents of the theory of planned behaviour, which is based on Ajzen's (1991) framework. Travel intention, defined as the level of effort a traveller is willing to exert to undertake a trip (Quintal et al., 2010), is determined by three behavioural components: attitude towards the travel, subjective norm, and perceived behavioural control (Ajzen, 1991).

The influence of perceived risk and uncertainty on the attitude toward the behaviour, subjective norms, and perceived behaviour control is essential to determine travel intention. Prior studies have established that perceived risk and uncertainty can modify the attitude toward travel in travel intention models (Quintal et al., 2010; Hsieh et al., 2016). It has been demonstrated that health risks (such as SARS, H1N1, and Ebola) have an effect on the tourism industry and the decision-making behaviour of tourists (Neuburger & Egger, 2020). In the context of the unprecedented COVID-19 pandemic, understanding the link between risk perception and travel behaviour is critical. Risk perception has been incorporated into the Theory of Planned Behaviour as a successful model for testing tourism-related behaviour, based on previous research (Quintal et al., 2010; Sparks & Pan, 2009). For example, the Theory of Planned Behaviour was utilised to forecast tourists' health-related behaviour and satisfaction with their travels to Tibet (Huang et al., 2020). Furthermore, Quintal et al. (2010) have observed that risk

perception directly affects behavioural intention. Recent studies suggest that the COVID-19 pandemic has led potential travellers to modify their intentions (Wang et al., 2020).

According to Bae and Chang (2021), affective risk perception plays a significant role as an antecedent of attitude, while cognitive risk perception positively influences subjective norms. Their study primarily focuses on the bidimensional model of risk perception, which includes both affective and cognitive dimensions. In contrast, the preceding discussion has compared experiential risk perception to deliberative risk perception (Ferrer et al., 2016). Incorporating experiential risk perception into the model is crucial. Ouyang et al. (2020) study has provided empirical evidence indicating that individuals' risk perception (i.e., affective, deliberative, and experiential) influences their behaviour regarding hotel scam risks. Moreover, their investigation has highlighted that various adverse circumstances may trigger distinct emotions, perceptions, and behavioural reactions, which could potentially pose health risks. Therefore, it is suggested that the relationship between risk perception (deliberative, affective, and experiential) and the factors of the Theory of Planned Behaviour be re-examined. Based on this premise, the current study employs a theoretical framework of the Theory of Planned Behaviour model and TRIRISK to explore the impact of COVID-19 risk perception on domestic tourism intention.

In conclusion, the Theory of Planned Behaviour (TPB) has lost some of its predictive power to explain travel intention during the COVID-19 pandemic because the pandemic has introduced new risk factors that were not considered in the original TPB model. These new factors, such as the perceived risk of contracting the virus, may have a stronger influence on travel behaviour than the traditional TPB variables such as attitude, subjective norm and perceived behavioural control. To overcome this limitation, some researchers have combined the TPB with the theory of risk perception, which takes into



account people's perceived likelihood based on deliberative, experiential and affective risk perception. By incorporating multidimensional risk perception into the TPB, researchers can gain a more complete understanding of why people may or may not engage in certain behaviours during the pandemic.

**Table 2.3: The previous research on combining risk perception and the TPB**

| <b>Study</b>             | <b>Purpose</b>  | <b>Results</b>  |
|--------------------------|---|---|
| Cetinsoz, and Ege (2013) | To determine risk level and effect on revisit intention   | Several risk dimensions affecting revisit intention were identified   |
| Bae and Chang (2021)     | To examine effect of COVID-19 risk perception on untact tourism   | Affective risk perception has negative influence on behavioural intention, cognitive risk perception positively influences subjective norms, gender and marital status moderate relationship among constructs   |
| Munandar et al. (2021)   | To determine impact of risk perception on travel intention to Sabang City during Covid-19 pandemic  | Perception of risk has negative effect on antecedents of intention, Attitudes and Behavioural Control have positive effect, Subjective Norms have no effect   |
| Chaulagain et al. (2020) | To develop and test theoretical model predicting individuals' intention to engage in medical tourism  | Perceived benefits positively associated with attitude, perceived barriers negatively associated with attitude and behavioural control, attitude, behavioural control, and subjective norm positively influence intention, perceived severity moderates' relationship between variables |
| Lee et al. (2012)        | To introduce non-pharmaceutical intervention (NPI) concept and test its impact on behavioural intention of potential international tourists | Desire, perceived behavioural control, frequency of past behaviour, and NPI predict tourists' intention, perception of 2009 H1N1 had no effect on desire and intention  |

|                       |  |  |
|-----------------------|--|--|
| Quintal et al. (2010) | To explore the impact of risk and uncertainty on travel decision-making  | The extended model explained 21-44% of the variance in travel intentions. Subjective norms and perceived behavioural control had a significant impact on travel intentions in all country samples. Attitudes towards visiting Australia were only significant in Japan. Perceived risk influenced attitudes in South Korea and Japan, and perceived uncertainty influenced attitudes in South Korea and China. |
| Shin et al. (2022)    | To develop a framework to explain the impact of travel promoting, restricting, and attitudinal factors on travel decision during and after the COVID-19 pandemic | The study provides important insights into how to develop successful COVID-19 recovery strategies in the tourism industry. The results show the specific factors that determine travel decisions and travel intentions during and after the pandemic.  |
| Sohn et al. (2016)    | To analyse the relationship between perceived risk, evaluation, satisfaction, and behavioural intention of festival attendees                                    | Risk may lead to negative perception but has no effect on satisfaction or subsequent behavioural intention. Direct causality exists between perception, satisfaction, and future intention. Demand for diversity in programs determines perceptions of risk and allows for visitor segmentation. The findings contribute to successful planning and marketing strategies in festival studies.                  |

## 2.4 Research gap

After reviewing the literature of risk perception and travel intention, this research identified the below significant theoretical gaps. The researcher identified an apparent gap in the prior research concerning travel risk perception. The previous research has addressed several aspects of travel risk perception: environmental disasters, tourism risk perception, and terrorism-related tourism risk perception (Premkumar & Bhattacharjee, 2008; Sonmez & Graefe, 1998). However, according to Neuburger and Egger (2020),

health-related tourism risk perception has less attention. The tourism research related to pandemics or epidemics is still limited. The previous pandemics, such as SARS, H1N1, or Ebola, differ significantly from the COVID-19 pandemic in terms of their impact on tourism (Zhang et al., 2005; Zhu & Deng, 2020). During those previous outbreaks, although there were disruptions and concerns, the restrictions on travel and tourism were not as extensive or prolonged as during the COVID-19 pandemic.

The COVID-19 pandemic resulted in unprecedented and widespread shutdowns of the tourism sector, including domestic and international travel restrictions, border closures, and lockdown measures. This unique situation severely limited tourism activities and rendered previous research on tourist behavior during other pandemics obsolete when it comes to understanding the specific context and challenges posed by COVID-19. Therefore, the argument can be made that new research is essential to examine and understand tourist behavior during the COVID-19 pandemic. The dynamics, restrictions, and risk perceptions associated with this particular pandemic are distinct and require a fresh approach. Previous studies conducted during different pandemics may provide some insights into general patterns of tourist behavior during health crises, but they may not fully capture the complexities and nuances of the COVID-19 context.

Given the unprecedented and prolonged nature of the COVID-19 pandemic and its profound impact on the tourism industry, there is a clear need for new research that specifically focuses on understanding tourist behavior, risk perception, and decision-making during this unique period. This will help researchers and practitioners develop effective strategies and interventions to address the challenges and uncertainties faced by the tourism sector in the post-COVID era. During the COVID-19 pandemic, the specific period when domestic tourism in China was open without any restrictions varied over time. The pandemic's impact and the associated travel restrictions were dynamic and subject to change based on the evolving situation and government policies. China

implemented various measures to control the spread of COVID-19, including travel restrictions, lockdowns, and quarantine requirements. These measures were adjusted according to the severity of the pandemic and the specific regions affected. As the situation improved or worsened, travel restrictions were periodically eased or tightened accordingly. Therefore, it is challenging to pinpoint a specific period during the COVID-19 pandemic when domestic tourism in China was completely open without any restrictions. The travel landscape and regulations were subject to frequent changes based on the government's assessment of the pandemic situation and the corresponding control measures implemented. To accurately determine the specific period when domestic tourism was open in China during the COVID-19 pandemic, it would be necessary to refer to official government announcements, travel advisories, and regulations issued by the relevant authorities in China. These sources would provide the most up-to-date and accurate information on the periods when domestic tourism restrictions were lifted or modified.

Empirical studies that adopted risk perception to comprehend Chinese tourists' travel intention toward domestic tourism during the COVID-19 pandemic seem hard to find. The researcher needs to pay more attention to investigating the relationship between the COVID-9 pandemic and tourists' behaviour in China. The research literature on risk perception has often been discussed and proposed as a critical predictor in people's behavioural intention (Ouyang et al., 2020). Researchers applied the unidimensional or bidimensional risk perception models to measure the risk perception in tourism (Bae & Chang, 2020; Neuburger & Egger, 2020; Zhu & Deng, 2020) studies have measured tourism risk perception using a more comprehensive risk perception model. There is a need to use a multidimensional risk perception model to enhance predictive validity compared with unidimensional and bidimensional models.

Travel decision-making, which is a highly intricate process, is affected by psychological (attitudes), social (subjective norm) factors, and perceived behavioural control (Lam & Hsu, 2006). The research literature on the Theory of Planned Behaviour suggests that intention is the result of attitudes toward behaviour, subjective norm, and perceived behavioural control (Ajzen & Driver, 1992; Bae & Chang, 2020; Chaulagain et al., 2020). Therefore, Theory of Planned Behaviour is popular in the tourism sector to predict tourists' intentions and behaviour. Moreover, it is of value to investigate how tourists' risk perception interacts with other factors leading to their travel intention. The mediating role of other factors in the Theory of Planned Behaviour model in the relationship between risk perception and travel intention is necessary to be uncovered. However, there are fewer studies on this point views in COVID-19 risk perception. As indicated above, it is vital to understand the role of risk perception in shaping tourists' decision-making process in travel intention. Empirical studies typically find only main effects and later formulations (Ajzen, 1991; Bamberg et al., 2003). Most empirical applications treat perceived behavioural control as a direct determinant of intention, with a status equivalent to attitude and subjectivity normative status. However, in the original formulation of the Theory of Planned Behaviour (Ajzen, 1985), perceived behavioural control was assigned the role of a moderating variable (Barbera & Ajzen, 2021). It's possible that perceived control over behaviour serves as a precondition for the ability of attitude and subjective norm to predict intention. For example, in latest study of Barbera and Ajzen (2021), findings show that substantial perceived behavioural control leads to an increase in the strength of the relationship between attitudes and intentions, while a decrease in the strength of the relationship between subjective norms and intentions (Barbera & Ajzen, 2021). Several studies have tested the moderator effects of perceived behavioural control on the Theory of Planned Behaviour (Barua, 2013). The literature

related to the moderating role of perceived behavioural control for tourists' behaviour is still lacking.

In summary, this study has identified theoretical gaps as below.

1. The prior research on travel risk perception has neglected health-related tourism risk perception and there is limited research on the impact of pandemics, particularly the COVID-19 pandemic, on tourists' behavior in China.
2. A multidimensional risk perception model is needed to better understand the relationship between COVID-19 pandemic risk perception and tourists' behavior.
3. The theory of planned behavior is widely used in the tourism sector to predict tourists' intention and behavior, but the mediating role and moderating role of other factors, needs to be explored in the context of COVID-19 risk perception.

To address existing research gaps, the purpose of this study is to provide a comprehensive understanding of the role of risk perception in influencing the decision-making process of tourists during the COVID-19 pandemic. Specifically, this research focuses on the relationship between risk perception of the COVID-19 pandemic and the travel intentions of tourists towards domestic tourism in China. The study employs a multidimensional risk perception model and applies the Theory of Planned Behaviour framework to analyze the impact of risk perception on the decision-making process of tourists. Moreover, the study also investigates the mediating role of attitude, subjective norm, and perceived behavioural control, as well as the moderating role of perceived behavioural control in the relationship between risk perception and travel intention. Overall, the objective of this thesis is to make a significant contribution to the existing literature.

## **2.5 Hypotheses development**

### **2.5.1 The relationship of risk perception and travel intention**

It has been suggested that risk perception plays a crucial impact in the travel decisions of individuals (Huang et al., 2021). Zhu and Deng (2020) investigated the impact of risk knowledge on rural tourism intention and examined the mediating roles of risk perception and attitude. To analyse the impact of COVID-19 on tourist behaviour, their study integrated the Theory of Planned Behaviour with risk perception. However, their conceptions of risk only presented unidimensional or bidimensional models. Ferrer et al. (2016) have proposed a multidimensional risk perception model that comprises three dimensions, namely deliberative, affective, and experiential, to provide a comprehensive theoretical framework for comprehending risk perceptions. This model has been shown to enhance predictive validity by introducing novel measures. Affective risk perception, which is closely linked to emotions, is a shared component in these models. Ferrer et al. (2016) posited that individuals' risk perceptions are not exclusively determined by rationality, but also affected by emotional responses. In comparison, rational risk perception, referred to as "deliberative" in multidimensional models and "cognitive" in bi-dimensional models, is characterized by systematic and logic-based evaluations that are closely associated with probability calculation and utility maximization. Furthermore, the Tripartite Risk Perception (TRIRISK) model proposed by Ferrer et al. (2016) incorporates a new dimension of risk perception, referred to as experiential risk perception. This type of risk perception is characterized by a rapid, heuristic response to uncertain risks, based on gut feelings, mental images, and narratives (Ferrer et al., 2016). The impact of risk perception on behaviour and decision-making has been examined in light of the research conducted by Ferrer et al. (2016). This present study aims to employ the Tripartite Risk Perception (TRIRISK) model, which encompasses the dimensions of deliberative, affective, and experiential risk perception, to explicate the association

between travel intention, domestic tourism, and the risk perception of COVID-19. The TRIRISK model is considered as one of the theoretical frameworks for comprehending the health-related actions of tourists during the COVID-19 pandemic. Three hypotheses are proposed regarding the relationship between risk perception as independent variables, travel intention as the dependent variable, and its three antecedents as mediating variables.

Thus, it was hypothesised as follow:

Hypothesis 1 (H1): Deliberative risk perception exerts a significant influence on attitude, subjective norm, perceived behavioural control and travel intention.

Hypothesis 2 (H2): Affective risk perception exerts a significant influence on attitude, subjective norm, perceived behavioural control and travel intention.

Hypothesis 3 (H3): Experiential risk perception exerts a significant influence on attitude, subjective norm, perceived behavioural control and travel intention.

### **2.5.2 The relationship of attitude toward domestic tourism, subjective norm, perceived behavioural control, and travel intention**

According to Ajzen (1991), the Theory of Planned Behaviour posits that human behaviours are determined by behavioural intentions, which are influenced by an individual's attitude towards the behaviour, subjective norms, and perceived behavioural control. The Theory of Planned Behaviour has been widely scrutinized and affirmed in earlier investigations, with research conducted by Chen and Tung (2014) and Park et al. (2017) providing corroboration for the linkage between behavioural intentions and the three constructs of the theory. Owing to its increased adaptability and flexibility relative to the Theory of Reasoned Action, the Theory of Planned Behaviour has been extensively employed to support various research endeavours regarding tourism and tourist behaviour (Ajzen & Driver, 1992; Han et al., 2010; Han & Kim, 2010; Lam & Hsu, 2006). According to Lam and Hsu (2004), the Theory of Planned Behaviour was employed to investigate the motivations of Chinese tourists visiting Hong Kong. The study found that



attitude and perceived behavioural control had a direct impact on the travel intentions of the survey participants. Similarly, Cheng et al. (2006) utilized the Theory of Planned Behaviour to examine the intentions of Chinese consumers to engage in negative word-of-mouth communication about high-class Chinese restaurants. The study revealed that attitude, subjective norm, and perceived behavioural control were influential factors in determining the intention to spread negative word-of-mouth communications.

Sparks and Pan (2009) used the Theory of Planned Behaviour model to test the attitude directly, subjective normative influences, and perceived control to predict the Chinese outbound tourists' behavioural intention of visiting Australia. According to their results, the subjective norm based on social influences and perceived behaviour control had significant associations with behavioural intention. However, attitude toward taking a holiday at the destination was not significant in predicting intentions to take a holiday in Australia in their study. Utilizing the theory of planned behaviour, Jalilvand and Samiei (2012) explored the influence of electronic word-of-mouth on the decision-making process of selecting a tourism destination. Their findings validated the predictive constructs as determinants of behavioural intention in the theory of planned behaviour. Moreover, they confirmed that attitude toward visiting a destination, subjective norm and perceived behavioural control significantly positively impact the intention to travel to a specific destination. In a recent study, Boguszewicz-Kreft et al. (2020) utilized the Theory of Planned Behaviour to elucidate the behaviour of individuals in medical tourism by determining their intentions. They empirically confirmed the relationship between the intention to participate/consider participation in medical tourism and the three Theory of Planned Behaviour factors (attitudes towards participation in medical tourism, subjective norms, and perceived behavioural control). In the study of Bae and Chang, they measured the effect of attitude toward untact tourism, subjective norm, and perceived behavioural control on the Korean tourists' behavioural intention to untact tourism by using the theory

of planned behavioural model (Bae & Chang, 2020). Their results confirmed the significant positive associations between them.

Regarding understanding Chinese tourists' intentions for domestic travel during the pandemic, we must understand that "the relative importance of attitudes, subjective norms and perceived behaviour control in intention prediction is expected to vary by behaviour and situation"(Ajzen, 1991). According to the theory of planned behaviour, behavioural intention is deemed to be significant when an individual holds a positive attitude towards the behaviour in question, when they are influenced by individuals who are important to them to engage in the behaviour, and when they perceive themselves as having the capability to perform the behaviours (Callow et al., 2020). Based on previous research, the following hypothesis statements have been formulated to test the relationships of the theory of planned behaviours (TPB):

Hypothesis 4 (H4): Attitude, subjective norm, and perceived behavioural control exert a significant influence on travel intention.

### **2.5.3 The mediating effect of attitude toward domestic tourism and subjective norm**

The mediation effect refers to the effect of an independent variable on a dependent variable transmitted through an intervening variable. The Theory of Planned Behaviour (TPB) typically posits that the association between beliefs and behavioural intention is mediated by three constructs: attitude, subjective norm, and perceived behavioural control (Ajzen, 1991). However, during the COVID-19 pandemic, research has shown that risk perception plays a dominant role in determining tourists' behaviours (Bae & Chang, 2021; Neuburger & Egger, 2020). This study suggests substituting beliefs with tourism risk perception to explore how the interplay between tourism risk perception and behavioural intention is mediated by attitude, subjective norm, and perceived behavioural control. (Ajzen, 1991).

Utilizing a more comprehensive multidimensional risk perception model, this study proposes that attitude and subjective norms, as well as perceived behavioural control, serve as mediators in the association between risk perception and behavioural intention towards domestic tourism. Prior research conducted by Soliman (2019) has established that attitude and subjective norms play a mediating role in the link between variables. Likewise, Maksan et al., (2019) have demonstrated that attitude acts as a mediator in the relationship between consumer ethnocentrism and intention to purchase domestic wine. Additionally, Bae and Chang (2021) have highlighted that attitude and subjective norms serve as mediators of the association between risk perception and behavioural intention towards contactless tourism. Additionally, a study by Choi et al., (2013) proved that attitude plays a mediating role between risk perception and behavioural intention. In light of the multidimensional nature of risk perception, this study suggests reassessing the role of attitude and subjective norms as mediators in the link between risk perception and travel intention towards domestic tourism. There are three hypotheses on the mediating effect of the its three antecedent of travel intention (mediating variables) on the relationship between risk perception (independent variables) and travel intention (dependent variable).

Hypothesis 5 (H5): Attitude is a significant mediator between risk perceptions (i.e., deliberative/affective/experiential) and travel intention.

Hypothesis 6 (H6): Subjective norm is a significant mediator between risk perceptions (i.e., deliberative/affective/experiential) and travel intention.

Hypothesis 7 (H7): Perceived behavioural control is a significant mediator between risk perceptions (i.e., deliberative/affective/experiential) and travel intention.

#### **2.5.4 The moderating effect of perceived behaviour control**

The term moderator variable refers to a variable that can strengthen, reduce, negate, or otherwise alter the association between independent and dependent variables

(MacKinnon, 2011). Ajzen (1985) introduced perceived behavioural control as a critical component of the theory of planned behaviour. The concept of perceived behavioural control accommodates the Theory of Planned Behaviour to understand the nonvolitional elements. A high level of perceived behavioural control should intensify an individual's intention to perform the behaviour, and the low level of perceived behavioural control should be less motivated to perform the behaviour. Perceived behavioural control helps assess an individual's actual control over a given situation. It may indirectly affect intent and change behaviour. Therefore, it is considered an additional predictor of behaviour (Ajzen, 2002). In 1991, Ajzen conducted a study that examined the relationship between perceived behavioural control and intention, as well as its impact on positive attitudes and subjective norms. He recognized that perceived behavioural control was originally considered as a moderating variable in the original formulation of the TPB (Ajzen, 1985). Ajzen proposed that the relationship between intention and behaviour is influenced by the level of perceived behavioural control. Specifically, a lack of control over executing behaviour leads to a weaker relationship between intention and behaviour (Ajzen, 1991).

Moreover, Eagly and Chaiken (1993) identified several potential interactions of the Theory of Planned Behaviour components that require further scrutiny. They point out that people who positively assess behaviour tend to be more or less inclined to enact behaviour. They have solid or weak perceptions of behavioural control, respectively, suggesting that perceived behavioural control moderates the effect of attitude on behaviour. In 1999, Cheung et al. showed that perceived behavioural control moderates controlling beliefs, thereby promoting or hindering behavioural performance. The study by Umeh and Patel (2004) confirmed the moderating effects of perceived behavioural control on subjective norm. They posited that subjective norms may encourage the performance of behaviour, provided individuals have control over the situation. However, if the perception of control is low, subjective norms may have little or no effect on

behaviour. According to Yzer et al. (2007), perceived control over behavioural performance may function as a prerequisite for attitude and subjective norm to predict intention. Additionally, Castanier et al. (2013) found that when perceived capacity was high, positive attitudes (towards following a car too closely and disobeying road signs) or peers' approval (towards drinking and driving) exerted a greater influence on the formation of intentions for the target behaviour. Barua (2013) also pointed out there is a possibility that perceived behavioural control moderate attitudes and normative effects of intention. Bin-Nashwan et al. (2021) pointed out that attitude and subjective norm were more strongly relation with intention to comply with Zakah (Islamic tax) in Islam among people in business showing higher levels of perceived behaviour control. In 2021, Barbera and Ajzen found empirical support for the postulated moderating effects of perceived behavioural control. In addition, Ajzen argues that with increased perceived behavioural control, the strength of the association between attitudes and intentions increases, while the strength of the association between subjective norms and intentions decreases (Barbera & Ajzen, 2021).

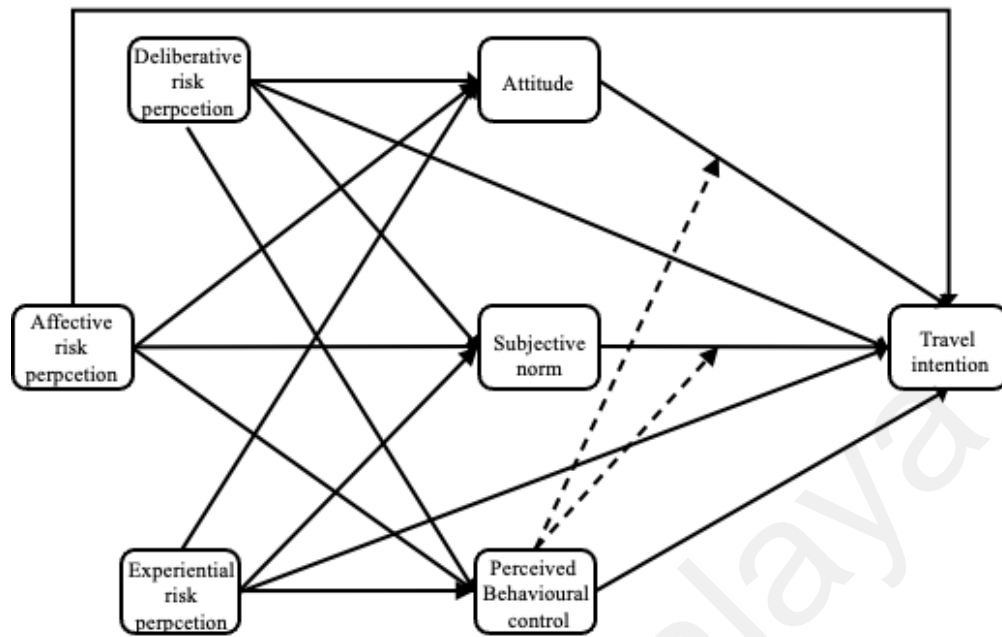
However, since empirical studies tend to find only main effects, later formulations and most empirical applications of this model treat perceived behavioural control as a direct determinant of intention, its status related to attitude and subjectivity specification (Barbera & Ajzen, 2020). The empirical support for perceived behavioural control moderate attitudes and subjective norms and is insufficient to identify the interaction of perceived behavioural control thoroughly (Barbera & Ajzen, 2021). The failure to find interaction effects has usually been attributed to the methodological difficulties in detecting interactions (Ajzen, 2002; Barbera & Ajzen, 2020; Yzer & Putte, 2014). Some researchers argued that the hypothesis lacks empirical support for the moderation effects of perceived behavioural control (Yzer, 2012).

Ajzen (1991) explained the relationship between perceived behavioural control and intention in relation to positive attitudes and subjective norms. However, Eagly and Chaiken (1993) argued that PBC produces positive intention when an individual holds a positive attitude, but not when an individual holds a negative attitude. For example, when individuals are in a library, most people perceive PBC as being under control, but this does not mean that people hold positive attitudes about not shouting. Their investigation demonstrates that individuals will not perform the behaviour if they are confident in their ability to do so. Therefore, there is a possibility that PBC moderates the effects of attitudes and normative beliefs on intention. The study by Umeh and Patel (2004) found that the moderation effects of subjective norms are dependent on the level of PBC's intensity in controlling the performance of the behaviour. Additionally, Cheung et al. (1999) found that PBC moderates control beliefs, promoting or hindering the performance of the behaviour.

Therefore, this research attempted to test the moderation model for tourists' behavioural intention to contribute the empirical findings. Based on the theoretical considerations and the results of previous research outlined above, the researcher formulated the following hypotheses.

Hypothesis 8 (H8): High perceived behavioural control would strengthen the relationship between attitude and travel intention and the relationship between subjective norm and travel intention.

## 2.6 The conceptual model



**Figure 2.1: The conceptual model**

The current study presents a conceptual model for predicting travel intention towards domestic tourism during the COVID-19 pandemic, integrating the multidimensional aspects of risk perception into the Theory of Planned Behaviour (Figure 2.1). The study posits that risk perception, encompassing deliberative, affective, and experiential dimensions, has a significant influence on travel intention, which is the dependent variable in the conceptual model. The findings suggest that Chinese tourists' travel intention towards domestic tourism is significantly impacted by their perceived risk perception of COVID-19.

Deliberative risk perception involves the cognitive evaluation of risks and the ability to make informed decisions based on accurate information. In the context of the pandemic, this means that individuals who have a better understanding of the risks associated with traveling can make more informed choices about their domestic tourism activities. By being aware of the potential risks, they can take appropriate precautions and choose destinations or activities that align with their risk tolerance. This

understanding promotes responsible travel behavior and can contribute to the overall safety and well-being of individuals engaging in domestic tourism. By promoting deliberative risk perception, individuals were able to make informed decisions about domestic tourism, choose destinations with lower infection rates, and adjust their travel plans based on the evolving situation.

Affective risk perception refers to the emotional responses and feelings of vulnerability individuals experience when assessing risks. During the COVID-19 pandemic, people have become more sensitive to health risks and concerns. Affective risk perception can positively impact domestic tourism by promoting cautious behavior and adherence to safety measures. When individuals perceive higher risks and experience emotions such as fear or anxiety, they are more likely to prioritize safety and follow guidelines such as wearing masks, practicing social distancing, and maintaining personal hygiene. This heightened emotional response can contribute to a safer travel environment and encourage others to engage in domestic tourism with a sense of security. During the pandemic, many Chinese travelers experienced heightened emotional concerns and feelings of vulnerability. To address this, hotels, airlines, and tourist attractions implemented stringent health and safety measures. For instance, hotels and resorts implemented rigorous cleaning and sanitization protocols, provided personal protective equipment (PPE) to guests, and enforced social distancing measures in common areas. These measures aimed to alleviate travelers' fears and enhance their affective risk perception by creating a sense of safety and security during their domestic tourism experiences.

Experiential risk perception is influenced by an individual's direct experiences with a particular risk. In the case of domestic tourism during the pandemic, individuals who have positive experiences and feel safe while traveling within China are likely to have a more favorable perception of the overall risk involved. If they perceive the risks as



manageable and have enjoyable experiences, they are more likely to continue engaging in domestic tourism activities and recommend them to others. This positive experiential risk perception can contribute to the recovery and growth of the domestic tourism industry in China by instilling confidence in travelers and reducing hesitations related to safety concerns. Overall, the combination of deliberative risk perception, affective risk perception, and experiential risk perception can positively impact domestic tourism in China during the COVID-19 pandemic by fostering responsible behavior, encouraging adherence to safety measures, and creating positive travel experiences. These factors contribute to the overall recovery and resilience of the domestic tourism sector while ensuring the safety and well-being of travelers.

Moreover, the model examines the effects of individuals' attitudes towards domestic tourism and subjective norms, which are respectively shaped by their deliberative, affective, and experiential risk perceptions. Furthermore, this study demonstrates that attitudes, subjective norms, and perceived behavioural control impact travel intention based on the above findings. This implies that the individuals' evaluative perceptions of their attitude towards domestic tourism, the social recognition they receive from important others, and their perceived behavioural control in participating in domestic tourism significantly influence their behavioural intention during the COVID-19 pandemic. The current research further posits that the mediational effects of attitude and subjective norms have a bearing on the relationship between risk perception and behavioural intention. Lastly, this research suggests that perceived behavioural control has the moderating effects of attitude toward domestic tourism and subjective norm effects on travel intention.

The TPB integrated with the bi-dimensional risk perception model has emerged as a prevalent framework for comprehending the influence of perceived risk on tourists' behaviour. Despite its popularity, the model has a significant limitation in that it only

considers two dimensions of risk perception: affective and cognitive. This narrow focus fails to capture the full complexity of risk perception and its impact on behaviour. To address this shortcoming, researchers have proposed a multidimensional risk perception model with the TPB. This model expands upon the original framework by incorporating a third dimension of risk perception: experiential. By considering all three dimensions, the multidimensional model provides a more comprehensive understanding of risk perception and its impact on behaviour.

Risk perception was originally viewed as primarily a deliberative concept (also called cognitive), usually measured through assessments of perceived likelihood and severity. However, as the role of affect was recognized as being critical in decision making and risk assessment, the definition of risk perception was expanded to include an affective component, encompassing emotional reactions such as worry, anxiety, and fear. In addition to these two components, a third category, known as experiential risk perception, has also been proposed. This type of risk perception refers to intuitive, heuristic, and "gut-level" reactions to a threat, which are thought to result from previous experiences and learned associations. While the cognitive basis of experiential risk perception may not be consciously accessible, individuals may still be aware of their intuition regarding their level of risk from a threat. The interplay between these three forms of risk perception - deliberative, affective, and experiential - has been shown to have an impact on intentions and behaviour. By including all three dimensions, the multidimensional risk perception model provides a more nuanced understanding of the complexity of risk perception. This is particularly important for the study of tourism behaviour, as tourists' risk perceptions are influenced by a wide range of factors, including personal experiences, cultural background, media exposure, and more. In conclusion, the multidimensional risk perception model with the TPB offers a more comprehensive understanding of risk perception and its impact on behaviour than the original bi-dimensional model. By

including all three dimensions of risk perception, this model provides valuable insights for researchers and practitioners in the field of tourism.

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**Table 2.4: Summary of research question, research objective and hypothesis**

| Research Question | Research Objective | Hypothesis  |
|-------------------|--------------------|---|
| RQ1               | RO1                | H1 <sub>a</sub> Deliberative risk perception exerts a significant positive influence on attitude.                     |
|                   |                    | H1 <sub>b</sub> Deliberative risk perception exerts a significant positive influence on subjective norm.              |
|                   |                    | H1 <sub>c</sub> Deliberative risk perception does not exert a significant influence on perceived behavioural control. |
|                   |                    | H1 <sub>d</sub> Deliberative risk perception exerts a significant positive influence on travel intention.             |
|                   |                    | H2 <sub>a</sub> Affective risk perception exerts a significant positive influence on attitude.                        |
|                   |                    | H2 <sub>b</sub> Affective risk perception exerts a significant positive influence on subjective norm.                 |
|                   |                    | H2 <sub>c</sub> Affective risk perception does not exert a significant influence on perceived behavioural control.    |
|                   |                    | H2 <sub>d</sub> Affective risk perception exerts a significant positive influence on travel intention.                |
|                   |                    | H3 <sub>a</sub> Experiential risk perception exerts a significant positive influence on attitude.                     |
|                   |                    | H3 <sub>b</sub> Experiential risk perception exerts a significant positive influence on subjective norm.              |

|            |            |   |
|------------|------------|---|
|            |            | H3 <sub>c</sub> Experiential risk perception does not exert a significant influence on perceived behavioural control.                     |
|            |            | H3 <sub>a</sub> Experiential risk perception exerts a significant positive influence on travel intention.                                 |
| <b>RQ2</b> | <b>RO2</b> | H4 <sub>a</sub> Attitude exerts a significant positive influence on travel intention.   |
|            |            | H4 <sub>b</sub> Subjective norm exerts a significant positive influence on travel intention.  |
|            |            | H4 <sub>c</sub> Perceived behavioural control exerts a significant positive influence on travel intention.                                |
| <b>RQ3</b> | <b>RO3</b> | H5 <sub>b</sub> Attitude partially mediates the relationship between affective risk perception and travel intention.                      |
|            |            | H5 <sub>c</sub> Attitude partially mediates the relationship between experiential risk perception and travel intention                    |
|            |            | H6 <sub>a</sub> Subjective norm partially mediates the relationship between deliberative risk perception and travel intention             |
|            |            | H6 <sub>b</sub> Subjective norm partially mediates the relationship between affective risk perception and travel intention                |
|            |            | H6 <sub>c</sub> Subjective norm partially mediates the relationship between experiential risk perception and travel intention             |
|            |            | H7 <sub>a</sub> Perceived behavioural control does not mediate the relationship between deliberative risk perception and travel intention |
|            |            | H7 <sub>b</sub> Perceived behavioural control does not mediate the relationship between affective risk perception and travel intention    |

|            |            |   |
|------------|------------|---|
|            |            | H7 <sub>c</sub> Perceived behavioural control partially mediates the relationship between experiential risk perception and travel intention |
| <b>RQ4</b> | <b>RO4</b> | H8a High perceived behavioural control strengthens the positive relationship between attitude and travel intention.                         |
|            |            | H8b High perceived behavioural control strengthens the positive relationship between subjective norm and travel intention.                  |

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## 2.7 Chapter Summary

This chapter presents a comprehensive literature review appropriate to this research's theoretical framework. The first section reviewed risk perception theory, including tourism risk perception. It highlighted the importance of risk perception theory in tourism and presented a comprehensive analysis of risk perception in tourist' behaviour. Moreover, this research reviewed the development of unidimensional risk perception, bidimensional risk perception, and multidimensional risk perception. It revealed that the TRIRISK model as a multidimensional risk perception model improves the predictive validity compared with unidimensional risk perception models and bidimensional risk perception models. Next, this research reviewed the attitude, subjective norm, perceived behavioural control, and travel intention in the theory of planned behaviour. This study also elucidates the rationale for integrating the Theory of Planned Behaviour with the TRIRISK model to prognosticate travel intention amidst the COVID-19 pandemic. In addition, this research discussed the association of multidimensional risk perception, attitude, subjective norm, perceived behavioural control with travel intention was highlighted to support the conceptual framework. Lastly, this chapter postulates the research hypotheses, which establish the intercorrelations between multidimensional risk perception and travel intention while considering the mediation of attitude, subjective norm, and perceived behavioural control. Additionally, the research examines the moderating effect of perceived behavioural control.

## CHAPTER 3: RESEARCH METHODOLOGY

### 3.1 Introduction

The process of research is systematic inquiry into specific questions or objectives. This is to obtain valuable data, make decisions, draw conclusions, and develop a philosophy about a particular problem or setting in a particular area of knowledge. The concept of research methodology can be defined as the process of finding a method for solving a certain problem. Wilson (2014) describes the Honeycomb of Research Methodology (Figure 3.1) as a diagram that illustrates six defining elements that make up research methodology, explains fundamental research concepts, and provides a framework for structuring the chapter on methodology. Now, Honeycomb research methodology is used in order to understand the fundamental concepts in this study. Honeycomb consists of three prominent elements or basic research concepts, which are combined with three other elements to constitute the research method. These elements include research philosophy, approach, strategy, design, and collection and analysis of data.



Figure 3.1: The Honeycomb of Research Methodology



Note. The Honeycomb of Research Methodology. From *“Essentials of Business Research: A Guide to Doing Your Research Project”* by J. Wilson., 2014, SAGE Publications Ltd, p 32. Copyright 2014 by J. Wilson.

## **3.2 Research philosophy**

A researcher's perspective on the development of knowledge is often considered to be reflected in their philosophy of research. As a result, the method in which a researcher conducts their research will be determined by their beliefs on what constitutes knowledge. Therefore, it is important for researchers to have a clear understanding of their research philosophy, as it can play a significant role in shaping the way they approach their research. Easterby-smith et al., (2018) have outlined three important reasons why a grasp of philosophical issues is essential for researchers. First and foremost, it enables a clear explication of the research design by scrutinizing the requisite evidence and delineating the approaches for data collection. Secondly, an understanding of philosophy can help the researcher determine which research design is most effective. And finally, research philosophy can enhance a researcher's ability to adjust and modify their research design to suit different subjects or methods of acquiring knowledge. In conclusion, research philosophy is vital for researchers as it enables them to reflect on their role in the research process. There are three main philosophical perspectives in research philosophy, namely epistemology, ontology, and axiology, and the importance of each of these perspectives will be discussed below (Wilson, 2014).

### **3.2.1 Epistemology**

According to Bryman and Bell (2007), epistemology is defined as the theory about the nature of knowledge or how we come to know. It is also concerned with how we view our environment and what constitutes acceptable knowledge. A critical aspect of this inquiry involves the study of the social world and the extent to which it can and should be studied using the same methods as the natural sciences. It is essential for researchers

to have a clear understanding of epistemology as it significantly affects the way they conduct and interpret their research. There are three primary epistemological stances, which are positivism, interpretivism, and pragmatism.

Positivism is characterized by its objective perspective and detachment from those being studied. It emphasizes the importance of direct observation and experience, relying on quantitative (empirical) methods such as surveys and statistical analysis (Saunders et al., 2015). The basis of positivism is the values of fact, belief, and validity, and it views research as being based on facts, observations, and statistics. In order to explain the collected data, this approach to analysis must be grounded in a well-established theory.

Interpretivism, on the other hand, holds that the researcher must engage with the social world they are studying. Researchers who espouse this perspective are inclined to scrutinize social agents within their cultural milieu and may utilize qualitative, subjective observations (Creswell, 2005). A pivotal facet of interpretivist research is apprehending the social world of the study participants, frequently attained through interaction and collaboration with them. Research conducted using an interpretivist perspective is typically inductive, starting with observations and moving towards theories.

In situations where a researcher is unable to choose between either of these philosophies or believes their research does not align with either, they may adopt a pragmatic approach. Pragmatism recognizes the significance of both the physical and social domains and is not restricted to any particular philosophical perspective. It places the focus of the research on the problem being studied and uses the most appropriate methodology to generate the most significant insights (Greene, 2007). Pragmatism is often regarded as the most popular paradigm for mixed-method social inquiry, yet it can be applied to any paradigm.

In conclusion, it is important for researchers to understand the different epistemological stances and choose the one that aligns with their research objectives and methods. The stance adopted will shape the researcher's approach to conducting and interpreting their research and will have significant implications for the validity and reliability of the findings.

This research has consciously chosen to adopt a positivist epistemological stance. The choice is rooted in researcher's belief that the objective perspective and detachment from the research participants, as promoted by positivism, will provide a strong foundation for the research findings. Furthermore, the positivist approach aligns well with this research objectives and methodology, as it emphasizes evidence collected through direct observation and experience, particularly through quantitative (empirical) methods such as online surveys and statistical analyses.

Positivism emphasizes the importance of fact, belief, and validity, and it is grounded in the belief that research should be based on observable and verifiable data. This philosophical stance is concerned with the development of knowledge through the collection of facts, observations, and statistics, and it relies on established theories, such as the Theory of Planned Behaviour and risk perception, to explain the collected data.

In light of the above, it is clear that the positivist stance is the most suitable for this research. The positivist approach aligns well with this research objectives and methodology, as this research plans to use a combination of surveys and statistical analyses to gather data and make inferences about the research questions. By adopting this perspective, this research aims to ensure the validity and reliability of the research findings and to provide a solid theoretical foundation for the conclusions.

### 3.2.2 Ontology

According to Blaikie (1993), ontology in business research can be defined as “the science or study of being” and it deals with the nature of reality. Ontology is a system of belief that reflects an interpretation of an individual about what constitutes a fact. In simple terms, ontology is associated with what we consider as reality. Ontology is the study of being and it refers to the researcher's beliefs about the essence of existence and the way the objective reality is perceived and constructed. Saunders et al. (2015) argue that the ontological assumptions made by the researcher can have a significant impact on the conclusion of the research and should be acknowledged. There are two main ontological stances, namely subjectivism and objectivism, which are based on different perceptions of the social world (Bryman, 2012).

Subjectivism is a stance that sees social phenomena as being created by the perceptions and actions of social actors. This perspective is linked to interpretivism and accentuates the necessity of comprehending the subjective beliefs and attitudes that prompt respondents to act in a particular manner. For instance, when examining management perceptions of their business networks, the researcher would concentrate on scrutinizing the individual actors' (management) subjective experiences to apprehend the business networks (Wilson, 2014). On the other hand, objectivism is an ontological stance that considers social phenomena to be grounded in external realities that are beyond the reach or control of social actors. From this viewpoint, the world is perceived as external to social actors, and the analysis would emphasize treating social phenomena as tangible objects that are explicitly defined and discrete from the ever-evolving interactions of individual actors. For example, if one were to adopt an objectivist approach to analysing business networks, they would view the networks as being external to social actors and analyse them as tangible objects (Wilson, 2014).

The two main ontological stances, subjectivism and objectivism, differ in their understanding of the nature of reality and the relationship between the researcher and the researched. Subjectivism views reality as being constructed by individual perspectives and subjective experiences. In other words, the social world is seen as a product of people's perceptions, beliefs, and experiences. This perspective emphasizes the importance of considering the individual perspectives and experiences of the people being studied. In research, subjectivism often leads to an interpretive approach where the researcher examines the motivations and social interactions of the participants. On the other hand, objectivism views reality as being external to the individual, existing independently of people's perceptions and experiences. This perspective considers the social world as a set of objective facts that can be studied and analysed independently of individual perspectives. Objectivism often leads to a positivist approach in research, where the focus is on collecting and analysing objective data to gain a comprehensive understanding of the social phenomena under investigation. In summary, subjectivism emphasizes the subjective experiences of individuals, while objectivism focuses on objective reality. These different ontological stances guide the research approach, influencing the methods and techniques used to study social phenomena.

The objectivist ontological stance is suitable for this research because it provides a clear and tangible perspective on social phenomena. By viewing social phenomena as based on external realities, it allows for a more objective analysis that is not influenced by personal biases or subjective interpretations. This approach aligns well with the research objectives in this study, as it provides a comprehensive understanding of the tourists' travel intention during pandemic under investigation. In addition, the objectivist stance is grounded in the principle of positivism, which is a research philosophy that seeks to understand the world through empirical evidence and objective data (Saunders et al.,

2015). This approach is well suited for this research to examine the data objectively, free from personal biases and preconceptions. This can lead to a more reliable and valid interpretation of the findings, which is crucial for advancing the understanding of the tourists' travel intention during pandemic under investigation.

Overall, the objectivist ontological stance is a suitable choice for this research because it provides a clear and objective perspective on social phenomena, aligns with the principles of positivism, and supports the research objectives.

### **3.2.3 Axiology**

Axiology refers to “the ‘aims’ of the research”, which is a branch of philosophy that deals with evaluations of values in research (Saunders et al., 2015). It is concerned with the influence of the researcher's personal values on the research process and the role they play in determining the aims of the study. The concept of axiology has become increasingly relevant in recent years as researchers aim to understand the impact of their values on the research outcome.

Positivist researchers believe in a value-free approach to research. They aim for objectivity and independence from the data, viewing subjectivity and bias as sources of error. As such, axiological assumptions in a positivist study focus on maintaining a value-free stance, striving for objective measurements and independent analysis. This approach is often associated with highly structured research methods, such as quantitative studies using large samples and measurements.

In contrast, interpretivist researchers acknowledge the interdependence between the researcher and their research. They view the researcher's personal values, intuition, and biases as important and consider the subjective experiences of participants valuable. Axiological assumptions in an interpretivist study acknowledge that the researcher's

values, worldviews, and experiences influence the types of questions asked, the analysis of findings, and the presentation of results. Research using this approach is considered value-bound, with the researcher being an inherent part of the research process. Qualitative research methods, such as in-depth investigations and small sample sizes, are often used in an interpretivist study.

In summary, this research has embraced a positivist perspective in terms of its epistemology and an objectivist viewpoint with regards to its ontology. This approach places a strong emphasis on impartiality and objectivity, which is reflected in the research's axiology. The research is designed to maintain a value-free perspective, meaning that the research remains uninfluenced by personal biases or subjective considerations. This is crucial as it helps to ensure that the findings of the research are reliable and trustworthy. By keeping the research independent from the data, the study aims to minimize the impact of any potential sources of error that may arise from subjective interpretations. The value-free approach helps to guarantee that the results of the research are accurate and unbiased, allowing for valid and meaningful conclusions to be drawn.

### **3.3 Research approach**

Research approach is a crucial component of research methodology that plays a significant role in determining the research methods used in a study. It refers to the plan and procedures undertaken in an empirical study, starting from the broad assumptions and leading to the data collection methods, data analysis, and data interpretation (Creswell 2005). The research approach can be divided into two categories: deductive and inductive.

Deductive approach is based on the development of hypotheses from existing theory, followed by the design of a research strategy to test the hypothesis (Wilson, 2014). This

approach is concerned with deducing conclusions from premises or propositions and begins with an expected pattern that is tested against observations. Deductive reasoning is "reasoning from the general to the particular" and involves the formulation of hypotheses that are tested during the research process (Wilson, 2014). The deductive approach is useful in explaining causal relationships between concepts and variables, measuring concepts quantitatively, and generalizing research findings to a certain extent (Ghauri & Grøhaug, 2005).

Inductive approach, also known as inductive reasoning, starts with observations and theories are developed towards the end of the research process as a result of the observations defined (Hyde, 2000). This approach involves searching for patterns from observations and developing explanations and theories based on the patterns (Wilson, 2014). Inductive reasoning is based on learning from experience and observing patterns, resemblances, and regularities in experience to reach conclusions and generate theory (Wilson, 2014). The inductive approach allows the researcher to be flexible and alter the direction of the study after the research process has commenced.

The difference between deductive and inductive approaches lies in the direction of the reasoning process. Deductive reasoning starts from general theory or hypotheses and moves towards specific observations and data, whereas inductive reasoning starts from specific observations and data and moves towards the formulation of general theory or hypotheses. In deductive research, the researcher starts with a well-known theory or a set of hypotheses, which are then tested through empirical data collection and analysis. The goal of deductive research is to confirm or reject the theory or hypotheses through the findings of the study. This approach is more structured and systematic, and the researcher follows a pre-determined plan to collect and analyse data.



On the other hand, in inductive research, the researcher starts with detailed observations of the phenomenon being studied and gradually develops generalizations and theories as a result of these observations. The researcher does not start with a pre-existing theory and is free to alter the direction of the study based on the observations and findings. Inductive research is more exploratory in nature and allows for greater flexibility in the research process. In terms of data analysis, deductive research often employs quantitative methods, such as regression analysis or hypothesis testing, whereas inductive research typically employs qualitative methods, such as content analysis or case study analysis.

In conclusion, the selection between a deductive and inductive approach is depended on the research questions, the objectives of the study, and the nature of the data being gathered. Therefore, this study employed a deductive approach, which prioritizes hypothesis development based on the Theory of Planned Behaviour and risk perception. It used quantitative methods to test the hypotheses presented in Chapter Two, confirmed or rejected through empirical data collection and analysis.

### **3.4 Research strategy**

Research strategy refers to the plan and approach adopted by a researcher to conduct a study (Wilson, 2014). There are two main types of research strategies: qualitative strategy and quantitative strategy;

Qualitative research is concerned with understanding the socially constructed nature of reality and the contextual factors that shape inquiry. It involves examining entities and processes that are not experimentally measured in terms of quantity, amount, intensity or frequency (Denzin & Lincoln, 2000). Researchers in this tradition also recognize the value-laden nature of inquiry and focus on exploring how social

experiences are created and given meaning. They collect data from smaller samples using various structured and less structured techniques such as in-depth interviews and focus groups (Aaker et al., 2001). Despite its cost-effectiveness and effectiveness in understanding consumer opinions, decision-makers remain hesitant to base significant decisions on small samples and subjective interpretations (McDaniel & Gates, 2015). The goal of qualitative research is to explore and understand the meaning that individuals and groups ascribe to social and human problems. The research process consists of emerging questions, data collection usually in the participant's setting, data analysis inductively building from particulars to general themes, and the researcher's interpretation of the data. There is flexibility to the structure of the final written report. A case for this kind of inquiry is that it supports an inductive approach to research. It emphasizes individual meaning and emphasizes the need to report the complexity of the situation.

Rather than focusing on processes, quantitative studies focus on measuring and analysing the relationships between variables. Such studies claim to be conducted within a value-free framework (Denzin & Lincoln, 2000). Structured questionnaires are a common tool employed in quantitative research to gather data from a significant number of participants. Such data is often utilized by decision-makers to forecast relationships between variables and actions, obtain a better understanding of said relationships, verify existing relationships, and test various hypotheses (Hair et al., 2009). In quantitative research, the relationship between variables is examined in order to test objective theories. Statistical procedures can be used to analyse numbered data based on these variables, usually based on instruments. The written report consists of several sections including an introduction, literature review, theory, methods, results, and discussion. Researchers who engage in this form of inquiry assume they will be testing theories deductively and being able to generalize and replicate results.

Quantitative and qualitative research approaches differ in their perspectives and methodologies. The crucial distinction between these two approaches lies in their data collection methods. Qualitative research aims to comprehend and investigate the significance that people and communities ascribe to societal and human predicaments by involving themselves intimately with the research subject. To this end, methods such as in-depth interviews and focus groups are employed, typically with smaller sample sizes. However, the findings from qualitative analysis are not subject to statistical testing to determine their significance or to assess their potential for replication and generalization. In contrast, quantitative research focuses on measuring and analysing causal relationships between variables and uses structured questionnaires to collect data from larger samples. It tests objective theories and employs statistical procedures to analyse numerical data. The results of quantitative data analysis are more easily generalizable to a broader population.

The primary objective of this study is to elucidate the relationship between risk perception and travel intention towards domestic tourism in China during the COVID-19 pandemic through a quantitative approach. It is imperative to ensure that the findings of this research have applicability to the wider domestic tourism sector in China. The purpose of this study is to provide researchers and tourism practitioners with novel insights on how risk perception influences tourists' behavioural intentions during the pandemic. Given this research's focus on correlating variables and testing hypotheses, a quantitative approach is deemed appropriate and suitable to achieve its objectives and establish its outcomes.

### **3.5 Research design**

According to Malhotra et al. (2016), the research design refers to a comprehensive blueprint that outlines the methods and procedures for data collection and analysis in a

research project. It serves as a guide for researchers throughout the research process, increasing the probability of achieving their objectives. According to Wilson (2014), there are many types of research design, such as action research, case studies, experimental, longitudinal, cross-sectional, archival analysis, and comparative research design.

Kurt Lewin, a social psychologist, is credited with coining the term "action research" in 1946. This approach involves the researcher taking an active role in the research process, rather than merely serving as an "outside observer" (Lewin, 1946). In contrast to traditional research, action research produces both outcomes and actions.

Experimental design refers to the systematic approach of conducting experiments in natural or laboratory settings within the realm of natural sciences (Campbell & Stanley, 1963). Through experimental studies, causal relationships can be identified. It involves manipulating the independent variable (e.g., promotion) to observe how the result affects the dependent variable (e.g., purchasing behaviour).

According to Wilson (2014), cross-sectional research, also known as "snapshot" research, involves the simultaneous examination of multiple variables and individuals to investigate a particular phenomenon at a particular point in time. This type of research is highly practical when time is limited. This type of research is characterized by its ability to evaluate multiple factors at one time. There is one major disadvantage of this study method, however, as it does not take into account developments that have taken place before and after the study. Since research can be conducted in a limited amount of time, most researchers use this type of analysis.

Unlike cross-sectional studies, a longitudinal investigation or research is conducted over a long period of time. The period of time needed for research is necessary since the research work may differ from the researcher's criteria and may even span several years (Saunders et al., 2015). In this case, the principal benefit of conducting research is that

the analysis is carried out over a longer period of time and after a specific point in time, so that the researcher will be able to detect improvements in the factors being studied and thus clarify in depth the causes and impacts of the factors or variables. Methods such as experiment, grounded theory, and action research are usually employed in this type of approach. The current research is cross-sectional in nature.

Archival design generally pertains to public records or documents that are of interest to researchers. Raw data is often synonymous with archival data, which exist in their original state and are considered a form of secondary data (Wilson, 2014). Examples of archival data may include business reports, country reports, staff records, or minutes from local community groups, among others.

Comparative research involves analysing the differences between two or more groups based upon a single variable. A comparative approach can lead to some interesting results. When comparing like for like, and drawing conclusions based on group findings, it is advantageous.

In summarise, action research involves active participation and produces outcomes and actions. Experimental design identifies causal relationships through manipulation of variables. Cross-sectional research is a quick evaluation of variables at a specific time, while longitudinal research examines changes over a longer period. Archival research involves analysis of public records, while comparative research compares differences between groups based on a single variable.

Therefore, based on the nature and given time horizon of this research, the present study employed a cross-sectional design that offers a snapshot of the outcome and its characteristics at a specific point in time. Unlike experimental designs, which involve active intervention by the researcher to produce and measure change or create differences, cross-sectional designs focus on studying existing differences between people, subjects, or phenomena and collecting data at one point in time. While longitudinal studies involve

taking multiple measures over an extended period, cross-sectional research focuses on finding relationships between variables at a single moment in time and is quicker to conduct. This study used a cross-sectional design to estimate the prevalence of an outcome of interest, as the sample is typically taken from the entire population. Additionally, the cross-sectional design used survey techniques to gather data, making it relatively inexpensive and efficient.

**Table 3.1: Summary of Research Methodology**

|                            |  |
|----------------------------|--|
| <b>Research philosophy</b> | Positivist epistemology, objectivist ontology, and value-free axiology to ensure reliable and valid results. |
| <b>Research approach</b>   | Deductive approach   |
| <b>Research strategy</b>   | Quantitative methods   |
| <b>Research design</b>     | Cross-sectional design and survey techniques for data collection.  |

### 3.6 Data Collection

Data collection, as the fifth step in the typical structure of a methodology chapter, is an essential component of the research process and is typically represented in the Honeycomb of Research Methodology (Malhotra et al., 2016). Two types of data exist, namely primary data and secondary data. Primary data refers to data collected by researchers themselves using tools such as interviews, observations, and questionnaires. In contrast, secondary data refers to data that have already been published. The individual techniques and methods used in data collection, as well as their interconnection and unfolding, should be thoroughly detailed in the research design (Malhotra et al., 2016).

Primary data collection is generally used when existing secondary data sources are inadequate, not available, or unable to fulfil the research purpose. This is particularly true for contemporary topics, such as the ongoing COVID-19 pandemic crisis, which lack comprehensive secondary data coverage. For instance, in a study examining domestic tourists' behavioural intentions and tourism risks, the researcher found that secondary sources were inadequate in assessing tourists' risk perception. Therefore, primary research was the preferred data collection method.

### **3.6.1 Instrument development**

As stated by Aaker (2008), surveys represent the most commonly employed method for collecting primary data. This deductive approach allows researchers to gather data from a large sample of participants at a comparatively low cost. Surveys permit the quantitative analysis of data, thereby facilitating the exploration of descriptive questions (i.e., who, what, when, where, and how), as well as the establishment of potential explanations for relationships between variables and the construction of corresponding models (Saunders et al., 2015). In this study, Chinese respondents provided primary data through the utilization of a survey strategy.

Survey research may use a variety of data collection methods with the most common being questionnaires and interviews. Questionnaires are a way of collecting data comprised of a set of questions that is aimed at gathering data suitable for the research project's objectives. Both qualitative and quantitative data can be collected with questionnaires. A questionnaire is a popular tool for collecting data among researchers. Researchers are able to gather a wide range of data by incorporating different questioning techniques within their questionnaires. Qualitative research strategies are more frequently associated with interviews. In an interview, the researcher gains insight into an

individual's beliefs and attitudes towards a particular topic. It is vital for researchers to examine both verbal and non-verbal communication in some types of interviews. Because this study employs the quantitative research strategy, the questionnaires were distributed to prospective respondents by self-administered survey.

The self-administered survey can be categorized as a direct mail survey, a mail panel survey, or a drop-off survey, which does not involve trained interviewers. The evolution of technology has resulted in the development of online surveys, which can be deemed as innovative self-administered surveys, usually conducted through the internet or email (Hair et al., 2002). Online surveys have several advantages over traditional survey methods, including faster and lower cost, more visual, flexible, and interactive, and the ability to target specific populations effectively while eliminating interviewer effects (Duffy et al., 2005). In this study, due to the current pandemic, primary data was collected through an internet survey, which is a self-administered questionnaire that can be accessed and completed on a website or other online platforms by prospective participants (Hair et al., 2002). According to the China Internet Network Information Centre, the number of Chinese netizens had reached 940 million by June 2020, with 99.2% relying on mobile devices. In light of that, it was rational to use an online social platform for distributing the online questionnaire.

### **3.6.2 Questionnaire development**

This questionnaire included 10 closed-ended questions and 27 Likert-scale measurements. A close-ended question is one that limits possible responses to options like Yes/No, True/False, and the likes. It comes with pre-selected answer options and requires the respondent to choose one of the options that closely resonates with her thoughts, opinion, or knowledge. Close-ended questions are best used in quantitative research because they allow researcher to collect statistical information from respondents.



Compared to open-ended questions, close-ended questions are easier and quicker to answer, and cheaper to collate and analyse the responses. Therefore, closed-ended questions were utilised for screening questions and background questions of respondents in this study.

According to Collis and Hussey (2003), a Likert scale question is a form of psychometric inquiry that assesses the respondent's perception or beliefs regarding a specific subject matter. The beliefs and perception expressed in this study include, for example, those about attitudes toward domestic tourism, subjective norms, perceived behavioural control, travel intentions, and deliberative, affective, and experiential perceptions of risk. This study decided to use the 5-point Likert scale (rather than a scale with more points) in order to maintain consistency while collecting responses from respondents. These questions hold a significant place in research as they can be utilized to gauge an individual's attitude and determine the degree to which they concur or differ with a particular query or statement. The advantages of Likert scale questions are numerous, one of which is the ease of organizing and interpreting the responses obtained. Moreover, Likert scale questions provide a more comprehensive context to the responses by enabling the researcher to quantify the intensity of each response.

Likert scales were expressed in numbers or in words (1 to 5 or strongly agree to strongly disagree). Such a scale never starts with zero (0) but instead provides nuclear stands such as "neither agree nor disagree" (i.e., "3") for the respondents, which reflects the lack of clarity about the respondent's position. The present study's latent variables (independent, mediating, and dependent) were measured using 5-point Likert scales (Strongly agree to Strongly disagree). Therefore, the Likert-scale questions were utilised to assess the respondents' opinions for measurement constructs in this study.

### **3.6.3 Content of questionnaire**

The questionnaire developed in this research had three sections as (1) screening questions (related with basic knowledge about COVID-19); (2) questions related to variables (independent variable: deliberative risk perception, affective risk perception, and experiential risk perception; mediating variables: attitude toward domestic tourism and subjective norm; moderating variable: perceived behavioural control; dependent variable: travel intention); (3) demographic variables (gender, age, income, etc.). The complete set of the questionnaire is presented in Appendix A. The following sections also address construct measurements related to the independent, mediating, moderating, and dependent variables.

### **3.6.4 Construct measurements**

Measurement items previously developed were adapted to fit this study. The construct items utilized in this study were developed to determine the relationships of multi-dimension risk perception and travel intention to domestic tourism. The TRIRISK model constructs: deliberative risk perception, affective risk perception, and experiential risk perception were tested in relationship to the Theory of Planned Behaviour constructs: attitude toward domestic tourism, subjective norm, perceived behavioural control, and travel intention.

All survey questions related to the TRIRISK model constructs were adapted from previous studies (Bae & Chang, 2021; Ferrer et al., 2016; Ouyang et al., 2020). Each question was effectively modified to fit the topic of this research best. Items used to test the multidimensions of risk perception constructs.

A total of eleven multidimensions of risk perception measurable items were asked of each survey participant. Three questions were used to measure deliberative risk perception (Ferrer et al., 2016), four questions were used to measure affective risk

perception (Bae & Chang, 2021), four questions were used to measure experiential risk perception (Ferrer et al., 2016; Ouyang et al., 2020). Two questions related to the deliberative risk perception, four questions related to the affective risk perception, and questions related to the experiential risk perception were Likert scale questions, with 1 representing strongly disagree and 5 representing strongly disagree. Only one question was related to the deliberative risk perception (i.e., How likely is it that COVID-19 will infect you?) was 5-point Likert scale questions, with 1 representing very unlikely and 5 representing very likely.

The survey was built to ask questions related to the attitude, subjective norm, perceived behavioural control, and travel intention associated with domestic tourism. All questions related to travel intention, attitude, subjective norm, and perceived behavioural control were measured using a 5-point Likert scale with answers ranging from 1 being strongly disagreed to 5 strongly agreeing. Four questions were utilized to measure the constructs of attitude, subjective norm, perceived behavioural control, and travel intention.

**Table 3.2: Measurements of TRIRISK model constructs and the TPB constructs**

| Variables                    | Items | Measurement  | Source  |
|------------------------------|-------|--|---|
| TRIRISK model                |       |  |   |
| Deliberative risk perception | DRP1  | How likely is it that you will be infected by COVID-19   | (Ferrer et al., 2016)                           |
|                              | DRP2  | When I think about my lifestyle, it seems possible that I could be infected by COVID-19          |   |
|                              | DRP3  | If I look at myself as a doctor, I realize that my behaviour puts me at risk of getting COVID-19 |   |
| Affective risk perception    | ARP1  | I am worried about the possibility of being infected by COVID-19.                                | (Bae & Chang, 2021)                             |
|                              | ARP2  | I am worried about COVID-19 becoming as a health issue.  |   |
|                              | ARP3  | I am worried about the possibility of my relatives being infected by COVID-19.                   |   |
|                              | ARP4  | I am worried about COVID-19 occurring in my region.  |   |
| Experiential risk perception | ERP1  | I am concerned about facing COVID-19   | (Ferrer et al., 2016; Ouyang et al., 2020).     |
|                              | ERP2  | I feel vulnerable to COVID-19  |   |
|                              | ERP3  | It is easy for me to imagine myself being infected by COVID-19 in the future                     |   |
|                              | ERP4  | When I hear of someone getting COVID-19, my first reaction is, "that could be me someday".       |   |
| Theory of planned behaviour  |       |  |   |
| Attitude                     | ATT1  | Domestic tourism is enjoyable  | (Chaulagain et al., 2020; Lee et al., 2012) Lee |
|                              | ATT2  | Domestic tourism is beneficia  |   |
|                              | ATT3  | Domestic tourism is attractive   |   |
|                              | ATT4  | Domestic tourism is valuable   |   |
| Subjective norm              | SN1   | Most people who are important to me think that it is a good idea to travel within China          | (Chaulagain et al., 2020; Lee et al., 2012)     |
|                              | SN2   | Most people who are important to me agree with me to travel within China                         |   |

|                               |      |   |                                       |
|-------------------------------|------|---|---------------------------------------|
|                               | SN3  | Most people who are important to me support that I travel within China    |                                       |
|                               | SN4  | Most people who are important to me understand that I travel within China |                                       |
| Perceived behavioural control | PBC1 | I am confident that if I want to, I can travel within China               | (Lee et al., 2012)                    |
|                               | PBC2 | I have opportunities to travel within China                               |                                       |
|                               | PBC3 | I am capable of traveling in China  |                                       |
|                               | PBC4 | Whether or not I travel within China is completely up to me               |                                       |
| Travel intention              | TI1  | I intention to travel within China  | (Bae & Chang, 2021; Lee et al., 2012) |
|                               | TI2  | I will make an effort to travel within China                              |                                       |
|                               | TI3  | I willing to travel within China  |                                       |
|                               | TI4  | I plan to invest time to travel within China                              |                                       |

### 3.6.5 Instrument validity

In the field of social sciences, researchers frequently design and implement measurement tools to assess complex constructs. To draw valid conclusions based on these measurements, it is imperative that the validity of the measurement tool be established. In an effort to establish validity, a pre-testing of the questionnaire was conducted with the involvement of three academicians specialized in the field of tourism from universities in Malaysia. The participants were asked to provide feedback on various aspects of the questionnaire, including question content, response format, phrasing, sequence, instructions, and the overall quality of the English language used. Their input was carefully considered and incorporated in the process of refining and improving the questionnaire. All questions used to measure the constructs can be found in Table 3.1.

### **3.6.6 Translating the questionnaire**

The questionnaire was developed in English and then translated into Chinese (Mandarin) using the blind translation-back translation method, as described by Brislin (1976). Back-translation is a useful approach for identifying translation errors and ensuring translation equivalence (Usunier & Lee, 2005). To ensure accurate translation, the survey questionnaire was translated by three Chinese PhDs who possess excellent skills in both English and Chinese. The first translator translated the questionnaire into Chinese (i.e., the target language), and the second translator blindly translated it back into English (i.e., the original language). To determine if there are differences between the two English versions caused by errors in the first translation, the third translator compared the two versions. By resolving any differences in the questionnaire, a Chinese equivalent was obtained. The complete set of the Chinese version questionnaire is presented in Appendix B.

### **3.6.7 Sampling design**

Sampling is a vital component of primary data collection, which involves various data collection methods. In addition to questionnaire construction, sampling design plays a significant role in the primary data collection process. Malhotra (2015) emphasizes that the sampling process typically consists of five essential steps, which include defining the target population, identifying the sampling frame, selecting the appropriate sampling method, determining the appropriate sample size, and executing the sample plan. The following section outlines these steps in detail.

#### **3.6.7.1 Target population and sampling frame**

The process of designing a sample begins with the identification of the target population. As defined by Jennings (2010), a population refers to all the elements or objects that a research project is focused on, while the target population represents only the specific elements of the population that the researcher aims to study. In the present

study, the population consists of potential Chinese tourists to domestic tourism, and the target population comprises potential Chinese tourists to domestic tourism who are at least 18 years old and possess basic knowledge of COVID-19.

To ensure that the sample accurately represents the target population, the researcher must identify an appropriate sampling frame, which is essentially a list of all the cases from which the sample will be drawn. Cooper and Schindler (2014) suggest that an ideal sampling frame should provide an accurate and complete list of the elements of the target population. However, determining the representativeness of a sampling frame is often challenging, and it is crucial to carefully consider how to locate a list of individuals or organizations when designing the sampling frame. The sampling frame in this study was limited to potential Chinese domestic tourists who were 18 years of age or older and had a basic understanding of COVID-19 due to the purpose of this research.

#### **3.6.7.2 Sampling techniques**

Selecting an appropriate sampling technique is the third step in sampling. There are two general categories of sampling techniques that are currently used in the survey process: probability or random sampling and non-probability or non-random sampling.

According to Sekaran and Bougie (2016), probability sampling is an objective method in which the probability of each population element being chosen is known. Various probability sampling methods, such as random sampling, systematic sampling, stratified sampling, and cluster sampling, can be employed to generate findings that can be generalized to a target population. Moreover, probability sampling enables the estimation of sampling error, which is defined as the discrepancy between the sample value and the true value of the population (Proctor, 2005).

According to Sekaran & Bougie, (2016), non-probability sampling is a subjective process in which a population element has an unknown chance of being selected. Hair et

al. (2002) posit that researchers may opt for nonprobability sampling methods, such as convenience, judgment, snowball, or quota sampling, to minimize the cost and duration of sampling. However, the representativeness of the resulting sample may not be guaranteed, and it may depend on the efficacy of the selection procedures implemented and managed by the researchers. In nonprobability sampling, researchers must be aware of the limitations and biases associated with the sampling method, and caution should be exercised when attempting to generalize the results to the target population. In quantitative research it would be unlikely and expensive to examine all members or participants of a target population. Thus, ensuring quality sampling technique is essential to assure the representativeness of the target population or minimising the gap between the chosen sample and the target population.

This study measured the domestic travel intentions of potential Chinese tourists, as a formal list of potential Chinese tourists was not available. The probability of selecting participants was therefore uncertain. In the present investigation, potential respondents were selected from the target population using a non-probability judgmental sampling method. The selection was based on various factors such as the availability of resources, the scope of the research, and knowledge of the target population. Patton (1990) and Maxwell (1996) explain that judgmental or purposive sampling techniques involve deliberate selection of specific settings, individuals, or events to obtain critical data that cannot be derived from other sources. In the current study, the inclusion of cases or participants in the sample was determined by the researcher's subjective judgment and the perceived significance of their participation.

When using judgmental sampling, there are some benefits, including that it allows effective collection of the wide range of responses needed, which is crucial to fulfilling the purpose of the study (Zikmund et al., 2009). Further, non-probability (judgmental) sampling is appropriate in the current research context in a number of ways. In the first



place, the full list of potential Chinese tourists is not available. It was not possible to obtain a list of potential Chinese tourists with knowledge of COVID-19, essential for sampling frames in probability sampling (Hulland et al., 2018). In non-probability sampling, this issue can therefore be addressed with an adequate sample size (Rowley, 2014). Second, purposive or judgmental sampling would be appropriate for a large group of people with specific characteristics (Etikan, 2016). The study targeted a group of people who have some knowledge of COVID-19 by using screening questions. Third, Cooper and Schindler (2014) argue that carefully controlled non-probability can provide valid and meaningful results. It has been suggested by Burns et al. (2017) that judgmental sampling is an “expert”, “educated guess” at representing any target population. In addition, previous studies of travellers' intent also employed purposively or judgmental sampling methods (Dissanayake & Malkanthie, 2018; Keni et al., 2022).

### **3.6.7.3 Sample size**

Sample size is defined as "the number of elements to be included in the study" (Malhotra, 2015). One of the most challenging issues faced by researchers is determining the appropriate sample size for their study. Several techniques have been developed to address this issue in a study. As Vaus (2002) asserts, the determination of a suitable sample size should be grounded in the nature and objectives of the study, the level of reliability desired for the results, and the variability within the population under investigation. However, Garson (2012) claims that there is no universally correct or incorrect sample size. Aaker (2008) suggests that selecting the appropriate sample size requires careful consideration of three general factors. First, the number of groups and subgroups in the sample that will be subjected to statistical analysis should be identified. Secondly, the cost implications of increasing the sample size versus the potential value of acquiring more precise data should be assessed. Finally, the variability of the

population being sampled should be taken into account to determine the sample size required to obtain a representative sample.

Concerning these suggested methods and considering that this study would use Structural Equation Modelling (SEM) as the key data analysis technique, therefore, the concern of sample size was mainly measured from the SEM viewpoint. Kline (2005) presented guidelines for sample size in the analysis of structural equation models, indicating that a sample size of 100 is considered small, a sample size between 100 and 200 is medium, and a sample size exceeding 200 is considered large. However, Kline (2016) acknowledges that a sample size of 200 may not be sufficient for complex models with non-normal distributions, particularly when estimation methods other than maximum likelihood are employed. Additionally, Kline (2016) suggests that a sample size below 100 cases is not recommended for any type of SEM analysis unless the model being analysed is very simple. Furthermore, the complexity of the model should be taken into account when determining the sample size, as models with more parameters necessitate a larger sample than parsimonious models (Kline, 2005). Kline posits that SEM is a technique that is best suited for large sample sizes, and that certain estimates, such as standard errors for latent construct effects, may be inaccurate when the sample size is small.

Furthermore, the guideline proposed by Christopher Westland (2010) was considered in using A-priori Sample Size Calculator for Structural Equation Models (Soper, 2022), and an appropriate statistical procedure was applied to determine the efficient and adequate sample size for Structural Equation Models analysis. An application of the A-priori sample size for structural equation models has become popular among users of second-generation multivariate data analysis techniques (e.g., covariance-based structural equation modelling, Partial Least Squares path modelling). It is an online power analysis tool that determines the sample size needed for research using structural equation

modelling (SEM). The model needs information about the number of observed and latent variables, the size of the expected effect, and the level of statistical power.

Given the structural complexity of the model, the application calculates the minimum sample size for detecting a specified effect. Compared to other online sample size calculators, it has the advantage of determining a study-specific sample size (based on the number of latent and observed variables). Regardless of whether a non-probability or probability sampling technique is used to collect the data, it can be considered (Memon et al., 2020). In studies such as those conducted by Chew and Jahari, (2014), Rezaei and Valaei (2017) and Mohseni et al. (2018), these researchers used A-priori sample size calculations in structural equation models. In the current study, given the number of observed items (27) and latent constructs (7), the expected effect size (0.3), the desired probability (0.05), and the statistical power level (0.8), 352 responses were recommended as a minimum sample size (two-tailed hypothesis) to test the model. Given above result, the current investigation aimed at collecting a minimum of 352 usable questionnaires from the target population (Soper, 2021).

### **3.6.8 Procedure for collect data**

A pilot test was conducted before the final data collection to identify any probable difficulties responding to the questions in this research. A complete set of questionnaires was provided for the pilot study, along with a cover letter describing the purpose of the research and ensuring the respondent's anonymity. A pilot test was conducted to check the internal consistency of the instrument. Researchers suggested that using a pilot test improves the questionnaire design and identifies issues for improvement in the survey (Reynolds et al., 1993). To ensure that the research objectives were met and potential issues with the Chinese questionnaire were identified and addressed, a pilot study was conducted. Malhotra (2015) cautions that the participants in the pilot study should be chosen from the target population under investigation. Accordingly, the pilot study

collected data from Chinese citizens aged 18 or older who had basic knowledge of COVID-19. The purpose of the pilot study was to eliminate any potential problems associated with the Chinese questionnaire and ensure that the data collected was suitable for the research objectives. Moreover, according to Isaac and Michael (1995), a selection of 10 to 30 responses is adequate for conducting a pilot test.

Although all the constructs provided in this research were tested on different studies in several parts of the world, the researchers conducted a pilot study to confirm the validity and reliability of the research instrument in China. The scale's reliability was measured by Cronbach's alpha (Hair et al., 2010). The acceptable value for Cronbach's alpha is 0.7. Cronbach's alpha with a value below 0.7 is considered poor internal consistency (Hair et al., 2010). Therefore, 51 respondents were invited to engage in the pilot test in this study. The reliability of the questionnaire was assessed through the calculation of Cronbach's alpha values, which were found to be 0.921 for attitude, 0.935 for subjective norms, 0.869 for perceived behavioural control, 0.917 for travel intention, 0.903 for deliberative risk perception, 0.897 for affective risk perception, and 0.915 for experiential risk perception. All of the Cronbach's alpha values exceeded the acceptable lower limit of 0.7 (Hair et al., 2010), indicating high reliability of the questionnaire. Results of the pilot study confirmed that no major changes were required. Finally, this study was approved by the University of Malaya Research Ethics Committee (UMREC).

After the pilot test, the next step was to collect the final data using non-probability judgmental sampling. The online survey was conducted in China from October to November 2021 for the current survey investigation. The data collected during the pandemic holds significance as it provides a reference point for subsequent research that seeks to observe behavioural changes from a longitudinal perspective (Novelli et al., 2018).

The questionnaire was disseminated using the online survey tool Wenjuanxing to various social platforms, including WeChat, Wenjuanxing, Weibo, and QQ group. Interested individuals could voluntarily participate in the survey by accessing the questionnaire through the provided link. Then, screening questions were asked (i.e., Are you 18 years old or older? Are you Chinese citizens? Which symptom is not COVID-19? )—those who met the requirements and were willing to participate in the survey. After using judgmental sampling, a total of 600 prospective participants in China were approached for participating in this research through online self-administrated survey methods. Among them, 144 participants did not meet the requirements for screening questions. Total 456 responses were returned from 600 questionnaires. The response rate was 76% (50-60% is sufficient) (Shanks-Meile & Dobratz, 1995). Among the 456 responses, 56 incomplete responses were removed. There are no missing values in the data. Finally, this research used 400 survey responses in the final data analysis. KMO measurement of sample adequacy indicated 0.908 (>0.6) (Kaiser, 1974). Moreover, the sample size range in previous studies on travellers' behaviour in China was 328 to 621 (Hao, 2021; Lam & Hsu, 2014; Quintal, 2010). Hence, a sample size of 400 for this study is adequate to test the hypothesized model.

### **3.6.9 Ethical issues related to primary data collection**

The University of Malaya Research Ethics Committee (UMREC) undertakes an ethics review of all research involving human participants, including funded and unfunded research, which is non-medical. As per the report, research involving human subjects should adhere to the fundamental ethical principles of respect for persons, beneficence, and justice. Informed consent is an essential element of respect for persons and may be provided to potential participants through a cover or recruitment letter. In the current study, the recruitment letter containing all necessary information for informed consent was included on the first page of the questionnaire. The selection of human subjects and

the entire research protocol, including the questionnaire, was subject to review and approval by the UMREC.

In this research, researchers followed a range of procedures to maintain the confidentiality of the data collected, including the participants' identities being kept anonymous and their profiles being mentioned in such a method, which was not let participants be recognized. The raw data collected in this research was used to analyse the data of this study. Data of this study kept records using a questionnaire. The digital versions of the questionnaires were stored in secure password-protected computers. After dissertation submission, the data will be deleted after five years.

#### **3.6.10 Data analysis**

Data analysis is a crucial process that aims to extract meaningful insights and knowledge from data, using various statistical and computational methods. As noted by Creswell (2014), the primary objective of data analysis is to identify patterns, relationships, and trends within the data, which can be used to draw accurate and reliable conclusions and recommendations. Through data analysis, researchers can gain a deeper understanding of the phenomenon under investigation, and make informed decisions that are grounded in empirical evidence. Consequently, data analysis is a fundamental component of research in various disciplines, including social sciences, and plays a critical role in advancing knowledge and promoting evidence-based practices (Creswell, 2014; Maxwell, 2013). Statistical analysis is a method of aggregating numeric data and drawing inferences about variables. Wilson (2014) posits that when analysing quantitative data, researchers can use two main types of statistical procedures, namely descriptive statistics and inferential statistics. Descriptive statistics refer to techniques that are used to summarize and describe the key features of the data, such as measures of central tendency and variability, which can help to provide a better understanding of the data (Maxwell, 2013). On the other hand, inferential statistics involve making inferences

about a larger population based on the information gathered from a smaller sample of data (Wilson, 2014). As noted by Maxwell (2013), inferential statistics are critical for generalizing findings to broader populations and can help to enhance the external validity of research studies. Therefore, both descriptive and inferential statistics are essential tools in quantitative data analysis, and each plays a unique role in helping researchers draw accurate conclusions from their data.

According to Aaker (2008), preparing raw survey data before conducting analysis is a crucial step in ensuring accurate and reliable interpretation of results. The process of data preparation typically involves three sequential steps: data editing, data coding, and data filing, each of which plays a unique role in transforming the raw data into a format suitable for statistical analysis (Zikmund & Babin, 2007). During the data editing stage, the raw data is carefully inspected and any missing, inconsistent, or unclear data is corrected or removed to ensure data completeness, consistency, and accuracy. Next, in the data coding stage, the edited data is transformed into numerical scores or other categorical symbols to facilitate statistical analysis (Zikmund & Babin, 2007). Finally, in the data filing stage, the coded data is entered into a spreadsheet or statistical software for analysis.

In this study, all of these data preparation steps were followed to ensure accurate interpretation of results. Specifically, the raw data collected from online questionnaires were edited, coded, and filed into an Excel spreadsheet for subsequent analysis using IBM SPSS statistical software version 26, IBM SPSS AMOS version 23 software packages, and PROCESS Macro version 4.0, respectively. By following these data preparation procedures, the researchers were able to obtain accurate and reliable results that supported the study's research objectives (Zikmund & Babin, 2007).

The screening questions (Section A), variables related questions of this research (Section B), and demographics questions (Section C) of this study were coded and presented in Table 3.2 given below:

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**Table 3.3: Data preparation**

| Variable name  | Question Coding | Scale   |
|--|-----------------|---|
| Section one: screen questions  |                 |   |
| Are you 18 years old or older?   | Q1              | Yes/No  |
| Are you Chinese citizens?  | Q2              | Yes/No  |
| Which symptom is not COVID-19?   | Q3              | Multiple Choice   |
| Section Two: Questions for the seven latent variables in this research                   |                 |   |
| Attitude toward domestic tourism   |                 |   |
| Domestic tourism is enjoyable.   | ATT1            | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Domestic tourism is beneficial.  | ATT2            | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Domestic tourism is attractive.  | ATT3            | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Domestic tourism is valuable   | ATT4            | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Subjective norm  |                 |   |
| Most people who are important to me think that it is a good idea to travel within China. | SN1             | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Most people who are important to me agree with me to travel within China.                | SN2             | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Most people who are important to me support that I travel within China.                  | SN3             | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Most people who are important to me understand that I travel within China.               | SN4             | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Perceived behavioural control  |                 |   |
| I am confident that I can travel within China if I want to.                              | PBC1            | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| I have opportunities to travel within China.   | PBC2            | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| I am capable of traveling in China.  | PBC3            | Likert Scale (1= strongly disagree to 5 = strongly agree) |

|   |      |   |
|---|------|---|
| Whether or not I travel within China is completely up to me.                                      | PBC4 | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Travel intention to domestic tourism  |      |   |
| I intent to travel within China.  | TI1  | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| I will make an effort to travel within China.   | TI2  | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| I willing to travel within China.   | TI3  | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| I plan to invest time in travelling within China.   | TI4  | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Deliberative risk perception  |      |   |
| How likely is it that COVID-19 will infect you?   | DRP1 | Likert Scale (1= Very unlikely to 5 =Very likely)         |
| When I think about my lifestyle, it seems possible that I could be infected by COVID-19.          | DRP2 | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| If I look at myself as a doctor, I realize that my behaviour puts me at risk of getting COVID-19. | DRP3 | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Affective risk perception   |      |   |
| I am worried about the possibility of being infected by COVID-19.                                 | ARP1 | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| I am worried about COVID-19 becoming a health issue.  | ARP2 | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| I am worried about the possibility of my relatives being infected by COVID-19.                    | ARP3 | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| I am worried about COVID-19 occurring in my region.   | ARP4 | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Experiential risk perception  |      |   |
| I am concerned about facing COVID-19.   | ERP1 | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| I feel vulnerable to COVID-19.  | ERP2 | Likert Scale (1= strongly disagree to 5 = strongly agree) |

|  |      |   |
|--|------|---|
| It is easy for me to imagine myself being infected by COVID-19 in the future.                | ERP3 | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| When I hear of someone getting COVID-19, my first reaction is, “that could be me someday”.   | ERP4 | Likert Scale (1= strongly disagree to 5 = strongly agree) |
| Section Three: Demographic Questions   |      |   |
| Gender   | GEN  | Male/Female   |
| Age  | AGE  | Multiple Choice   |
| Marital status   | MAR  | Yes/No  |
| Do you have any children?  | CHI  | Yes/No  |
| What was your highest education attained?  | EDU  | Multiple Choice   |
| Do you have traveling experiences for a vacation within China before COVID-19 (before 2020)? | EXP  | Yes/No  |
| Monthly household income in Chinese Currency (before taxes)                                  | INC  | Multiple Choice   |

In the present study, the researchers utilized both descriptive and inferential statistics to analyse the collected data. Descriptive statistics were employed to summarize and describe the respondents' background factors and their responses to the measurement scales, as noted by Maxwell (2013). This allowed the researchers to gain a better understanding of the characteristics of the sample and the distribution of responses for each variable. On the other hand, inferential statistics were used to test for significant relationships between variables, as pointed out by Wilson (2014). This involved using appropriate statistical tests to examine the strength and direction of the relationships between the study variables and to evaluate the hypotheses proposed. By utilizing both descriptive and inferential statistics, the researchers were able to obtain a comprehensive understanding of the data and identify any significant associations or differences that may exist between the study variables, ultimately supporting the study's research objectives. Primary data analysis such as data entry, respondent's demographic analysis, descriptive analysis, correlational matrix, Exploratory Factor Analysis (EFA) with reliability analysis, and data normality tests were performed using IBM SPSS statistical software version 23. In addition, IBM SPSS AMOS version 23 software packages were used to evaluate the measurement model, structural model, multi group invariance analysis and hypotheses (direct relation testing) of this research. In this study, mediation analysis and moderation analysis were examined using the PROCESS MACRO version 4.0, which is elaborated upon in Chapter 4.

**Table 3.4: Summary of data analysis**

| <b>Research question</b> | <b>Analysis technique</b> |
|--------------------------|---------------------------|
| <b>RQ1, RQ2</b>          | Direct relation analysis  |
| <b>RQ3</b>               | Mediation analysis        |
| <b>RQ4</b>               | Moderation analysis       |

### **3.7 Chapter Summary**

This chapter provides a thorough overview of the methodology employed in the present study. The rationale behind the selection of specific research design, target population, sampling technique, and survey instrument to test the proposed hypotheses and models is carefully explicated. In addition, a comprehensive discussion of data collection and data analysis procedure is presented to provide a clear understanding of the data processing and interpretation process.

## CHAPTER 4: FINDINGS AND ANALYSIS

### 4.1 Introduction

This study applies the Theory of Planned Behaviour to China's domestic tourism and adds three types of risk perception to the theoretical model. The research establishes a conceptual model of the factors influencing travel intention towards domestic tourism and proposes eight hypotheses. To examine these hypotheses, a thorough literature review was undertaken to establish theoretical explanations for each hypothesis (Chapter 2). A sample of 400 respondents, mainly potential domestic tourists in China, were recruited for an online questionnaire survey. The eight hypotheses were examined through descriptive statistical analysis, exploratory factor analysis, reliability and validity analysis, confirmatory factor analysis using SPSS 26.0. AMOS 23.0 was used for multigroup invariance analysis to compare the attributes in different population groups and structural model analysis to determine the relationship between the variables and to re-establish the extended model of the theory of planned behaviour. Furthermore, the mediating and moderating relationships were examined using PROCESS for SPSS v 4.0. The findings of the study validate the proposed hypotheses in this chapter.

### 4.2 Data preparation

#### 4.2.1 Missing data

As suggested by Cohen et al (1988) the researcher made the fullest attempt to avoid missing values at the data collection and data preparation stages. Prior to conducting the final data analysis, it is crucial to prepare the data to ensure that it is clean and devoid of missing values. According to Kline (2016), researchers should gather a complete set of data, including responses to every item. Missing data can cause problems during data analysis and negatively impact the results of structural equation modelling (SEM) due to a reduction in sample size (Hair et al., 2010). As previously noted in the previous chapter,

the data for this study was collected through an online survey of potential Chinese domestic tourists. Respondents were allowed to withdraw their participation at any time, and their responses were not recorded, thereby eliminating unwanted outcomes during data collection. Additionally, the use of Wenjuanxing online survey software ensured that responses were recorded fully, as users were not able to proceed to the next screen until all responses were completed. As a result, the final dataset was free of missing data.

#### 4.2.2 Univariate normality

To assure the univariate normality in the data set, skewness, and kurtosis values were used to examine the normality of the data in current research (Hair et al., 2010; Tabachnick & Fidell, 2007). Table 4.1 shows the skewness statistics ranged from -0.61 to 0.16 and the kurtosis statistics from -1.50 to -0.59. Because none of the absolute values of univariate skewness exceeded two and none of the absolute values of univariate kurtosis exceeded 3, the data should not be treated as extremely violating normality according to Kline's (2016) criteria. Therefore, it can be assumed that there is no significant deviation from univariate normality.

**Table 4.1: The Skewness and Kurtosis statistics of measurements**

| Item | Distribution |          |
|------|--------------|----------|
|      | Skewness     | Kurtosis |
| DRP1 | -0.218       | -0.881   |
| DRP2 | -0.604       | -0.937   |
| DRP3 | -0.4         | -1.104   |
| ARP1 | 0.156        | -1.058   |
| ARP2 | -0.344       | -1.042   |
| ARP3 | -0.351       | -0.887   |
| ARP4 | -0.145       | -0.817   |
| ERP1 | -0.613       | -0.594   |
| ERP2 | -0.529       | -0.851   |
| ERP3 | -0.024       | -1.113   |
| ERP4 | -0.508       | -0.91    |
| ATT1 | -0.3         | -0.659   |
| ATT2 | -0.142       | -1.188   |
| ATT3 | -0.216       | -1.073   |
| ATT4 | -0.13        | -1.145   |

|      |        |        |
|------|--------|--------|
| SN1  | -0.349 | -1.127 |
| SN2  | -0.425 | -0.691 |
| SN3  | -0.285 | -0.928 |
| SN4  | -0.397 | -0.933 |
| PBC1 | -0.226 | -1.059 |
| PBC2 | -0.146 | -1.071 |
| PBC3 | -0.243 | -1.092 |
| PBC4 | -0.187 | -1.117 |
| TI1  | 0.034  | -1.01  |
| TI2  | 0.071  | -1.291 |
| TI3  | -0.15  | -1.496 |
| TI4  | -0.323 | -1.099 |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention

#### 4.2.3 Common method variance assessment

Common method variance (CMV) is the systematic error variance distributed between variables calculated with the same source or process (Richardson et al., 2009). This systemic variance of error can result in common method bias and can bias the expected connections between constructs or measures (Jakobsen & Jensen, 2015). As a subset of method bias, CMV occurs in quantitative research, which may trigger the evaluated associations among two variables increase contrasted to its actual value (Williams & Brown, 1994). Such bias may cause a problem because it may create a loss of construct validity may often be challenging to spot and sometimes not spotted with test a regular assessment for discriminant and convergent validity (Podsakoff et al., 2003).

Internal consistency is another important aspect of research that measures the reliability of data and helps to ensure that the data is consistent and reliable. When CMV is present, it can compromise the internal consistency of the data by introducing systematic error into the data collection process. As a result, the results of the study may be inaccurate and misleading, causing a loss of construct validity. To minimize the impact of CMV, researchers must take measures to control its impact or to minimize its impact



on the results. It is crucial for researchers to be aware of the potential impact of CMV and to take measures to control or minimize its impact on the internal consistency of their research data. By taking these measures, researchers can ensure that the results are reliable and valid. Hence, CMV is always a concern, and researchers are needed to control it in every possible way, and prior and post-doc remedies can be used to avoid the common method variance, following Podsakoff et al. (2003).

However, the prior approaches to controlling CMV through the design of the survey (both the questionnaire and the procedures used for data collection) and choice of respondent may not always be feasible, and even when they are used their impact may not be sufficient. In such cases, researchers must turn to statistical techniques in order to control CMV (Hulland et al., 2018). As a result, this research the post-hoc approach such as Harman's single factor test to assess the presence of a common method bias (Podsakoff et al., 2003). According to Podsakoff et al. (2003), common method bias is a concern when one or single latent factor accounts for the majority of the explained variance. Harman's single factor test was performed to ensure there was no common method bias in the questionnaire survey.

The results of Table 4.2 exposed that the first factor should be <50% (33.54%), less than the threshold level of 50% of the total variance described. Out of the 27 possible linear combinations, only seven were extracted from the principal component analysis because they met the condition of seven values, which is more than one. The eigenvalue is the explainable to unexplainable variation ratio and must be more than one to have a lower residual variance. This process identified that seven factors explained the overall variance, and the total variance explained must be above 50% (79.01%). All (27) items of seven latent variables used in this research were tested in one-factor analysis, and unrotated explanatory factor analysis results showed that one single factor explained 33.53% of the total variance. Therefore, the common method bias was not a severe threat

to analysing further data. Because Podsakoff et al. (2003) recommended that any study do not affect by the common method bias if the total variance for a single factor is smaller than 50%. Therefore, this research was not affected by common method bias.

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**Table 4.2: The statistics of total variance explained for measurements**

| Total Variance Explained |                     |               |              |                                     |               |              |
|--------------------------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|
| Factor                   | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              |
|                          | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % |
| 1                        | 9.055               | 33.537        | 33.537       | 8.446                               | 31.282        | 31.282       |
| 2                        | 2.825               | 10.463        | 44           |                                     |               |              |
| 3                        | 2.782               | 10.303        | 54.303       |                                     |               |              |
| 4                        | 2.076               | 7.688         | 61.991       |                                     |               |              |
| 5                        | 1.859               | 6.884         | 68.875       |                                     |               |              |
| 6                        | 1.707               | 6.324         | 75.198       |                                     |               |              |
| 7                        | 1.03                | 3.815         | 79.013       |                                     |               |              |
| 8                        | 0.542               | 2.006         | 81.02        |                                     |               |              |
| 9                        | 0.44                | 1.628         | 82.647       |                                     |               |              |
| 10                       | 0.406               | 1.503         | 84.151       |                                     |               |              |
| 11                       | 0.391               | 1.447         | 85.598       |                                     |               |              |
| 12                       | 0.341               | 1.262         | 86.86        |                                     |               |              |
| 13                       | 0.331               | 1.227         | 88.087       |                                     |               |              |
| 14                       | 0.312               | 1.154         | 89.241       |                                     |               |              |
| 15                       | 0.294               | 1.088         | 90.329       |                                     |               |              |
| 16                       | 0.274               | 1.016         | 91.345       |                                     |               |              |
| 17                       | 0.267               | 0.99          | 92.335       |                                     |               |              |
| 18                       | 0.251               | 0.929         | 93.265       |                                     |               |              |
| 19                       | 0.248               | 0.918         | 94.183       |                                     |               |              |
| 20                       | 0.227               | 0.841         | 95.023       |                                     |               |              |
| 21                       | 0.222               | 0.824         | 95.847       |                                     |               |              |

|  |       |       |        |  |  |  |
|--|-------|-------|--------|--|--|--|
| 22   | 0.217 | 0.802 | 96.65  |  |  |  |
| 23   | 0.208 | 0.772 | 97.422 |  |  |  |
| 24   | 0.205 | 0.761 | 98.183 |  |  |  |
| 25   | 0.183 | 0.68  | 98.862 |  |  |  |
| 26   | 0.166 | 0.613 | 99.476 |  |  |  |
| 27   | 0.142 | 0.524 | 100    |  |  |  |
| Extraction Method: Principal Axis Factoring. |       |       |        |  |  |  |

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### 4.3 Profile of respondents

In this research, the survey was comprised of three sections. The first section included screening questions. This research used the following inclusion and exclusion criteria while selecting respondents. The respondents must be 18 years and above Chinese citizens with basic knowledge about COVID-19. Above mentioned criteria were checked through screening questions at the beginning of the questionnaire. The first one is “Are you 18 years old or older?”; the second one is “Are you Chinese citizen?”; the third one is “Which symptom is not COVID-19 symptom?”. The screening questions are in order to ensure the aptness of responses collected. If qualified, respondents were requested to proceed to the second section of the survey. The second section was related to the variables of this study. The last section concerned respondents’ personal information about their gender, age, marital status, with or without the child, educational level, monthly household income, and past travel experience before the COVID-19 pandemic. Table 4.3 provides the demographic profile of the respondents who participated in this study.

In total, 456 questionnaires were received, and 400 were usable. Fifty-six questionnaires were discarded due to the uncompleted questionnaires. Males made up 53% of the sample, slightly higher than females (47%). The age of the respondents was recorded as: 18.80% between 18 and 24 years old; 28.70% between 25 and 34 years old; 12.30% between 35 and 44 years old; 40.30 % were 45 and above years old. Approximately 47.50% of the respondents were unmarried; 52.50% were married. More than half of the respondents have children. Moreover, 80.8% of the respondents have attained college or university degrees. The respondents’ monthly household income distribution showed that more than half of them (55.5%) reported CNY 5,000- CNY 10,000. Finally, respondents also provided information regarding their past travelling

experience before the COVID-19 pandemic. 54.25% of respondents had domestic travel experience.

To evaluate the representativeness of the sample, this study compared the demographic characteristics of 400 respondents to the 2021 China demographics reported by Worldmeter (2022). In 2021, the population of China was 1.42 billion, with females accounting for 48.8% and males accounting for 51.2%. Additionally, 43.43% of the population was aged above 45 years old. The comparison showed a close match between the two samples, indicating that the sample of 400 observations was representative of the Chinese population. Moreover, the purpose of this study is to explore the behavioural intention of tourists participate in domestic tourism during the pandemic, then the geographic location of the respondents was not as critical as their demographics or travel pattern<sup>1</sup>. Tourists are a highly mobile group, and they travel across regions and countries, making their geographic location less relevant when considering representativeness. The representativeness of a sample is determined by its size. According to Chapter 3 (Section 3.6.7.3), 352 responses (effect size = 0.3,  $\alpha = 0.05$ , power = 0.80) were recommended as a minimum sample size (two-tailed hypothesis) to test the model in current study. Therefore, as the sample size in this study was 400 respondents in this study, it suggested that the sample was representative.

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<sup>1</sup> The geographic distribution of the sample respondents 400 across different provinces in China.

**Table 4.3: Demographic profile of respondents (N=400)**

| Variable                                   | Category                            | Frequency | Percentage (%) |
|--|-------------------------------------|-----------|----------------|
| Gender                                     | Male                                | 212       | 53.00          |
|  | Female                              | 188       | 47.00          |
| Age  | 18-24                               | 75        | 18.8           |
|  | 25-34                               | 115       | 28.7           |
|  | 35-44                               | 49        | 12.3           |
|  | ≥45                                 | 161       | 40.3           |
| Marital status                             | Unmarried                           | 190       | 47.50          |
|  | Married                             | 210       | 52.50          |
| Has Children                               | No                                  | 186       | 46.50          |
|  | Yes                                 | 214       | 53.50          |
| Education level                            | Secondary school or below           | 77        | 19.3           |
|  | Diploma                             | 146       | 36.50          |
|  | Bachelor's degree                   | 145       | 36.30          |
|  | Master's degree and Doctoral degree | 32        | 8.00           |
| Monthly household income                   | Under CNY 5,000                     | 22        | 5.5            |
|  | CNY 5,000- CNY 10,000               | 222       | 55.5           |
|  | CNY 10,001- CNY 15,000              | 83        | 50.8           |
|  | CNY 15,001- CNY 20,000              | 55        | 13.8           |
|  | More than CNY 20,000                | 18        | 4.5            |
| Past traveling experiences before COVID-19 | No                                  | 183       | 45.75          |
|  | Yes                                 | 217       | 54.25          |

#### 4.4 Descriptive statistical analysis

This study employed a questionnaire consisting of seven sets of five-point Likert-type scales, including the deliberative risk perception scale (3 items), affective risk perception scale (4 items), experiential risk perception scale (4 items), attitude scale (4 items), subjective-norm scale (4 items), perceived behavioural control scale (4 items), and travel intention scale (4 items). Descriptive analysis was conducted for each scale using the complete sample set of 400 participants (Table 4.4). It is recommended that statistical analysis tools at both higher and lower levels of aggregation be used complementarily to obtain helpful information from the data (Hung & Petrick, 2010). The descriptive analysis results are presented in Table 4.4, with the frequency distribution of each measurement item shown in Appendix A. Additionally, when analysing a single variable, both the central tendency (e.g., mean) and variability (e.g., standard deviation) should be reported (Yang, 2010)

According to Liang and Walker (2011), the mean scores for all three items on the deliberative risk perception scale (DRP1, DRP2, DRP3) were above the midpoint of the scale, which indicates a transition from disagreement to agreement. As for the standard deviation of deliberative risk perception items, the lowest to highest scores was 1.28 to 1.32. Moreover, the minimum value of the variable is 1 for all three items, while the maximum value is 5, and the range is 4. Based on the results, it can be concluded that the respondents exhibited a tendency to agree with the statements related to deliberative risk perception. The mean rankings revealed that DRP3 received the highest agreement level, indicating that it was rated more positively than DRP1 and DRP2. That is, the expression of respondents' judgement regarding their susceptibility to COVID-19 that is more related to DPR3.

The mean scores for all four items related to affective risk perception (ARP1, ARP2, ARP3, ARP4) were above the midpoint, indicating that the respondents generally agreed



with these statements. As for the standard deviation of affective risk perception items were 1.14 to 1.29. Moreover, the minimum value of the variable is 1 for all four items, while the maximum value is 5, and the range is 4. In accordance with the mean rankings, ARP1 ranked the highest. Compared to ARP2, ARP3 and ARP4, the respondents generally more agreed and rated ARP1 positively. That is, most of respondents thought the affective responses to the possibility of developing a COVID-19 is related to ARP1.

The mean scores for all four items related to experiential risk perception (ERP1, ERP2, ERP3, ERP4) were above the midpoint, indicating that the respondents generally agreed with these statements. As for the standard deviation of experiential risk perception items were 1.15 to 1.26. Moreover, the minimum value of the variable is 1 for all four items, while the maximum value is 5, and the range is 4. In accordance with the mean rankings, ERP3 ranked the highest. Compared to ERP1, ERP2 and ERP4, the respondents generally more agreed and rated ERP3 positively. Because most respondents thought that a holistic processing that relies on learned associations to assess vulnerability to COVID-19 was more related to ERP3.

The mean scores for all four attitude items (ATT1, ATT2, ATT3, ATT4) were greater than the midpoint, suggesting that the respondents generally agreed with these statements and rated them positively. In other words, the respondents commonly held a favourable attitude toward domestic tourism in China. As for the standard deviation of attitude items were 1.10 to 1.32. Moreover, the minimum value of the variable is 1 for all four items, while the maximum value is 5, and the range is 4. ATT4 ranked the highest. Compared to ATT1, ATT2 and ATT3, the respondents generally more agreed and rated ATT4 positively. That is, most of respondents thought the overall positive or negative evaluation of domestically travelling in China is related to ATT4.

The mean scores for all four subjective norm items (SN1, SN2, SN3, SN4) were greater than the midpoint, suggesting that the respondents generally agreed with these

statements and rated them positively. That means the respondents commonly felt greater social pressure from important others to domestic tourism in China. As for the standard deviation of subjective norm items were 1.18 to 1.28. Moreover, the minimum value of the variable is 1 for all four items, while the maximum value is 5, and the range is 4. In accordance with the mean rankings, SN1 ranked the highest. Compared to SN2, SN3 and SN4, the respondents generally more agreed and rated SN1 positively. That is, most of respondents thought the social pressure they perceive regarding performing or not performing domestically travelling in China is related to SN1.

The mean scores for all four perceived behavioral control items (PBC1, PBC2, PBC3, PBC4) were greater than the midpoint, indicating that the respondents generally agreed with these statements and rated them positively. The respondents commonly held higher perceived behavioural control for domestic tourism in China. As for the standard deviation of perceived behavioural control items were 1.30 to 1.31. Moreover, the minimum value of the variable is 1 for all four items, while the maximum value is 5, and the range is 4. In accordance with the mean rankings, PBC3 ranked the highest. Compared to PBC1, PBC2 and PBC4, the respondents generally more agreed and rated PBC3 positively. That is, most of respondents thought the perceptions of their ability to perform domestically travelling in China is related to PBC3.

The mean scores for three of the four travel intention items (TI1, TI2, TI4) were higher than the midpoint, with the mean score for TI3 being close to the midpoint. The results indicated that the respondents exhibited a tendency to agree with the statements and rated them positively, which suggests that there was a prevalent positive intention among the respondents to travel domestically. As for the standard deviation of travel intention items were 1.16 to 1.45. Moreover, the minimum value of the variable is 1 for all four items, while the maximum value is 5, and the range is 4. In accordance with the mean rankings, TI2 ranked the highest. Compared to TI1, TI3 and TI4, the respondents generally more

agreed and rated TI2 positively. That is, most of respondents thought the indication of their readiness to perform domestically travelling in China is related to TI2.

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**Table 4.4: Descriptive Statistics of measurement items (N=400)**

| Item  | Mean | Std. Deviation | Range | Min. | Max. | Rank |
|---|------|----------------|-------|------|------|------|
| <b>Deliberative risk perception (DRP)</b>   |      |                |       |      |      |      |
| DRP3: If I look at myself as a doctor, I realize that my behaviour puts me at risk of getting COVID-19. | 3.35 | 1.32           | 4     | 1    | 5    | 1    |
| DRP1: How likely is it that you will be infected by COVID-19?   | 3.30 | 1.25           | 4     | 1    | 5    | 2    |
| DRP2: When I think about my lifestyle, it seems possible that I could be infected by COVID-19           | 3.20 | 1.28           | 4     | 1    | 5    | 3    |
| <b>Affective risk perception (ARP)</b>  |      |                |       |      |      |      |
| ARP1: I am worried about the possibility of being infected by COVID-19                                  | 3.25 | 1.14           | 4     | 1    | 5    | 1    |
| ARP2: I fear the possibility of being infected by COVID-19.   | 3.23 | 1.29           | 4     | 1    | 5    | 2    |
| ARP4: I feel nervous about the possibility of being infected by COVID-19.                               | 3.20 | 1.16           | 4     | 1    | 5    | 3    |
| ARP3: I am worried about the possibility of my relatives being infected by COVID-19.                    | 3.20 | 1.20           | 4     | 1    | 5    | 4    |
| <b>Experiential risk perception (ERP)</b>   |      |                |       |      |      |      |
| ERP3: It is easy for me to imagine myself being infected by COVID-19 in the future.                     | 3.34 | 1.22           | 4     | 1    | 5    | 1    |
| ERP4: When I hear of someone getting COVID-19, my first reaction is, "that could be me someday".        | 3.31 | 1.26           | 4     | 1    | 5    | 2    |
| ERP2: I feel vulnerable to COVID-19.  | 3.23 | 1.24           | 4     | 1    | 5    | 3    |
| ERP1: I am concerned about facing COVID-19  | 3.21 | 1.15           | 4     | 1    | 5    | 4    |
| <b>Attitude (ATT)</b>   |      |                |       |      |      |      |
| ATT4: Domestic tourism is valuable  | 3.22 | 1.32           | 4     | 1    | 5    | 1    |
| ATT1: Domestic tourism is enjoyable   | 3.21 | 1.10           | 4     | 1    | 5    | 2    |
| ATT2: Domestic tourism is beneficial  | 3.18 | 1.28           | 4     | 1    | 5    | 3    |

|   |      |      |   |   |   |   |
|---|------|------|---|---|---|---|
| ATT3: Domestic tourism is attractive.   | 3.16 | 1.22 | 4 | 1 | 5 | 4 |
| Subjective norm (SN)  |      |      |   |   |   |   |
| SN1: Most people who are important to me think that it is a good idea to travel within China. | 3.35 | 1.28 | 4 | 1 | 5 | 1 |
| SN3: Most people who are important to me support that I travel within China.                  | 3.29 | 1.20 | 4 | 1 | 5 | 2 |
| SN4: Most people who are important to me understand that I travel within China                | 3.26 | 1.28 | 4 | 1 | 5 | 3 |
| SN2: Most people who are important to me agree with me to travel within China.                | 3.22 | 1.18 | 4 | 1 | 5 | 4 |
| Perceived behavioural control (PBC)   |      |      |   |   |   |   |
| PBC3: I am capable of traveling in China.   | 3.23 | 1.30 | 4 | 1 | 5 | 1 |
| PBC1: I am confident that if I want to, I can travel within China                             | 3.22 | 1.30 | 4 | 1 | 5 | 2 |
| PBC4: Whether or not I travel within China is completely up to me.                            | 3.17 | 1.31 | 4 | 1 | 5 | 3 |
| PBC2: I have opportunities to travel within China.  | 3.16 | 1.30 | 4 | 1 | 5 | 4 |
| Travel intention (TI)   |      |      |   |   |   |   |
| TI2: I will make an effort to travel within China   | 3.26 | 1.26 | 4 | 1 | 5 | 1 |
| TI1: I intent to travel within China.   | 3.08 | 1.16 | 4 | 1 | 5 | 2 |
| TI4: I plan to invest time in travelling within China   | 3.03 | 1.29 | 4 | 1 | 5 | 3 |
| TI3: I willing to travel within China.  | 2.99 | 1.45 | 4 | 1 | 5 | 4 |

#### 4.5 Correlation analysis

Correlation measures the magnitude of the association among a set of variables, specifically, the degree to which, as one variable's value changes, the other variable's value also changes (Hair et al., 2018). This section specifies the associations among the four unobserved latent constructs of the research. As per the recommendation of Cohen (1992), this study followed the cut-off values for the effect size of the associations. Hence, an R-value below 0.28 means a low correlation, an R-value between 0.28 to 0.49 means a moderate correlation, and an R-value higher than 0.50 means a significant correlation. A confidence interval of 99% is used to evaluate an association's degree or level of significance. However, any perfect or extremely strong association between two constructs is undesirable and may indicate multicollinearity—a range of cut-off values specified in the literature to monitor this assessment. For example, Rubin (2009) proposed that multicollinearity is observed if the correlation coefficient magnitude surpasses the cut-off value accounts for a significant proportion of variance ( $r=0.80$  or above) for multiple coefficients.

Table 4.5 represents the association between the proposed variables of this study at the 0.001 and 0.005 significance levels. These outcomes of the correlations are in the estimated direction and demonstrates primary support to the proposed hypotheses for this research. The following observations highlight the nature of the relationships between the variables studied in the research. Deliberative risk perception shows a significant and positive moderate association with attitude ( $r=0.30$ ,  $p< 0.001$ ), subjective norm ( $r=0.32$ ,  $p< 0.001$ ) a significant and positive large association with travel intention ( $r=0.50$ ,  $p< 0.001$ ), but only a significant and positive low association with perceived behavioural control ( $r=0.12$ ,  $p< 0.05$ ). Affective risk perception shows significant positive moderate associations with attitude ( $r=0.29$ ,  $p< 0.001$ ), subjective norm ( $r=0.37$ ,  $p< 0.001$ ) and

travel intention ( $r = 0.43$ ,  $p < 0.001$ ), but only a significant and positive low association with perceived behavioural control ( $r = 0.12$ ,  $p < 0.05$ ). Experiential risk perception shows significant, positive and moderate associations with attitude ( $r = 0.30$ ,  $p < 0.001$ ), subjective norm ( $r = 0.35$ ,  $p < 0.001$ ) and travel intention ( $r = 0.41$ ,  $p < 0.001$ ), but only a significant and positive low association with perceived behavioural control ( $r = 0.12$ ,  $p < 0.05$ ). Attitude shows significant, positive and large associations with travel intention ( $r = 0.57$ ,  $p < 0.001$ ). Perceived behavioural control shows significant, positive and moderate associations with travel intention ( $r = 0.34$ ,  $p < 0.001$ ). Finally, the  $r$  values presented in Table 4.3 show that there is no multicollinearity issue in this study, as the values of  $r$  among each pair of constructs were smaller than 0.80, which is in line with the suggested values of Rubin (2009). Table 4.5 shows that deliberative risk perception, affective risk perception, experiential risk perception, attitude, subjective norm, and perceived behavioural control were all significantly correlated to travel intention.

**Table 4.5: The correlations among the study variables**

| Variable | DRP    | ARP    | ERP    | ATT    | SN     | PBC    | TI |
|----------|--------|--------|--------|--------|--------|--------|----|
| DRP      | 1      |        |        |        |        |        |    |
| ARP      | 0.28** | 1      |        |        |        |        |    |
| ERP      | 0.27** | 0.11*  | 1      |        |        |        |    |
| ATT      | 0.30** | 0.29** | 0.30** | 1      |        |        |    |
| SN       | 0.32** | 0.37** | 0.35** | 0.29** | 1      |        |    |
| PBC      | 0.12*  | 0.12*  | 0.12*  | 0.27** | 0.13** | 1      |    |
| TI       | 0.50** | 0.43** | 0.41** | 0.57** | 0.51** | 0.34** | 1  |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention

\* Correlation is significant at the 0.05 level (2-tailed).



#### 4.6 Exploratory factor analysis and reliability analysis

Principal components extraction and rotation were utilized in conducting an exploratory factor analysis on the calibration sample, with the aim of identifying the underlying factor structure. Both the Kaiser (1974) eigenvalue rule, which involves the retention of factors with eigenvalues greater than one, and Cattell's (1966) scree plot rule, which involves the retention of factors above the elbow, were employed to determine the appropriate number of factors. Items exhibiting low factor loadings ( $<0.40$ ) or high cross-loadings ( $>0.40$ ) were eliminated one at a time, and the process was continued until no more items required removal. The exploratory factor analysis revealed a three-factor solution, which is presented in Table 4.6. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value for the sample size adequacy for factor analysis was 0.91, indicating that the data was meritorious for factor analysis within the 0.8-0.9 range suggested by Kaiser (1974). Furthermore, the test statistic for Bartlett's Test of Sphericity (BTS) was significant ( $\chi^2=7851.03$ ;  $df=351$ ;  $p<0.001$ ), confirming the factorability of the data (Bartlett, 1954).

As mentioned previously, Table 4.2 represents that the total variance explained is thus 79.01%, which is above the suggested threshold of 60% (Hinkin, 2005). Principal component analysis was used to extract the factors by applying the constraint of higher than one eigenvalue for each factor (Malhotra et al., 2016). Only variables with loadings of at least 0.40 were included in the analysis. After exploratory factor analysis was conducted, all 27 items appropriately loaded on the factors.

Moreover, in exploratory factor analysis, factor loadings are used to identify patterns in the data, to reduce the number of variables, and to understand the structure of the relationships between the variables. EFA factor loadings are usually unstandardized and

reflect the strength of the relationship between the variable and the factor. According to Table 4.7, among the DRP items, DRP2 has the highest factor loading of 0.89, which means that it has the strongest association with the DRP factor. Conversely, DRP1 has the lowest factor loading of 0.85, indicating a weaker association with the DRP factor. Among the ARP items, ARP2 has the highest factor loading of 0.87, which means that it has the strongest association with the ARP factor. Conversely, ARP3 has the lowest factor loading of 0.83, indicating a weaker association with the ARP factor. Among the ERP items, ERP1, ERP2, and ERP4 have the highest factor loading of 0.87, which means that they have the strongest association with the ERP factor. Conversely, ERP3 has the lowest factor loading of 0.84, indicating a weaker association with the ERP factor. Among the ATT items, ATT2 and ATT4 have the highest factor loading of 0.85, which means that they have the strongest association with the ATT factor. Conversely, ATT1 and ATT3 have the lowest factor loading of 0.84, indicating a weaker association with the ATT factor. Among the SN items, SN3 has the highest factor loading of 0.86, which means that it has the strongest association with the SN factor. Conversely, SN1 and SN4 have the lowest factor loading of 0.84, indicating a weaker association with the SN factor. Among the PBC items, PBC2 and PBC4 have the highest factor loading of 0.83, which means that they have the strongest association with the PBC factor. Conversely, PBC1 and PBC3 have the lowest factor loading of 0.76, indicating a weaker association with the PBC factor. Among the TI items, TI2 and TI3 have the highest factor loading of 0.77, which means that they have the strongest association with the TI factor. Conversely, TI1 has the lowest factor loading of 0.74, indicating a weaker association with the TI factor. Cronbach's alpha ( $\alpha$ ) was used to analyse the reliability of the instruments. Reliability over 0.80 is good; reliability in the range of 0.70 is acceptable, and reliability less than 0.60 is considered poor (Hair et al., 2010). The Cronbach's coefficient  $\alpha$  estimates for the seven variables were greater than the 0.80 considered good. The exploratory factor

analysis results satisfied the requirement for the reliability coefficient of the measurement scales, revealing high internal consistency (Hair et al., 2010).

**Table 4.6: The statistics of KMO of Sampling Adequacy and BTS**

| <b>KMO and Bartlett's Test</b>                   |                    |         |
|--|--------------------|---------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | 0.91    |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 7851.03 |
|  | df                 | 351     |
|  | Sig.               | <0.001  |

**Table 4.7: Exploratory Factor Analysis**

| Factor and item | Factor loading | Reliability Statistics |                                  |
|-----------------|----------------|------------------------|----------------------------------|
|                 |                | Cronbach's Alpha       | Cronbach's Alpha if Item Deleted |
| DRP             |                | 0.90                   |                                  |
| DRP1            | 0.85           |                        | 0.88                             |
| DRP2            | 0.89           |                        | 0.83                             |
| DRP3            | 0.86           |                        | 0.84                             |
| ARP             |                | 0.91                   |                                  |
| ARP1            | 0.85           |                        | 0.89                             |
| ARP2            | 0.87           |                        | 0.88                             |
| ARP3            | 0.83           |                        | 0.88                             |
| ARP4            | 0.86           |                        | 0.88                             |
| ERP             |                | 0.91                   |                                  |
| ERP1            | 0.87           |                        | 0.89                             |
| ERP2            | 0.87           |                        | 0.88                             |
| ERP3            | 0.84           |                        | 0.90                             |
| ERP4            | 0.87           |                        | 0.88                             |
| ATT             |                | 0.92                   |                                  |
| ATT1            | 0.84           |                        | 0.90                             |
| ATT2            | 0.85           |                        | 0.89                             |
| ATT3            | 0.84           |                        | 0.89                             |
| ATT4            | 0.85           |                        | 0.89                             |
| SN              |                | 0.92                   |                                  |
| SN1             | 0.84           |                        | 0.89                             |
| SN2             | 0.85           |                        | 0.91                             |
| SN3             | 0.86           |                        | 0.90                             |
| SN4             | 0.84           |                        | 0.89                             |
| PBC             |                | 0.83                   |                                  |
| PBC1            | 0.76           |                        | 0.80                             |
| PBC2            | 0.83           |                        | 0.78                             |
| PBC3            | 0.79           |                        | 0.80                             |
| PBC4            | 0.83           |                        | 0.78                             |
| TI              |                | 0.93                   |                                  |
| TI1             | 0.77           |                        | 0.91                             |

|     |      |  |      |
|-----|------|--|------|
| TI2 | 0.74 |  | 0.90 |
| TI3 | 0.74 |  | 0.89 |
| TI4 | 0.74 |  | 0.91 |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention

#### 4.7 Confirmatory Factor Analysis

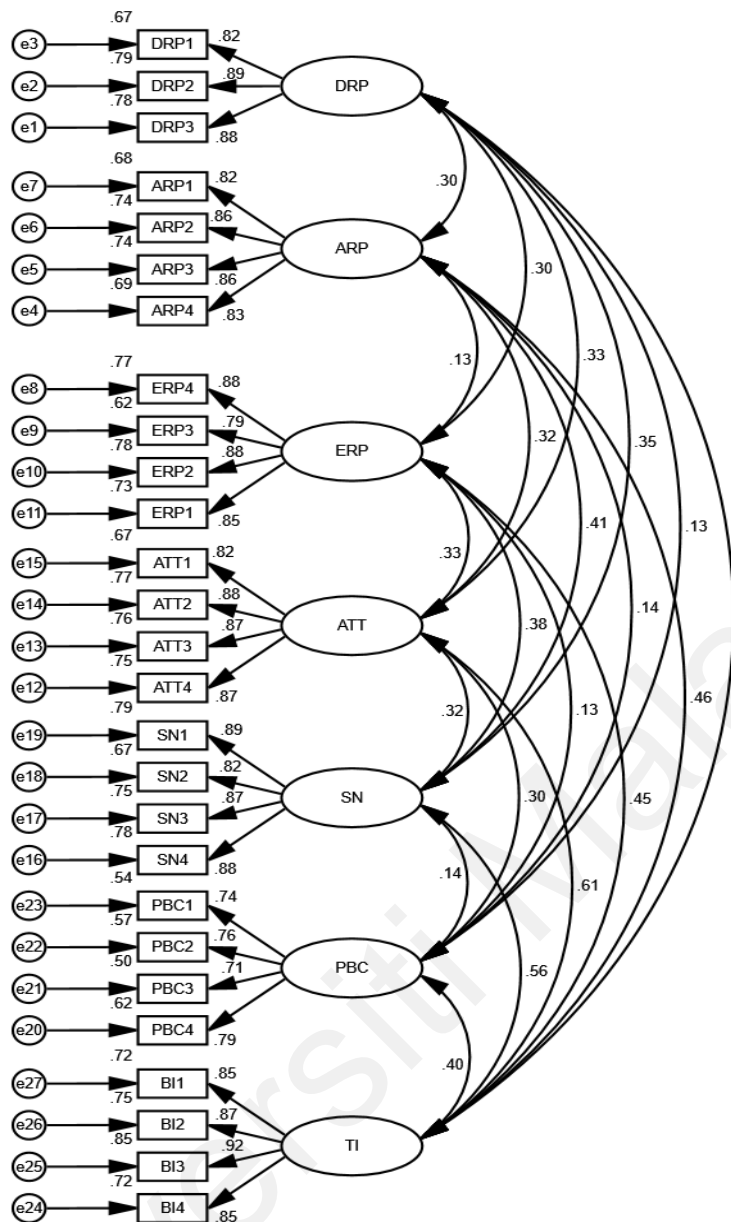
Although exploratory factor analysis (EFA) focuses on validity, the absolute test of measurement should be provided through Confirmatory Factor Analysis (CFA) using Structural Equation Modelling (SEM) technique. SEM is known by different approaches such as covariance-based analysis (CB-SEM), latent variable analysis, and variance-based SEM such as PLS path analysis (Becker et al., 2012; Nunkoo et al., 2013). Based on Hair et al. (2010), SEM combines multiple regression analysis, multivariate analysis of variance, and factor analysis in one comprehensive model that facilitates simultaneous assessment.

Based on Anderson and Gerbing (1988), this research used a two-step modelling approach. The first step in performing SEM is to develop a measurement model and obtain a fitting group of items to represent each scale best. In this part, the measurement model showed how observed variables facilitate the measurement of latent variables. The second step is to perform structural modelling with specifications that define the causal relationships among latent variables and explain the causal effect followed by unexplained variance.

**Table 4.8: Fit indices for the measurement model fit**

| <b>Fit Indices</b>                              | <b>Recommended Value</b> | <b>Index</b> |
|---|--------------------------|--------------|
| chi-square ( $\chi^2$ )                         | -                        | 353          |
| Degrees of freedom (df)                         | -                        | 303          |
| Normed chi-square ( $\chi^2/df$ )               | $\leq 3$                 | 1.17         |
| Root Mean Square Error of Approximation (RMSEA) | $\leq 0.08$              | 0.02         |
| Standardized Root Mean Square Residual (SRMR)   | $\leq 0.08$              | 0.03         |
| Goodness-of-Fit Index (GFI)                     | $\geq 0.9$               | 0.94         |
| Adjusted goodness of fit index (AGFI)           | $\geq 0.9$               | 0.93         |
| Comparative Fit Index (CFI)                     | $\geq 0.9$               | 0.99         |
| Incremental Fit Index (IFI)                     | $\geq 0.9$               | 0.99         |
| Normed Fit Index (NFI)                          | $\geq 0.9$               | 0.96         |

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**Figure 4.1: Results of the CFA**

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention

Confirmatory factor analysis was performed prior to structural model testing to confirm the fit of the measurement model to the study data. To validate the underlying dimensions of the seven latent variables obtained from the exploratory factor analysis, the researcher employed the maximum likelihood estimation technique to conduct a confirmatory factor analysis on the validation sample (Hair et al., 2010). The

measurement model included seven latent constructs and 27 observed indicators. This research allowed the latent variables to correlate in the confirmatory factor analysis, and the observed indicators were restricted to load only on their associated constructs. Chi-square (CMIN) statistic is associated probability or p-value, which should be statistically nonsignificant if there is a good model fit (Hair et al., 2010). Nevertheless, the chi-square statistic is very sensitive to sample size and is no longer a basis for acceptance or rejection (Schermelleh-Engel et al., 2003; Vandenberg, 2006). Therefore, the use of multiple fit indices has been developed to provide a more comprehensive view of goodness-of-fit, considering sample size, model complexity, and other related issues of the study. Structural equation modelling scholars recommend using other common goodness-of-fit measures (Brown, 2007; Byrne, 2010; Hair et al., 2010; Hooper et al., 2008). These include normed chi-square (i.e., ratio of chi-square to degrees of freedom), Root Mean Square Error of Approximation (RMSEA), Standardized Root Mean Square Residual (SRMR), Goodness-of-Fit Index (GFI), adjusted goodness of fit index (AGFI), Comparative Fit Index (CFI), incremental fit index (IFI), normed fit index (NFI). In general, it is recommended that the normed chi-square value should be three or less, while the RMSEA and SRMR should be 0.08 or less, and the GFI, AGFI, CFI, IFI, and NFI should be 0.90 or above (Brown, 2007; Byrne, 2010; Hair et al., 2010; Hooper et al., 2008). According to the Table 4.8, the fit of the measurement model for the study conducted is acceptable, with chi-square=353, degrees of free=303, normed chi-square=1.17; RMSEA = 0.02 (90% CI: 0.01, 0.03); SRMR=0.03, GFI=0.94, AGFI=0.93, CFI=0.99, IFI=0.99, NFI=0.96. Considering all the goodness of fit measures, the model is an adequately suitable fit to the data from the sample. Figure 4.1 displays the results of the measurement model.

Subsequently, in Confirmatory Factor Analysis (CFA), factor loadings are used to test hypotheses about the structure of the data and to confirm the factor structure found in an

EFA. CFA factor loadings are usually standardized and represent the regression weight of the variable on the factor. In CFA, factor loadings are estimated to test the hypothesis that the observed variables load on the underlying factors in a specific manner, and they are typically constrained to be equal across items to ensure that the factors are measured consistently. According to Table 4.9, For the DRP factor, DRP2 has the highest standardized factor loading with a value of 0.89, while DRP1 has the lowest values with 0.82. For the ARP factor, ARP2 and ARP3 have the highest standardized factor loading with values of 0.86 and 0.86 respectively, while ARP1 has the lowest value with 0.82. For the ERP factor, ERP2 and ERP4 have the highest standardized factor loading with values of 0.88, while ERP1 has a value of 0.85 and ERP3 has a value of 0.79. For the ATT factor, ATT2 has the highest standardized factor loading with values of 0.88, while ATT1 has a value of 0.82. For the SN factor, SN1 has the highest standardized factor loading with a value of 0.89, while SN4 has the second highest value of 0.88, and SN2 and SN3 have values of 0.82 and 0.87 respectively. For the PBC factor, PBC4 has the highest standardized factor loading with a value of 0.79, while PBC1, PBC2, and PBC3 have values of 0.73, 0.76, and 0.70 respectively. For the TI factor, TI3 has the highest standardized factor loading with a value of 0.92, while TI1, TI2, and TI4 have values of 0.85, 0.87, and 0.84 respectively.

To evaluate the internal consistency reliability and convergent validity of each dimension in the model, the researcher calculated the Composite Reliability (CR) and Average Variance Extracted (AVE) coefficients. Table 4.8 shows that the Composite Reliability (CR) scores were 0.90 for deliberative risk perception (three items); 0.90 for affective risk perception (four items); 0.91 for experiential risk perception (four items), 0.92 for attitude (four items); 0.92 for subjective norm (four items); 0.83 for perceived behavioural control (four items); 0.93 for travel intention (four items). All constructs were above the recommended cut-off (i.e., 0.70) (Hair et al., 2010). The data presented in the



figures suggest that all dimensions of the model were found to be reliable, as evidenced by their respective Composite Reliability (CR) and Average Variance Extracted (AVE) coefficients meeting the recommended thresholds for internal consistency reliability and convergent validity (Fornell & Larcker, 1981).

The Average Variance Extracted (AVE) value for deliberative risk perception was 0.75, affective risk perception was 0.70, experiential risk perception was 0.73, the attitude was 0.74, the subjective norm was 0.75 for perceived behavioural control was 0.56, for travel intention was 0.76. All constructs are above the threshold of 0.5 (Hair et al., 2010). The results imply that the convergent validity of deliberative risk perception, affective risk perception, experiential risk perception, attitude, subjective norm, perceived behavioural control, and travel intention was adequately demonstrated.

**Table 4.9: Confirmatory factor analysis: CR and AVE**

| <b>Factor and item</b> | <b>Standardised Factor Loading</b> | <b>Composite Reliability</b> | <b>Average Variance Extracted</b> |
|------------------------|------------------------------------|------------------------------|-----------------------------------|
| DRP                    |                                    | 0.90                         | 0.75                              |
| DRP1                   | 0.82                               |                              |                                   |
| DRP2                   | 0.89                               |                              |                                   |
| DRP3                   | 0.88                               |                              |                                   |
| ARP                    |                                    | 0.90                         | 0.70                              |
| ARP1                   | 0.82                               |                              |                                   |
| ARP2                   | 0.86                               |                              |                                   |
| ARP3                   | 0.86                               |                              |                                   |
| ARP4                   | 0.83                               |                              |                                   |
| ERP                    |                                    | 0.91                         | 0.73                              |
| ERP1                   | 0.85                               |                              |                                   |
| ERP2                   | 0.88                               |                              |                                   |
| ERP3                   | 0.79                               |                              |                                   |
| ERP4                   | 0.88                               |                              |                                   |
| ATT                    |                                    | 0.92                         | 0.74                              |
| ATT1                   | 0.82                               |                              |                                   |
| ATT2                   | 0.88                               |                              |                                   |
| ATT3                   | 0.87                               |                              |                                   |
| ATT4                   | 0.87                               |                              |                                   |
| SN                     |                                    | 0.92                         | 0.75                              |
| SN1                    | 0.89                               |                              |                                   |
| SN2                    | 0.82                               |                              |                                   |
| SN3                    | 0.87                               |                              |                                   |
| SN4                    | 0.88                               |                              |                                   |
| PBC                    |                                    | 0.83                         | 0.65                              |
| PBC1                   | 0.73                               |                              |                                   |
| PBC2                   | 0.76                               |                              |                                   |
| PBC3                   | 0.70                               |                              |                                   |
| PBC4                   | 0.79                               |                              |                                   |
| TI                     |                                    | 0.93                         | 0.76                              |
| TI1                    | 0.85                               |                              |                                   |
| TI2                    | 0.87                               |                              |                                   |
| TI3                    | 0.92                               |                              |                                   |
| TI4                    | 0.84                               |                              |                                   |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention

Discriminant validity is measured by comparing the associations or correlations among constructs and the square root of average variance extracted (AVEs) for a latent variable. Table 4.10 shows the correlation matrix for the latent variables or constructs. The diagonal of the matrix contains the square roots of AVEs that need to be higher than off-diagonal elements in the corresponding columns and rows to confirm discriminant validity (Hair et al., 2010). As presented in Table 4.10, the diagonal components are higher than the off-diagonal components in the corresponding columns and rows. The outcomes confirm no association among any two latent constructs higher than or equal to the square root of AVEs of the two latent constructs or variables. The results present adequate discriminant validity for all the latent constructs in the proposed hypothesized model. In other words, the findings presented that the measurement model in this research confirmed discriminant validity which means that latent constructs or variables proposed in this hypothesized model are unlikely to each other. Finally, this can be concluded that the measurement model of this research established acceptable convergent and discriminant validity and could be conducted using SEM for further path analysis.

**Table 4.10: The Discriminant Validity of the Measurement Constructs**

|     | AVE  | ARP  | DRP   | ERP   | PBC   | SN    | ATT   | TI    |
|-----|------|------|-------|-------|-------|-------|-------|-------|
| ARP | 0.73 | 0.85 |       |       |       |       |       |       |
| DRP | 0.75 | 0.30 | 0.865 |       |       |       |       |       |
| ERP | 0.74 | 0.13 | 0.295 | 0.861 |       |       |       |       |
| PBC | 0.65 | 0.15 | 0.136 | 0.135 | 0.803 |       |       |       |
| SN  | 0.72 | 0.41 | 0.348 | 0.383 | 0.111 | 0.849 |       |       |
| ATT | 0.71 | 0.37 | 0.335 | 0.332 | 0.095 | 0.258 | 0.845 |       |
| TI  | 0.56 | 0.47 | 0.553 | 0.456 | 0.336 | 0.544 | 0.576 | 0.748 |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention

#### 4.8 Structural model analysis

Table 4.11 shows the fit of the confirmatory factor analysis for the study conducted is acceptable, with chi-square=386.1, degrees of free=309, normed chi-square=1.25, RMSEA=0.03, SRMR=0.06, GFI=0.94, AGFI=0.92, CFI=0.99, IFI=0.99, NFI=0.95. Considering all the goodness of fit measures, the model is an adequately suitable fit to the data from the sample. The structural model was evaluated since the proposed measurement relationships were consistent with the data. An examination of the structural model involves significance tests for the estimated coefficients (paths), which provide the basis for accepting or rejecting the proposed relationships between latent constructs.

**Table 4.11: Fit indices for the structural model fit**

| Fit Indices                                     | Recommended Value | Index |
|---|-------------------|-------|
| chi-square ( $\chi^2$ )                         | -                 | 373   |
| Degrees of freedom (df)                         | -                 | 306   |
| Normed chi-square ( $\chi^2/df$ )               | $\leq 3$          | 1.25  |
| Root Mean Square Error of Approximation (RMSEA) | $\leq 0.08$       | 0.03  |
| Standardized Root Mean Square Residual (SRMR)   | $\leq 0.08$       | 0.06  |
| Goodness-of-Fit Index (GFI)                     | $\geq 0.9$        | 0.94  |
| AGFI  | $\geq 0.9$        | 0.92  |
| Comparative Fit Index (CFI)                     | $\geq 0.9$        | 0.99  |
| Incremental Fit Index (IFI)                     | $\geq 0.9$        | 0.99  |
| NFI (Normed Fit Index)                          | $\geq 0.9$        | 0.95  |

#### 4.9 Multi-group invariance analysis

Multi-group invariance analysis was employed as the robustness test for this study. When an assessment tool is developed to measure a particular construct (and/or different dimensions of a construct), it is important to know whether this tool is measuring the same construct (and dimensions of the construct) in people from distinct populations (e.g.,

gender, cultural groups, etc.), so that the instrument can be appropriately used to compare the attributes in different population groups (Yu & Shek, 2014). There are three aspects of factorial invariance: configural invariance, structural invariance, and measurement invariance. Configural invariance refers to invariance of the model configuration, i.e., whether the factorial structure of the instrument remains the same when applied to different populations (i.e., equal pattern). Configural invariance is achieved if the model of interest fits across the groups (e.g., having the same number of factors), which is usually the first step in testing factorial invariance. To do so, a baseline model must first be separately identified and estimated for different groups and then estimated for all groups simultaneously. Ultimately, the model fit provides evidence for the configural invariance. Measurement invariance concerns how the items measure the latent construct across groups. Structural invariance refers to the invariance of factor variances and covariances, i.e., how the latent factors are distributed and related in different populations.

The Theory of Planned Behaviour is a common framework applied in tourism studies to gather information on the demographic and travel-related characteristics of the target population, such as gender, marital status, and past travel experience. This information is used in various ways, including profiling the sample or segmenting the population into subgroups that may differ in terms of attitudes, subjective norms, perceptions of control, and intentions (Ajzen, 1991). Such segmentation allows for a deeper understanding of the various factors that contribute to travel-related behaviour, enabling researchers and practitioners to develop targeted strategies to influence these behaviours (Bae & Chang, 2021; Okazaki & Hirose, 2009; Promsivapallop & Kannaovakun, 2018). For instance, Okazaki and Hirose (2009) stated that female users are more predisposed to media displacement–reinforcement effects than male users in travel information search. Furthermore, previous studies have explored that travel risk perceptions are associated with the personal characteristics of tourist’s previous travel experience (e.g., Adam, 2015;

Fuchs & Reichel, 2011; Lepp & Gibson, 2003; Promsivapallop & Kannaovakun, 2018), gender (Bae & Chang, 2021; Carr, 2001; Mitchell & Vincent, 1998; Promsivapallop & Kannaovakun, 2018; Reichel et al., 2007) and educational levels (Karl, 2018). The current study collected demographic and travel-related information on potential Chinese tourists for descriptive and comparative purposes. The target population was segmented into subgroups based on background factors.

In this research study, a multi-group invariance analysis was conducted to assess whether the model relationships differed across gender, marital status, and travel experience groups. The use of a multi-group analysis can address two primary concerns. The first concern is whether the content of the questionnaire items is being interpreted similarly by both groups, and the second concern is whether the construct being measured has the same meaning and number of dimensions across the samples. Multi-group invariance testing, which involves the use of covariance-based structural equation modeling (SEM), is the most common approach used to establish the measurement and structural equivalence of the model paths across groups. This approach begins with an examination of the measurement model and estimation of the least restrictive (unconstrained) model for each group in the set. This is followed by the estimation of the unconstrained model for all the groups as a whole, which is referred to as the configural model. The structural model estimates are then evaluated for invariance by comparing the models across the groups. The equality constraint is applied to the set of parameters across the unconstrained and constrained models (e.g., factor loadings and structural paths). The chi-square difference test is then undertaken to compare the model fit of the configural model and the constrained model. If there is no statistical difference, this study concludes that the groups can be aggregated for analysis because they are invariant.

According to Table 12, the first step in testing for cross-group equivalence involves loose cross-validation. In this study, the male and female groups were validated using confirmatory factor analysis (CFA) on the same measurement model in each group. Test statistics were used to measure group equivalence, with the chi-square to degrees of freedom ratio being less than the threshold of 2.0. The associated p-value indicated a significant chi-square, which is commonly associated with large samples. Therefore, other fit indices were also examined. The root mean square error of approximation (RMSEA) values and comparative fit index (CFI) were similar for each group and suggested a good fit for both male and female groups. The RMSEA values were at the 0.08 threshold. No significant problems were observed with construct validity in either sample. Therefore, the loose cross-validation criteria were met because the measurement model appeared valid in both samples taken separately.

The second step involves testing the configural model, which did not have any cross-group constraints imposed (the unconstrained model). This allows for a basic form of equivalence to be tested simultaneously across the groups. This model test is used only to confirm that the factor structure is similar across groups, even though it may not be equivalent. Thus, it was ensured that the groups should have the same number of latent constructs, the same number of manifest indicators, and the same pattern of fixed and freed parameters. Configural invariance was verified, as the separate models for respondents from male and female groups both exhibited an acceptable level of model fit ( $\chi^2/df=1.195 < 3.0$ ,  $RMSE=0.022 < 0.08$ ,  $CFI=0.979 > 0.9$ ) (see Table 4.12). In view of the similar pattern, it was concluded that there is a basic level of configural invariance across both groups.

In the third step of the analysis, the researchers tested for measurement equivalence to determine if the survey items were being perceived and interpreted in the same way by

both male and female respondents (Byrne, 2010). The measurement model assessed the invariance of factor loadings by imposing equality constraints on these parameters for both groups. The results of the measurement invariance tests are presented in Table 4.12. A comparison of the unconstrained and constrained models yielded a non-significant chi-square difference of 24.315 with 20 degrees of freedom and a p-value of 0.229. This indicates that the two models exhibit full metric invariance, meaning that the same seven factors and factor loadings for specific items measuring each factor are invariant for both male and female respondents.

The final step in the study involved examining structural equivalence, which differs from measurement equivalence in that it focuses on latent variables rather than observed variables. To evaluate this, the study followed the recommendation of Byrne et al. (2004) and examined factor covariance. The aim was to determine whether the theoretical dimensionality of the construct was consistent across both male and female groups. The unconstrained model estimated an identical structural model in both groups simultaneously, while the constrained model estimated the fifteen construct paths to be equal in both groups. Both models were found to be an acceptable level of model fit ( $\chi^2/df < 3.0$ ,  $RMSE < 0.08$ ,  $CFI > 0.9$ ). The chi-square difference between the constrained and unconstrained models was 44.777 with 34 degrees of freedom and a p-value of 0.102, indicating that the path model relationships were invariant across both male and female groups. This provides evidence of structural equivalence across both groups.

According to Table 4.13, to test for measurement and structural equivalence of the proposed model across marital status groups (unmarried and married), the researchers conducted a four-step multi-group analysis. The first step involved loose cross-validation, which indicated no significant problems with construct validity in either sample, as indicated by acceptable model fit indices ( $\chi^2/df < 3.0$ ,  $RMSE < 0.08$ ,  $CFI > 0.9$ ). The second



step tested for configural invariance and found that the separate models for both unmarried and married groups exhibited an acceptable level of model fit ( $\chi^2/df=1.152<3.0$ ,  $RMSE=0.02<0.08$ ,  $CFI=0.984>0.9$ ). The third step tested for measurement equivalence, and the results indicated that the same factors and factor loadings for specific items measuring each factor were invariant for respondents from unmarried and married groups (the chi-square difference was 5.089 with 20 degrees of freedom and a p-value of 1). The fourth and final step tested for structural equivalence, which showed that the path model relationships were invariant across the groups, providing evidence of structural equivalence across unmarried and married groups (the chi-square difference was 45.265 with 35 degrees of freedom and a p-value of 0.115).

According to Table 4.14, the study conducted a four-step multi-group analysis to test for measurement and structural equivalence of the proposed model for travel experience groups (without travel experience and with travel experience). The first step involved loose cross-validation, which showed no significant problems with construct validity in either sample ( $\chi^2/df<3.0$ ,  $RMSE<0.08$ ,  $CFI>0.9$ ). The second step tested for configural invariance, which was verified as the separate models for both groups exhibited an acceptable level of model fit ( $\chi^2/df=1.152<3.0$ ,  $RMSE=0.02<0.08$ ,  $CFI=0.984>0.9$ ). The third step tested for measurement equivalence, and the results indicate that the same factors and factor loadings for specific items measuring each factor are invariant for respondents from both groups (the chi-square difference is 20.664 with 20 degrees of freedom and a p-value of 0.417). The fourth and final step tested for structural equivalence, which demonstrated that the path model relationships are invariant across the groups, providing evidence of structural equivalence across without travel experience and with travel experience groups (the chi-square difference was 48.809 with 35 degrees of freedom and a p-value of 0.061).

In this study, multi-group analyses were carried out to evaluate the measurement and structural equivalence of the proposed model across gender, marital status, and travel experience groups. The results of these analyses are reported in a sequential manner. The findings reveal that the measurement model and factor structures were invariant across all the groups. In other words, the results indicate that gender, marital status, and travel experience do not moderate the variables and do not influence the conceptual model.

These results are consistent with prior research that suggests that gender, marital status, and travel experience do not significantly affect consumer behaviour in tourism and hospitality contexts. For example, some studies have found that gender has little to no impact on tourist decision-making processes or travel behaviour (Wong et al., 2014). Similarly, research has found that marital status does not significantly influence travel behaviour (Kontogeorgopoulos et al., 2017).

Overall, the results suggest that the proposed model is a robust framework for understanding tourist behaviour, and that the model can be applied across different demographic groups. The findings provide valuable insights for tourism and hospitality practitioners who seek to understand the needs and preferences of diverse consumer groups, and who want to develop effective marketing strategies that target specific demographic segments.

**Table 4.12: Multiple group invariance analysis across male and female**

| Model tested                                      | $\chi^2$ | df  | $\chi^2/df$ | RMSEA | CFI   | $\Delta\chi^2$ | $\Delta df$ | p     |
|---|----------|-----|-------------|-------|-------|----------------|-------------|-------|
| Fit indices of separately conducted CFA           |          |     |             |       |       |                |             |       |
| Measurement model for Male                        | 379.141  | 303 | 1.251       | 0.035 | 0.97  |                |             | 0.002 |
| Measurement model for Female                      | 345.109  | 303 | 1.139       | 0.027 | 0.987 |                |             | 0.048 |
| Testing for Measurement Invariance                |          |     |             |       |       |                |             |       |
| Unconstrained model                               | 724.252  | 606 | 1.195       | 0.022 | 0.979 |                |             |       |
| Constrained model<br>(Measurement weights)        | 748.567  | 626 | 1.196       | 0.022 | 0.979 | 24.315         | 20          | 0.229 |
| Testing for Structural Equivalence                |          |     |             |       |       |                |             |       |
| Unconstrained model                               | 734.699  | 613 | 1.199       | 0.022 | 0.979 |                |             |       |
| Constrained model<br>(Equality of path estimates) | 779.476  | 647 | 1.205       | 0.023 | 0.977 | 44.777         | 34          | 0.102 |

**Table 4.13: Multiple group invariance analysis across unmarried and married**

| Model tested                                      | $\chi^2$ | df  | $\chi^2/df$ | RMSEA | CFI   | $\Delta\chi^2$ | $\Delta df$ | p     |
|---|----------|-----|-------------|-------|-------|----------------|-------------|-------|
| Fit indices of separately conducted CFA           |          |     |             |       |       |                |             |       |
| Measurement model for Unmarried                   | 344.123  | 303 | 1.136       | 0.027 | 0.987 |                |             | 0.042 |
| Measurement model for Married                     | 352.749  | 303 | 1.164       | 0.028 | 0.981 |                |             | 0.026 |
| Testing for Measurement Invariance                |          |     |             |       |       |                |             |       |
| Unconstrained model                               | 689.232  | 606 | 1.137       | 0.019 | 0.987 |                |             |       |
| Constrained model<br>(Measurement weights)        | 694.321  | 626 | 1.109       | 0.017 | 0.989 | 5.089          | 20          | 1     |
| Testing for Structural Equivalence                |          |     |             |       |       |                |             |       |
| Unconstrained model                               | 714.588  | 612 | 1.168       | 0.021 | 0.982 |                |             |       |
| Constrained model<br>(Equality of path estimates) | 759.854  | 647 | 1.174       | 0.021 | 0.98  | 45.265         | 35          | 0.115 |

**Table 4.14: Multiple group invariance analysis across without travel experience and with travel experience**

| Model tested                                    | $\chi^2$ | df  | $\chi^2/df$ | RMSEA | CFI   | $\Delta\chi^2$ | $\Delta df$ | p     |
|---|----------|-----|-------------|-------|-------|----------------|-------------|-------|
| Fit indices of separately conducted CFA         |          |     |             |       |       |                |             |       |
| Measurement model for Without travel experience | 336.52   | 303 | 1.111       | 0.023 | 0.987 |                |             | 0.039 |
| Measurement model for With travel experience    | 361.8    | 303 | 1.194       | 0.033 | 0.981 |                |             | 0.011 |
| Testing for Measurement Invariance              |          |     |             |       |       |                |             |       |
| Unconstrained model                             | 698.357  | 606 | 1.152       | 0.02  | 0.984 |                |             |       |
| Constrained model (Measurement weights)         | 719.02   | 626 | 1.149       | 0.019 | 0.983 | 20.664         | 20          | 0.417 |
| Testing for Structural Equivalence              |          |     |             |       |       |                |             |       |
| Unconstrained model                             | 710.737  | 612 | 1.161       | 0.02  | 0.982 |                |             |       |
| Constrained model (Equality of path estimates)  | 759.546  | 647 | 1.174       | 0.021 | 0.98  | 48.809         | 35          | 0.061 |

## **4.10 Hypothesis testing**

### **4.10.1 Checking the assumptions**

Multiple regression analysis is a powerful statistical technique that is used to examine the relationship between a dependent variable and multiple independent variables (Argyrous, 2011). However, it is important to note that there are certain assumptions that must be met in order for multiple regression to be applicable. These assumptions include the absence of multicollinearity, multivariate normality, linearity, homoscedasticity of residuals, independence of errors, and the absence of outliers (Tabachnick & Fidell, 2007).

Multicollinearity, which occurs when there is a strong correlation between two or more independent variables, is one of the assumptions that must be met for multiple regression analysis. This phenomenon can be detected by examining the correlation matrix or by computing the Variance Inflation Factor (VIF) (Kutner et al., 2004). The VIF and tolerance are closely related statistics that are used for diagnosing multicollinearity. Tolerance is the reciprocal of VIF. According to Table 4.16, the results of the study indicated that the highest correlation among the independent variables was 0.37, which is below the threshold of 0.8 for a high correlation. The tolerance value was 0.741- 0.922 for each independent variable in all regression models, which was above the recommended minimum value of 0.2. The VIF value was 1.084 - 1.349 for each independent variable in all regression models, which was far below the recommended maximum value of 5 (Hair et al., 2010). Therefore, there was no evidence of multicollinearity in the study.

**Table 4.15: The frequency distribution of measurements**

| Item | Frequency |     |     |     |    | Total | Distribution |          |
|------|-----------|-----|-----|-----|----|-------|--------------|----------|
|      | 1         | 2   | 3   | 4   | 5  |       | Skewness     | Kurtosis |
| DRP1 | 40        | 62  | 123 | 88  | 87 | 400   | -0.218       | -0.881   |
| DRP2 | 70        | 48  | 53  | 191 | 38 | 400   | -0.604       | -0.937   |
| DRP3 | 46        | 82  | 45  | 142 | 85 | 400   | -0.4         | -1.104   |
| ARP1 | 12        | 112 | 118 | 82  | 76 | 400   | 0.156        | -1.058   |
| ARP2 | 53        | 73  | 69  | 139 | 66 | 400   | -0.344       | -1.042   |
| ARP3 | 43        | 78  | 83  | 149 | 47 | 400   | -0.351       | -0.887   |
| ARP4 | 32        | 83  | 116 | 111 | 58 | 400   | -0.145       | -0.817   |
| ERP1 | 51        | 50  | 95  | 174 | 30 | 400   | -0.613       | -0.594   |
| ERP2 | 55        | 60  | 67  | 173 | 45 | 400   | -0.529       | -0.851   |
| ERP3 | 20        | 94  | 114 | 74  | 98 | 400   | -0.024       | -1.113   |
| ERP4 | 47        | 72  | 50  | 171 | 60 | 400   | -0.508       | -0.91    |
| ATT1 | 31        | 76  | 114 | 138 | 41 | 400   | -0.3         | -0.659   |
| ATT2 | 42        | 105 | 62  | 122 | 69 | 400   | -0.142       | -1.188   |
| ATT3 | 41        | 99  | 68  | 141 | 51 | 400   | -0.216       | -1.073   |
| ATT4 | 47        | 84  | 93  | 86  | 90 | 400   | -0.13        | -1.145   |
| SN1  | 34        | 98  | 41  | 147 | 80 | 400   | -0.349       | -1.127   |
| SN2  | 46        | 58  | 105 | 144 | 47 | 400   | -0.425       | -0.691   |
| SN3  | 32        | 85  | 83  | 135 | 65 | 400   | -0.285       | -0.928   |
| SN4  | 53        | 62  | 80  | 139 | 66 | 400   | -0.397       | -0.933   |
| PBC1 | 51        | 74  | 90  | 108 | 77 | 400   | -0.226       | -1.059   |
| PBC2 | 54        | 76  | 99  | 96  | 75 | 400   | -0.146       | -1.071   |
| PBC3 | 49        | 80  | 78  | 117 | 76 | 400   | -0.243       | -1.092   |
| PBC4 | 55        | 79  | 84  | 109 | 73 | 400   | -0.187       | -1.117   |
| TI1  | 28        | 121 | 90  | 114 | 47 | 400   | 0.034        | -1.01    |

|     |    |     |    |     |    |     |        |        |
|-----|----|-----|----|-----|----|-----|--------|--------|
| TI2 | 19 | 125 | 83 | 78  | 95 | 400 | 0.071  | -1.291 |
| TI3 | 94 | 82  | 18 | 146 | 60 | 400 | -0.15  | -1.496 |
| TI4 | 76 | 57  | 84 | 144 | 39 | 400 | -0.323 | -1.099 |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention

**Table 4.16: Variance Inflation Factor**

| Model                    | Collinearity Statistics |       |
|--------------------------|-------------------------|-------|
|                          | Tolerance               | VIF   |
| DRP                      | 0.818                   | 1.223 |
| ARP                      | 0.803                   | 1.246 |
| ERP                      | 0.815                   | 1.227 |
| ATT                      | 0.769                   | 1.300 |
| SN                       | 0.741                   | 1.349 |
| PBC                      | 0.922                   | 1.084 |
| a Dependent Variable: BI |                         |       |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention; VIF= Variance Inflation Factor

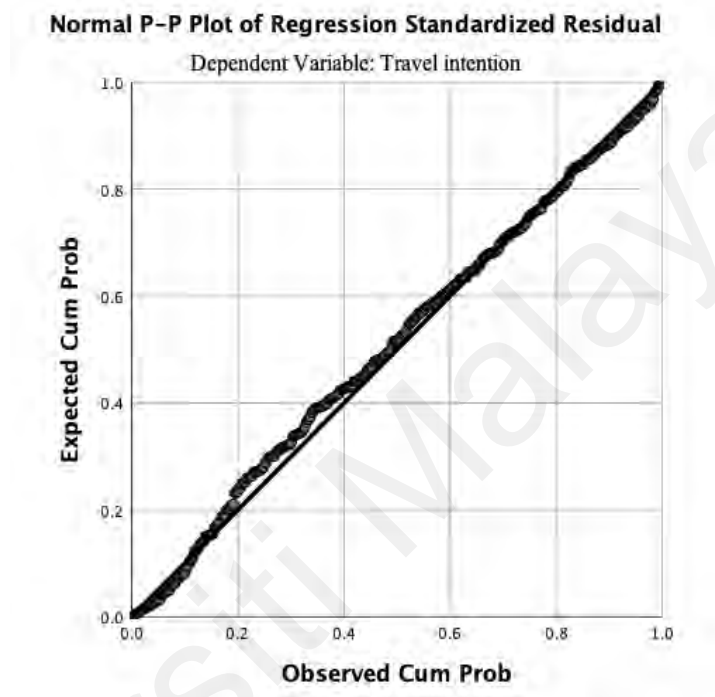
In this study, the assumptions of multivariate normality, linearity, and homoscedasticity of residuals were evaluated in the context of structural equation modeling (SEM) using the built-in test for normality in AMOS, which involves the calculation of Mardia's coefficient, a multivariate measure of kurtosis. The critical value for this coefficient can be interpreted as a significance test, with a critical value of 1.96 corresponding to a p-value of .05. If the critical ratio is greater than 1.96 in magnitude, the data may not be normally distributed. Table 4.15 presents the results of the multivariate normality test using Mardia's coefficient for each of the variables included in the SEM analysis. The table shows the minimum and maximum values, skewness, critical ratio, and kurtosis for each variable, with a corresponding critical ratio for each coefficient. According to the table, the critical ratios for all variables are less than 1.96 in magnitude, indicating that the data set is multivariate normal and satisfies the assumptions of SEM. The multivariate test, presented at the bottom of the table, also suggests that the data set is multivariate normal. These findings indicate that the assumptions of multivariate normality were met in this study.

To ensure that the assumptions of linearity and homoscedasticity of residuals were met, graphical methods were employed. The normal probability plot and residual scatterplot were used for this purpose (Pallant, 2016). The normal probability plot showed that the data points were closely aligned along the ideal diagonal line from bottom left to top right. The residual scatterplot displayed a roughly rectangular distribution of data points, with most points concentrated in the center (Pallant, 2016).

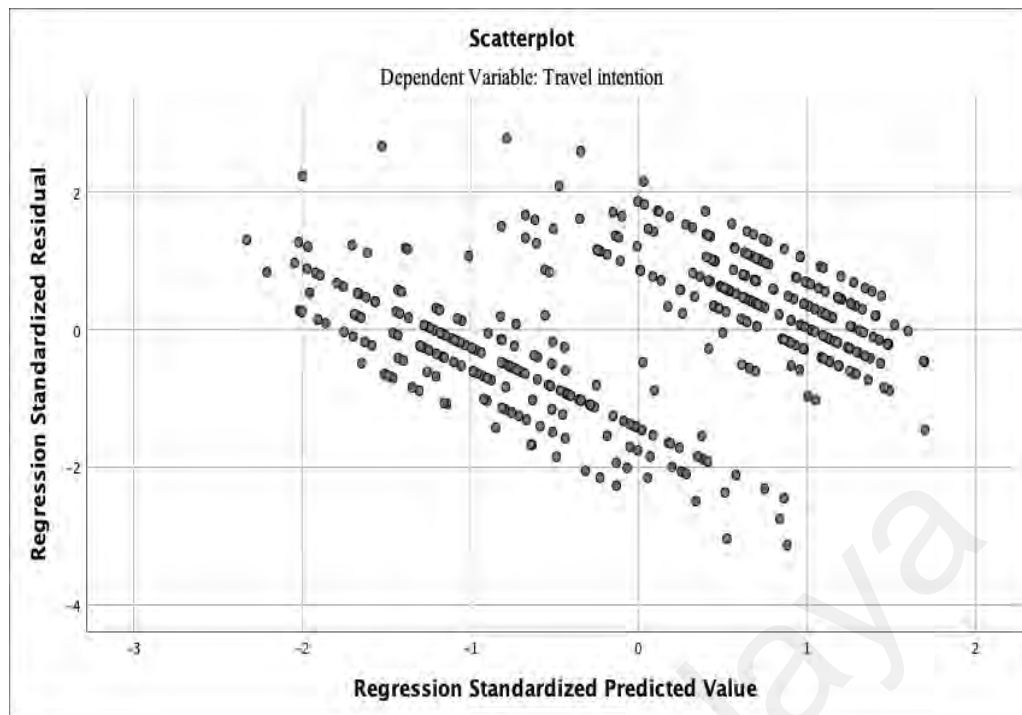
Figures 4.2 and 4.3 depict the normal probability plot and the residual scatterplot, respectively. The patterns in both plots suggest that there were no violations of the assumptions of linearity and homoscedasticity (Pallant, 2016). The data points in the normal probability plot fell very close to the diagonal line, indicating that the residuals were normally distributed. Additionally, the residual scatterplot showed a relatively



uniform spread of data points around the horizontal axis, which suggests that the variance of residuals was constant across all levels of the independent variables. Hence, both graphical methods indicate that the assumptions of linearity and homoscedasticity of residuals were satisfied.



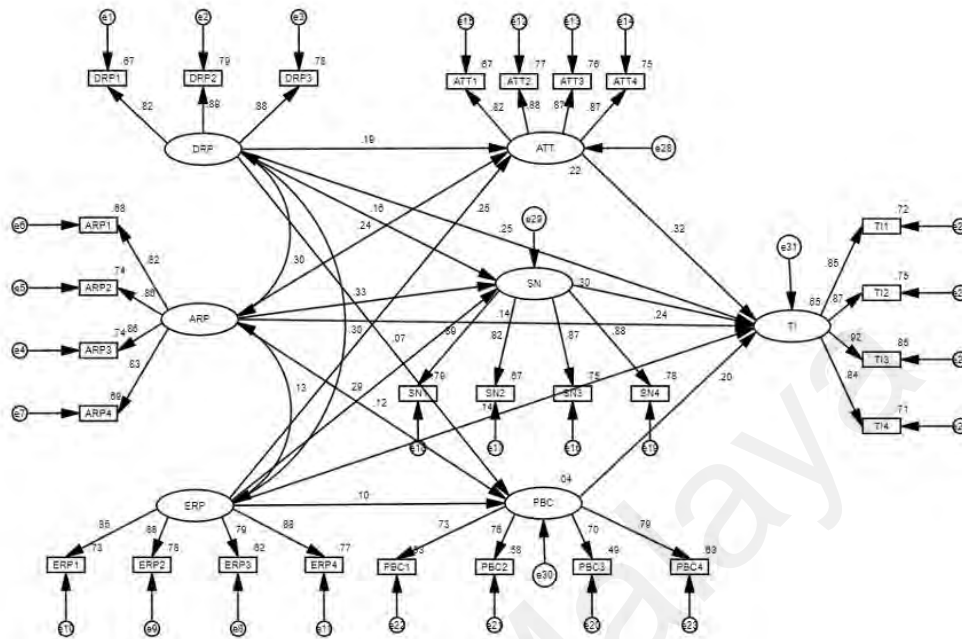
**Figure 4.2: The normal probability plot of independent variables with travel intention**



**Figure 4.3: The residuals scatterplot of independent variables with travel intention**

The third assumption of regression analysis is the independence of errors, which means that the error terms for any two observations should not be autocorrelated. Durbin and Watson's (1971) statistic is commonly used to test for this assumption. The statistic ranges from 0 to 4, with a value of 2 indicating absolute independence of the error terms. A value between 1 and 3 is generally considered acceptable (Field, 2009). In the present study, the Durbin and Watson statistic was calculated to be 2.02, which falls within the acceptable range and suggests that the assumption of independence of errors has been satisfied. It is important to note that the independence assumption is critical for the validity of regression analysis as violating this assumption may lead to biased estimates of the regression coefficients and incorrect statistical inferences. Therefore, the confirmation that the assumption has been met in the current study enhances the credibility of the regression analysis results. In summary, the independence of errors assumption was tested using Durbin and Watson's statistic in the current investigation,

and the obtained value of 2.02 indicated that there is no autocorrelation among the error terms, which satisfied the assumption.



**Figure 4.4: Standard estimates of structural equation model path analysis.**

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention

#### 4.10.2 Testing direct relationships

In this study, the extended model of Theory of Planned Behaviour was employed to test the hypotheses. Field (2009) differentiates between regression coefficients and standardized coefficients, or beta coefficients. Beta coefficients are often preferred for their ease of interpretation, as they are measured in standard deviation units. The sign of the beta coefficient indicates the direction of the relationship between the predictor and the outcome, while the value of the coefficient indicates the relative importance of the predictor to the outcome. Additionally, the associated t-test can reveal whether the predictor makes a statistically significant contribution to the outcome. Therefore, the use of beta coefficients in the current study allowed for a clear and precise interpretation of the model's findings (Field, 2009)

Figure 4.4 and Table 4.17 demonstrated the  $\beta$  estimates and p-values for the fifteen proposed hypotheses ( $H1_{a, b, c, d}$  -  $H4_{a, b, c}$ ) of the structural model in this research.  $H1_a$  was proposed to examine the nature of the association between the deliberative risk perception and attitude toward domestic tourism. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.19, p < 0.01$ ) between the deliberative risk perception and attitude during the COVID-19 pandemic. Thus,  $H1_a$  was accepted.  $H1_b$  was proposed to examine the nature of the association between the deliberative risk perception and subjective norm. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.16, p < 0.05$ ) between the deliberative risk perception and subjective norm during the COVID-19 pandemic. Thus,  $H1_b$  was accepted.  $H1_c$  was proposed to examine the nature of the association between the deliberative risk perception perceived behavioural control. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a nonsignificant relationship ( $\beta = 0.07, p > 0.05$ ) between the deliberative risk perception and perceived behavioural control during the COVID-19 pandemic. Thus,  $H1_c$  was rejected.  $H1_d$  was proposed to examine the nature of the association between the deliberative risk perception and travel intention toward domestic tourism. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.25, p < 0.01$ ) between the deliberative risk perception and travel intention toward domestic tourism during the COVID-19 pandemic. Thus,  $H1_d$  was accepted.

$H2_a$  was proposed to examine the nature of the association between affective risk perception and attitude toward domestic tourism. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.24, p < 0.01$ ) between the affective risk perception and attitude during the COVID-19 pandemic. Thus,  $H2_a$  was accepted.  $H2_b$  was proposed to examine the association between

affective risk perception and subjective norm. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.33$ ,  $p < 0.05$ ) between the affective risk perception and subjective norm during the COVID-19 pandemic. Thus, H2<sub>b</sub> was accepted. H2<sub>c</sub> was proposed to examine the association between affective risk perception and perceived behavioural control. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a nonsignificant relationship ( $\beta = 0.12$ ,  $p > 0.05$ ) between the affective risk perception and perceived behavioural control during the COVID-19 pandemic. Thus, H2<sub>c</sub> was rejected. H2<sub>d</sub> was proposed to examine the nature of the association between the affective risk perception and travel intention toward domestic tourism. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.14$ ,  $p < 0.01$ ) between the affective risk perception and travel intention toward domestic tourism during the COVID-19 pandemic. Thus, H2<sub>d</sub> was accepted.

H3<sub>a</sub> was proposed to examine the nature of the association between the experiential risk perception and attitude toward domestic tourism. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.25$ ,  $p < 0.01$ ) between the experiential risk perception and attitude during the COVID-19 pandemic. Thus, H3<sub>a</sub> was accepted. H3<sub>b</sub> was proposed to examine the nature of the association between the experiential risk perception and subjective norm. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.29$ ,  $p < 0.05$ ) between the experiential risk perception and subjective norm during the COVID-19 pandemic. Thus, H3<sub>b</sub> was accepted. H3<sub>c</sub> was proposed to examine the nature of the association between experiential risk perception and perceived behavioural control. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a nonsignificant relationship ( $\beta = 0.10$ ,  $p > 0.05$ ) between the experiential risk perception and perceived behavioural control during the COVID-19

pandemic. Thus, H3<sub>c</sub> was rejected. H3<sub>d</sub> was proposed to examine the nature of the association between the experiential risk perception and travel intention toward domestic tourism. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.14$ ,  $p < 0.01$ ) between the experiential risk perception and travel intention toward domestic tourism during the COVID-19 pandemic. Thus, H3<sub>d</sub> was accepted.

H4<sub>a</sub> was proposed to examine the nature of the association between the attitude toward domestic tourism and travel intention toward domestic tourism. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.33$ ,  $p < 0.01$ ) between the attitude toward domestic tourism and travel intention toward domestic tourism during the COVID-19 pandemic. Thus, H4<sub>a</sub> was accepted. H4<sub>b</sub> was proposed to examine the nature of the association between the subjective norm and travel intention toward domestic tourism. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.25$ ,  $p < 0.05$ ) between the subjective norm and travel intention toward domestic tourism during the COVID-19 pandemic. Thus, H4<sub>b</sub> was accepted. H4<sub>c</sub> was proposed to examine the nature of the association between perceived behavioural control and travel intention toward domestic tourism. The results (Figure 4.4 and Table 4.17) of the  $\beta$  estimates in the AMOS showed a significant and positive relationship ( $\beta = 0.21$ ,  $p < 0.01$ ) between the perceived behavioural control and travel intention toward domestic tourism during the COVID-19 pandemic. Thus, H4<sub>c</sub> was accepted.

Moreover, the figures show that the impact of DRP on ATT ( $\beta=0.19$ ) is stronger than the impact of DRP on SN ( $\beta=0.16$ ). The figures also show that the impact of ARP on SN ( $\beta=0.33$ ) is stronger than the impact of ARP on ATT ( $\beta=0.24$ ). Additionally, the figures indicate that the impact of ERP on SN ( $\beta=0.29$ ) is stronger than the impact of ERP on ATT ( $\beta=0.25$ ). Furthermore, the figures demonstrate that the impact of ATT on TI

( $\beta=0.36$ ) is stronger than the impact of DRP on TI ( $\beta=0.25$ ), the impact of SN on TI ( $\beta=0.24$ ), the impact of PBC on TI ( $\beta=0.21$ ), the impact of ARP on TI ( $\beta=0.14$ ), and the impact of ERP on TI ( $\beta=0.14$ ).

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**Table 4.17: Significant results of the path coefficient**

|                 | Path |      |     | Regression Weights |         |      | Standardized Regression Weights |
|-----------------|------|------|-----|--------------------|---------|------|---------------------------------|
|                 |      |      |     | S.E.               | T value | P    | Estimate ( $\beta$ )            |
| H1 <sub>a</sub> | ATT  | <--- | DRP | 0.06               | 3.44    | ***  | 0.19                            |
| H1 <sub>b</sub> | SN   | <--- | DRP | 0.05               | 3.09    | **   | 0.16                            |
| H1 <sub>c</sub> | PBC  | <--- | DRP | 0.06               | 1.13    | n.s. | 0.07                            |
| H1 <sub>d</sub> | TI   | <--- | DRP | 0.04               | 5.96    | ***  | 0.25                            |
| H2 <sub>a</sub> | ATT  | <--- | ARP | 0.06               | 4.48    | ***  | 0.24                            |
| H2 <sub>b</sub> | SN   | <--- | ARP | 0.05               | 6.34    | ***  | 0.33                            |
| H2 <sub>c</sub> | PBC  | <--- | ARP | 0.05               | 1.95    | n.s. | 0.12                            |
| H2 <sub>d</sub> | TI   | <--- | ARP | 0.04               | 3.42    | ***  | 0.14                            |
| H3 <sub>a</sub> | ATT  | <--- | ERP | 0.06               | 4.64    | ***  | 0.25                            |
| H3 <sub>b</sub> | SN   | <--- | ERP | 0.06               | 5.74    | ***  | 0.29                            |
| H3 <sub>c</sub> | PBC  | <--- | ERP | 0.06               | 1.66    | n.s. | 0.10                            |
| H3 <sub>d</sub> | TI   | <--- | ERP | 0.05               | 3.32    | ***  | 0.14                            |
| H4 <sub>a</sub> | TI   | <--- | ATT | 0.04               | 7.34    | ***  | 0.32                            |
| H4 <sub>b</sub> | TI   | <--- | SN  | 0.05               | 5.40    | ***  | 0.24                            |
| H4 <sub>c</sub> | TI   | <--- | PBC | 0.05               | 5.04    | ***  | 0.21                            |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention

\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\*\* Correlation is significant at the 0.001 level (2-tailed).

n.s. = nonsignificant



#### 4.10.3 Mediation relationships

This research highlighted six mediation relationships with the H5<sub>a</sub>, H5<sub>b</sub>, H5<sub>c</sub>, H6<sub>a</sub>, H6<sub>b</sub>, H6<sub>c</sub>, H7<sub>a</sub>, H7<sub>b</sub>, H7<sub>c</sub> in the hypothesized research model. H5<sub>a</sub> asserted that attitude toward domestic tourism mediates the direct relationship between deliberative risk perception and travel intention toward domestic tourism during the COVID-19 pandemic. H5<sub>b</sub> asserted that attitude toward domestic tourism mediates the direct relationship between affective risk perception and travel intention toward domestic tourism during the COVID-19 pandemic. H5<sub>c</sub> asserted that attitude toward domestic tourism mediates the direct relationship between experiential risk perception and travel intention toward domestic tourism during the COVID-19 pandemic. H6<sub>a</sub> asserted that subjective norm mediates the direct relationship between deliberative risk perception and travel intention toward domestic tourism during the COVID-19 pandemic. H6<sub>b</sub> asserted that subjective norm mediates the direct relationship between affective risk perception and travel intention toward domestic tourism during the COVID-19 pandemic. H6<sub>c</sub> asserted that subjective norm mediates the direct relationship between experiential risk perception and travel intention toward domestic tourism during the COVID-19 pandemic. H7<sub>a</sub> asserted that subjective norm mediates the direct relationship between deliberative risk perception and perceived behavioural control during the COVID-19 pandemic. H7<sub>b</sub> asserted that subjective norm mediates the direct relationship between affective risk perception and perceived behavioural control during the COVID-19 pandemic. H7<sub>c</sub> asserted that subjective norm mediates the direct relationship between experiential risk perception and perceived behavioural control during the COVID-19 pandemic.

The current study utilized PROCESS model 4 for testing the hypothesis, which is a mediation model (Hayes, 2017). Baron and Kenny, (1986) traditional mediation analysis has been shown to have limited statistical power (Hayes, 2009). To overcome this

limitation, the present study used a bias-corrected bootstrapping method with 5,000 resamples to obtain confidence intervals (CIs) at the 95% level. This approach is in line with the recommendation by Hayes (2009) and provides more stringent baseline criteria for avoiding type 1 errors. Although the default resampling option in SPSS is 1,000, the present study opted for 5,000 replications, given the recent arguments for the more robust approach (Hayes, 2017). Thus, the data analysis used in the current research aligns with the recommended guidelines.

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**Table 4.18: The mediating effect of attitude**

| H5 <sub>a</sub> : Mediating effect DRP-ATT-TI | Estimation |         | 95% bootstrapping |           | VAF |
|---|------------|---------|-------------------|-----------|-----|
|   | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |     |
| Indirect effect                               | 0.14***    | 0.03    | 0.09              | 0.19      | 28% |
| Total effect                                  | 0.50***    | 0.04    | 0.41              | 0.58      |     |
| Direct effect                                 | 0.36***    | 0.04    | 0.27              | 0.45      |     |
|   |            |         |                   |           |     |
| H5 <sub>b</sub> : Mediating effect ARP-ATT-TI | Estimation |         | 95% bootstrapping |           | VAF |
|   | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |     |
| Indirect effect                               | 0.16***    | 0.03    | 0.10              | 0.21      | 50% |
| Total effect                                  | 0.32***    | 0.05    | 0.22              | 0.42      |     |
| Direct effect                                 | 0.51***    | 0.04    | 0.42              | 0.60      |     |
|   |            |         |                   |           |     |
| H5 <sub>c</sub> : Mediating effect ERP-ATT-TI | Estimation |         | 95% bootstrapping |           | VAF |
|   | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |     |
| Indirect effect                               | 0.16***    | 0.03    | 0.11              | 0.22      | 57% |
| Total effect                                  | 0.28***    | 0.05    | 0.19              | 0.37      |     |
| Direct effect                                 | 0.52***    | 0.05    | 0.43              | 0.61      |     |
|   |            |         |                   |           |     |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; ATT=Attitude; TI=Travel intention; VAF= Variance accounted for  
 \*\*\* Correlation is significant at the 0.001 level (2-tailed).

#### 4.10.3.1 The mediating effect of attitude toward domestic tourism

From Table 4.18, the H5<sub>a</sub>, a mediating role of attitude toward domestic tourism, is confirmed by the significant indirect effect of deliberative risk perception on travel intention toward domestic tourism through attitude toward domestic tourism. As shown in Table 4.18, the results of PROCESS model 4 with 5,000 bootstrapped samples indicated that the total effect of deliberative risk perception was significant on attitude toward domestic tourism ( $\beta=0.50$ ,  $SE=0.04$ , 95% bootstrapping  $CI=0.41$  to  $0.58$ ,  $p<0.001$ ). The direct effect of attitude toward domestic tourism also significantly influenced travel intention toward domestic tourism ( $\beta=0.36$ ,  $SE=0.04$ , 95% bootstrapping  $CI=0.27$  to  $0.45$ ,  $p<0.001$ ). The indirect effect of deliberative risk perception on travel intention toward domestic tourism via attitude toward domestic was significant as a 95% bootstrapping  $CI$  for the indirect effect estimate ( $\beta=0.14$ ,  $SE=0.03$ ,  $p<0.001$ ) ranged from  $0.09$  to  $0.19$ , which did not overlap zero. Therefore, the indirect effect of deliberative risk perception on travel intention toward domestic tourism through attitude toward domestic tourism was significant. Variance accounted for (VAF) was used to confirm the strength of the mediating construct (Hair et al., 2014). VAF value represents the ratio of the Beta Coefficient of the indirect effect to the total effect. A VAF value bigger than 80% represents full mediation, a VAF value of between 20% and 80% means a partial mediation, while a value below 20% means no mediation. VAF for DRP-ATT-TI is 28%. Variance accounted for testing the strength of the mediating effect for by VAF value was calculated and showed a value of 28%, which indicates that about 28% of the total effect of deliberative risk perception was significant on attitude toward domestic tourism is explained by the indirect effect. In other words, attitude partially mediated the relationship between deliberative risk perception and travel intention. Therefore, H5<sub>a</sub> was supported.

The H5<sub>b</sub>, a mediating role of attitude toward domestic tourism, is confirmed by the significant indirect effect of affective risk perception on travel intention toward domestic tourism through attitude toward domestic tourism. As shown in Table 4.18, the results of PROCESS model 4 with 5,000 bootstrapped samples indicated that the total effect of affective risk perception was significant on attitude toward domestic tourism ( $\beta=0.32$ ,  $SE=0.05$ , 95% bootstrapping  $CI=0.22$  to  $0.42$ ,  $p<0.001$ ). The direct effect of attitude toward domestic tourism also significantly influenced travel intention toward domestic tourism ( $\beta=0.51$ ,  $SE=0.04$ , 95% bootstrapping  $CI=0.42$  to  $0.60$ ,  $p<0.001$ ). The indirect effect of affective risk perception on travel intention toward domestic tourism via attitude toward domestic was significant as a 95% bootstrapping CI for the indirect effect estimate ( $\beta=0.16$ ,  $SE=0.03$ ,  $p<0.001$ ) ranged from  $0.10$  to  $0.21$ , which did not overlap zero. Therefore, the indirect effect of affective risk perception on travel intention toward domestic tourism through attitude toward domestic tourism was significant. Variance accounted for (VAF) was used to confirm the strength of the mediating construct (Hair et al., 2014). VAF for ARP-ATT-TI is 50%. VAF value was calculated and showed a value of 50%, which indicates that about 50% of the total effect of affective risk perception was significant on attitude toward domestic tourism is explained by the indirect effect. As previously mentioned, a VAF value of between 20% and 80% means partial mediation. As a result, attitude partially mediated the relationship between affective risk perception and travel intention. Therefore, H5<sub>b</sub> was supported.

The H5<sub>c</sub>, a mediating role of attitude toward domestic tourism, is confirmed by the significant indirect effect of experiential risk perception on travel intention toward domestic tourism through attitude toward domestic tourism. As shown in Table 4.18, the results of PROCESS model 4 with 5,000 bootstrapped samples indicated that the total effect of experiential risk perception was significant on attitude toward domestic tourism ( $\beta=0.28$ ,  $SE=0.05$ , 95% bootstrapping  $CI=0.19$  to  $0.37$ ,  $p<0.001$ ). The direct effect of

attitude toward domestic tourism also significantly influenced travel intention toward domestic tourism ( $\beta=0.52$ ,  $SE=0.05$ , 95% bootstrapping  $CI=0.43$  to  $0.61$ ,  $p<0.001$ ). The indirect effect of experiential risk perception on travel intention toward domestic tourism via attitude toward domestic was significant as a 95% bootstrapping  $CI$  for the indirect effect estimate ( $\beta=0.16$ ,  $SE=0.03$ ,  $p<0.001$ ) ranged from  $0.11$  to  $0.22$ , which did not overlap zero. Therefore, the indirect effect of experiential risk perception on travel intention toward domestic tourism through attitude toward domestic tourism was significant. Variance accounted for (VAF) was used to confirm the strength of the mediating construct (Hair et al., 2014). VAF for ERP-ATT-TI is 57%. VAF value was calculated and showed a value of 57%, which indicates that about 57% of the total effect of experiential risk perception was significant on attitude toward domestic tourism is explained by the indirect effect. As previously mentioned, a VAF value of between 20% and 80% means partial mediation. As a result, attitude partially mediated the relationship between experiential risk perception and travel intention. Therefore, H5<sub>c</sub> was supported.

Moreover, the variance accounted for (VAF) reflects the amount of variance in the dependent variable (TI) that can be explained by the independent variable (DRP, ARP, ERP) through the mediating variable (ATT). A higher VAF value indicates a stronger relationship between the independent variable and dependent variable through the mediating variable. In this case, the VAF for ERP-ATT-TI relationship is the highest at 57%, which means that the mediation effect of ATT in the ERP-TI relationship is stronger than in the other two relationships (DRP-ATT-TI at 28% and ARP-ATT-TI at 50%). This suggests that ATT has a greater impact on TI when the independent variable is ERP compared to DRP or ARP. The VAF for DRP-ATT-TI relationship is the lowest at 28%, which means that the mediation effect of ATT in this relationship is the weakest. This suggests that ATT has a weaker impact on TI when the independent variable is DRP compared to ERP or ARP

**Table 4.19: The mediating effect of subjective norm**

| H6 <sub>a</sub> : Mediating effect DRP-SN-TI | Estimation |         | 95% bootstrapping |           | VAF |
|--|------------|---------|-------------------|-----------|-----|
|  | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |     |
| Indirect effect                              | 0.12***    | 0.02    | 0.08              | 0.17      | 32% |
| Total effect                                 | 0.38***    | 0.04    | 0.29              | 0.46      |     |
| Direct effect                                | 0.41***    | 0.04    | 0.33              | 0.50      |     |
| H6 <sub>b</sub> : Mediating effect ARP-SN-TI | Estimation |         | 95% bootstrapping |           | VAF |
|  | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |     |
| Indirect effect                              | 0.17***    | 0.03    | 0.11              | 0.22      | 55% |
| Total effect                                 | 0.31***    | 0.05    | 0.20              | 0.41      |     |
| Direct effect                                | 0.43***    | 0.05    | 0.34              | 0.52      |     |
| H6 <sub>c</sub> : Mediating effect ERP-SN-TI | Estimation |         | 95% bootstrapping |           | VAF |
|  | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |     |
| Indirect effect                              | 0.16***    | 0.03    | 0.11              | 0.21      | 57% |
| Total effect                                 | 0.28***    | 0.05    | 0.18              | 0.38      |     |
| Direct effect                                | 0.44***    | 0.05    | 0.35              | 0.53      |     |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; SN=Subjective norm; TI=Travel intention; VAF= Variance accounted for

\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\*\* Correlation is significant at the 0.001 level (2-tailed).

#### 4.10.3.2 The mediating effect of subjective norm

From Table 4.19, the H6<sub>a</sub>, a mediating role of subjective norm, is confirmed by the significant indirect effect of deliberative risk perception on travel intention toward domestic tourism through the subjective norm. As shown in Table 4.19, the results of PROCESS model 4 with 5,000 bootstrapped samples indicated that the total effect of deliberative risk perception was significant on the subjective norm ( $\beta=0.38$ ,  $SE=0.04$ , 95% bootstrapping CI=0.29 to 0.46,  $p<0.001$ ). The direct effect of subjective norm also significantly influenced travel intention toward domestic tourism ( $\beta=0.41$ ,  $SE=0.04$ , 95% bootstrapping CI=0.33 to 0.50,  $p<0.001$ ). The indirect effect of deliberative risk perception on travel intention toward domestic tourism via attitude toward domestic was significant as a 95% bootstrapping CI for the indirect effect estimate ( $\beta=0.12$ ,  $SE=0.02$ ,  $p<0.001$ ) ranged from 0.08 to 0.17, which did not overlap zero. Therefore, the indirect effect of deliberative risk perception on travel intention toward domestic tourism through subjective norm was significant. Variance accounted for (VAF) was used to confirm the strength of the mediating construct (Hair et al., 2014). VAF for DRP-SN-TI is 32%. VAF value was calculated and showed a value of 32%, which indicates that about 32% of the total effect of deliberative risk perception was significant on the subjective norm is explained by the indirect effect. As previously mentioned, a VAF value of between 20% and 80% means partial mediation. As a result, subjective norm partially mediated the relationship between deliberative risk perception and travel intention. Therefore, H6<sub>a</sub> was supported.

The H6<sub>b</sub>, a mediating role of subjective norm, is confirmed by the significant indirect effect of affective risk perception on travel intention toward domestic tourism through the subjective norm. As shown in Table 4.18, the results of PROCESS model 4 with 5,000 bootstrapped samples indicated that the total effect of affective risk perception was significant on the subjective norm ( $\beta=0.31$ ,  $SE=0.05$ , 95% bootstrapping CI=0.20 to 0.41,



$p < 0.001$ ). The direct effect of subjective norm also significantly influenced travel intention toward domestic tourism ( $\beta = 0.43$ ,  $SE = 0.05$ , 95% bootstrapping CI = 0.34 to 0.52,  $p < 0.001$ ). The indirect effect of affective risk perception on travel intention toward domestic tourism via attitude toward domestic was significant as a 95% bootstrapping CI for the indirect effect estimate ( $\beta = 0.17$ ,  $SE = 0.03$ ,  $p < 0.001$ ) ranged from 0.11 to 0.22, which did not overlap zero. Therefore, the indirect effect of affective risk perception on travel intention toward domestic tourism through subjective norm was significant. Variance accounted for (VAF) was used to confirm the strength of the mediating construct (Hair et al., 2014). VAF for ARP-SN-TI is 55%. VAF value was calculated and showed a value of 55%, which indicates that about 55% of the total effect of affective risk perception was significant on the subjective norm is explained by the indirect effect. As previously mentioned, a VAF value of between 20% and 80% means partial mediation. As a result, subjective norm partially mediated the relationship between experiential risk perception and travel intention. Therefore, H6<sub>b</sub> was supported.

The H6<sub>c</sub>, a mediating role of subjective norm, is confirmed by the significant indirect effect of experiential risk perception on travel intention toward domestic tourism through the subjective norm. As shown in Table 4.19, the results of PROCESS model 4 with 5,000 bootstrapped samples indicated that the total effect of experiential risk perception was significant on the subjective norm ( $\beta = 0.28$ ,  $SE = 0.05$ , 95% bootstrapping CI = 0.18 to 0.38,  $p < 0.001$ ). The direct effect of subjective norm also significantly influenced travel intention toward domestic tourism ( $\beta = 0.44$ ,  $SE = 0.05$ , 95% bootstrapping CI = 0.35 to 0.53,  $p < 0.001$ ). The indirect effect of experiential risk perception on travel intention toward domestic tourism via attitude toward domestic was significant as a 95% bootstrapping CI for the indirect effect estimate ( $\beta = 0.16$ ,  $SE = 0.03$ ,  $p < 0.001$ ) ranged from 0.11 to 0.21, which did not overlap zero. Therefore, the indirect effect of experiential risk perception

on travel intention toward domestic tourism through subjective norm was significant. Variance accounted for (VAF) was used to confirm the strength of the mediating construct (Hair et al., 2014). VAF for ERP-SN-TI is 57%. VAF value was calculated and showed a value of 57%, which indicates that about 57% of the total effect of experiential risk perception was significant on the subjective norm is explained by the indirect effect. As previously mentioned, a VAF value of between 20% and 80% means partial mediation. As a result, subjective norm partially mediated the relationship between experiential risk perception and travel intention. Therefore, H6<sub>c</sub> was supported.

Moreover, the variance accounted for (VAF) reflects the amount of variance in the dependent variable (TI) that can be explained by the independent variable (DRP, ARP, ERP) through the mediating variable (SN). In this case, the VAF for ERP-SN-TI relationship is the highest at 57%, which means that the mediation effect of SN in the ERP-TI relationship is stronger than in the other two relationships (DRP-SN-TI at 32% and ARP-SN -TI at 55%). This suggests that SN has a greater impact on TI when the independent variable is ERP compared to DRP or ARP. The VAF for DRP- SN -TI relationship is the lowest at 32%, which means that the mediation effect of SN in this relationship is the weakest. This suggests that SN has a weaker impact on TI when the independent variable is DRP compared to ERP or ARP.

#### **4.10.3.3 The mediating effect of perceived behavioural control**

**Table 4.20: The mediating effect of perceived behavioral control**

| H7 <sub>a</sub> : Mediating effect DRP-PBC-TI | Estimation |         | 95% bootstrapping |           | VAF |
|---|------------|---------|-------------------|-----------|-----|
|   | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |     |
| Indirect effect                               | 0.03**     | 0.02    | 0.01              | 0.01      | 6%  |
| Total effect                                  | 0.47***    | 0.04    | 0.39              | 0.54      |     |
| Direct effect                                 | 0.32***    | 0.05    | 0.22              | 0.41      |     |
| H7 <sub>b</sub> : Mediating effect ARP-PBC-TI | Estimation |         | 95% bootstrapping |           | VAF |
|   | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |     |
| Indirect effect                               | 0.04**     | 0.02    | 0.01              | 0.07      | 9%  |
| Total effect                                  | 0.43***    | 0.05    | 0.33              | 0.53      |     |
| Direct effect                                 | 0.32***    | 0.05    | 0.23              | 0.41      |     |
| H7 <sub>c</sub> : Mediating effect ERP-PBC-TI | Estimation |         | 95% bootstrapping |           | VAF |
|   | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |     |
| Indirect effect                               | 0.04**     | 0.02    | 0.01              | 0.01      | 36% |
| Total effect                                  | 0.11***    | 0.05    | 0.01              | 0.21      |     |
| Direct effect                                 | 0.33***    | 0.05    | 0.24              | 0.42      |     |

Note: DRP=Deliberative risk perception; ARP=Affective risk perception; ERP=Experiential risk perception; PBC=Perceived behavioural control; TI=Travel intention; VAF= Variance accounted for

\*\* Correlation is significant at the 0.01 level (2-tailed).

\*\*\* Correlation is significant at the 0.001 level (2-tailed).

From Table 4.20, the H7<sub>a</sub>, a mediating role of perceived behavioural control, showed a nonsignificant indirect effect of deliberative risk perception on travel intention toward domestic tourism through perceived behavioural control. As shown in Table 4.20, the results of PROCESS model 4 with 5,000 bootstrapped samples indicated that the total effect of deliberative risk perception was significant on perceived behavioural control ( $\beta=0.47$ ,  $SE=0.04$ , 95% bootstrapping  $CI=0.39$  to  $0.54$ ,  $p<0.001$ ). The direct effect of perceived behavioural control also significantly influenced travel intention toward domestic tourism ( $\beta=0.32$ ,  $SE=0.045$  95% bootstrapping  $CI=0.22$  to  $0.41$ ,  $p<0.001$ ). The indirect effect of deliberative risk perception on travel intention toward domestic tourism via attitude toward domestic was significant as a 95% bootstrapping CI for the indirect effect estimate ( $\beta=0.03$ ,  $SE=0.02$ ,  $p<0.01$ ) ranged from 0.008 to 0.075, which did not overlap zero. Therefore, the indirect effect of deliberative risk perception on travel intention toward domestic tourism through perceived behavioural control was significant. Variance accounted for (VAF) was used to confirm the strength of the mediating construct (Hair et al., 2014). VAF value represents the ratio of the Beta Coefficient of the indirect effect to the total effect. A VAF value bigger than 80% represents full mediation, a VAF value of between 20% and 80% means a partial mediation, while a value below 20% means no mediation. VAF for DRP-PBC-TI is 6%. VAF value was calculated and showed a value of 6%, which indicates that about 6% of the total effect of deliberative risk perception was significant on perceived behavioural control is explained by the indirect effect. As previously mentioned, a VAF value below 20% means no mediation. As a result, perceived behavioural control did not mediate the relationship between deliberative risk perception and travel intention. Therefore, H7<sub>a</sub> was rejected.

The H7<sub>b</sub>, a mediating role of perceived behavioural control, showed a nonsignificant indirect effect of affective risk perception on travel intention toward domestic tourism

through perceived behavioural control. As shown in Table 4.19, the results of PROCESS model 4 with 5,000 bootstrapped samples indicated that the total effect of affective risk perception was significant on perceived behavioural control ( $\beta=0.43$ ,  $SE=0.05$ , 95% bootstrapping  $CI=0.33$  to  $0.53$ ,  $p<0.001$ ). The direct effect of perceived behavioural control also significantly influenced travel intention toward domestic tourism ( $\beta=0.32$ ,  $SE=0.05$ , 95% bootstrapping  $CI=0.23$  to  $0.41$ ,  $p<0.01$ ). The indirect effect of affective risk perception on travel intention toward domestic tourism via attitude toward domestic was significant as a 95% bootstrapping CI for the indirect effect estimate ( $\beta=0.04$ ,  $SE=0.02$ ,  $p<0.001$ ) ranged from  $0.01$  to  $0.07$ , which did not overlap zero. Therefore, the indirect effect of affective risk perception on travel intention toward domestic tourism through perceived behavioural control was significant. Variance accounted for (VAF) was used to confirm the strength of the mediating construct (Hair et al., 2014). VAF value represents the ratio of the Beta Coefficient of the indirect effect to the total effect. A VAF value bigger than 80% represents full mediation, a VAF value of between 20% and 80% means a partial mediation, while a value below 20% means no mediation. VAF for ARP-PBC-TI -TI is 9%. VAF value was calculated and showed a value of 9%, indicating that about 9% of the total effect of affective risk perception was significant on perceived behavioural control, which is explained by the indirect effect. As previously mentioned, a VAF value of between 20% and 80% means partial mediation. As a result, perceived behavioural control did not mediate the relationship between experiential risk perception and travel intention. Therefore, H7<sub>b</sub> was rejected.

The H7<sub>c</sub>, a mediating role of perceived behavioural control, is confirmed by the significant indirect effect of experiential risk perception on travel intention toward domestic tourism through perceived behavioural control. As shown in Table 4.20, the results of PROCESS model 4 with 5,000 bootstrapped samples indicated that the total effect of experiential risk perception was significant on perceived behavioural control

( $\beta=0.11$ ,  $SE=0.05$ , 95% bootstrapping  $CI=0.01$  to  $0.21$ ,  $p<0.001$ ). The direct effect of perceived behavioural control also significantly influenced travel intention toward domestic tourism ( $\beta=0.33$ ,  $SE=0.05$ , 95% bootstrapping  $CI=0.24$  to  $0.42$ ,  $p<0.001$ ). The indirect effect of experiential risk perception on travel intention toward domestic tourism via attitude toward domestic was significant as a 95% bootstrapping CI for the indirect effect estimate ( $\beta=0.04$ ,  $SE=0.02$ ,  $p<0.01$ ) ranged from  $0.005$  to  $0.071$ , which did not overlap zero. Therefore, the indirect effect of experiential risk perception on travel intention toward domestic tourism through perceived behavioural control was significant. Variance accounted for (VAF) was used to confirm the strength of the mediating construct (Hair et al., 2014). VAF value represents the ratio of the Beta Coefficient of the indirect effect to the total effect. A VAF value bigger than 80% represents full mediation, a VAF value of between 20% and 80% means a partial mediation, while a value below 20% means no mediation. VAF for ERP-PBC-TI is 36%. VAF value was calculated and showed a value of 36%, which indicates that about 36% of the total effect of experiential risk perception was significant on perceived behavioural control is explained by the indirect effect. As previously mentioned, a VAF value of between 20% and 80% means partial mediation. As a result, perceived behavioural control partially mediated the relationship between experiential risk perception and travel intention. Therefore,  $H7_c$  was supported. Additionally, the variance accounted for (VAF) indicates the proportion of variance in the dependent variable (TI) that is explained by the independent variable (DRP, ARP, ERP) and the mediating variable (PBC). When compared to the other two relationships (DRP-PBC-TI at 6% and ARP-PBC-TI at 9%), it can be seen that the ERP-PBC-TI relationship has the strongest mediation effect, as indicated by its highest VAF.

#### 4.10.4 Moderating relationships

This research highlighted two moderating relationships with the H8<sub>a</sub> and H8<sub>b</sub> in the hypothesized research model. First, H8<sub>a</sub> asserted that perceived behavioural control moderates the relationship between attitude toward domestic tourism and travel intention during the COVID-19 pandemic. Second, H8<sub>b</sub> asserted that perceived behavioural control moderates the relationship between subjective norm and travel intention toward domestic tourism during the COVID-19 pandemic. This research employed similar approach to the mediating effect test by using PROCESS model 1 to test proposed hypotheses (i.e., moderation model) (Hayes, 2017). Bootstrap-based bias-corrected confidence intervals (95%) for the indirect effects were generated using 5000 iterations of bootstrapping.

As shown in Table 4.21, as for the moderating effect of perceived behavioural control on the relationship between attitude and travel intention, the results of PROCESS model 1 with 5,000 bootstrapped samples indicated that the attitude positively predicted travel intention ( $\beta=0.53$ ,  $SE=0.04$ , 95% bootstrapping  $CI=0.45$  to  $0.61$ ,  $p<0.001$ ). Perceived behavioural control positively predicted travel intention ( $\beta=0.28$ ,  $SE=0.05$ , 95% bootstrapping  $CI=0.18$  to  $0.37$ ,  $p<0.001$ ). Moreover, the interaction effect between attitude and perceived behavioural control was significant ( $\beta= 0.17$ ,  $SE=0.04$ , 95% bootstrapping  $CI=0.09$  to  $0.25$ ,  $p < 0.001$ ). The full model accounted for 39% of the variance in travel intention ( $R^2 =0.39$ ,  $p < 0.001$ ), increased 3% due to interaction ( $R^2$ -changed=0.03). Next, the conditional effect of the independent variable was calculated at the point of the mean  $\pm$  1 standard deviation of the moderator variable to check the statistical significance, and a simple slope verification method was used to validate the significance (Aiken et al., 1991). Table 4.22 shows the effects of attitude at three levels of perceived behavioural control: one SD below the mean, at the mean, and one SD above the mean. Results of simple slope tests showed that the relationship between attitude and travel intention was significantly positive ( $\beta$  simple=0.35,  $SE=0.06$ ,  $p < 0.001$ , 95%  $CI =$

[0.22, 0.47]) when perceived behavioural control was low ( $\beta$  simple = 0.71, SE=0.05,  $p < 0.001$ , 95% CI = [0.60, 0.83]) when perceived behavioural control was high. It can be seen that the strength of the association between attitude and travel intention increased as the perceived behavioural control values increased. Figure 4.5 illustrates the slope, which that that there is positive relationship between ATT and TI for respondents with high or low PBC. However, there is stronger positive ATT-TI relationship for respondent with higher PBC than those with lower PBC. All these results show that H8<sub>a</sub> was supported.

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**Table 4.21: The moderating effect of perceived behavioural control**

| Outcome variable: Travel intention | Estimation |         | 95% bootstrapping |           |
|------------------------------------|------------|---------|-------------------|-----------|
|                                    | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |
| ATT                                | 0.53***    | 0.04    | 0.45              | 0.61      |
| PBC                                | 0.28***    | 0.05    | 0.18              | 0.37      |
| Int 1: ATT x PBC                   | 0.17***    | 0.04    | 0.09              | 0.25      |
| R-square                           | 0.39***    |         |                   |           |
| R <sup>2</sup> -chang              | 0.03       |         |                   |           |
| Outcome variable: Travel intention | Estimation |         | 95% bootstrapping |           |
|                                    | Coeff      | Boot SE | Boot LLCI         | Boot ULCI |
| SN                                 | 0.50***    | 0.04    | 0.42              | 0.58      |
| PBC                                | 0.34***    | 0.05    | 0.24              | 0.43      |
| Int 1: SN x PBC                    | 0.12***    | 0.03    | 0.06              | 0.19      |
| R-square                           | 0.36***    |         |                   |           |
| R <sup>2</sup> -chang              | 0.02       |         |                   |           |

Note: ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control

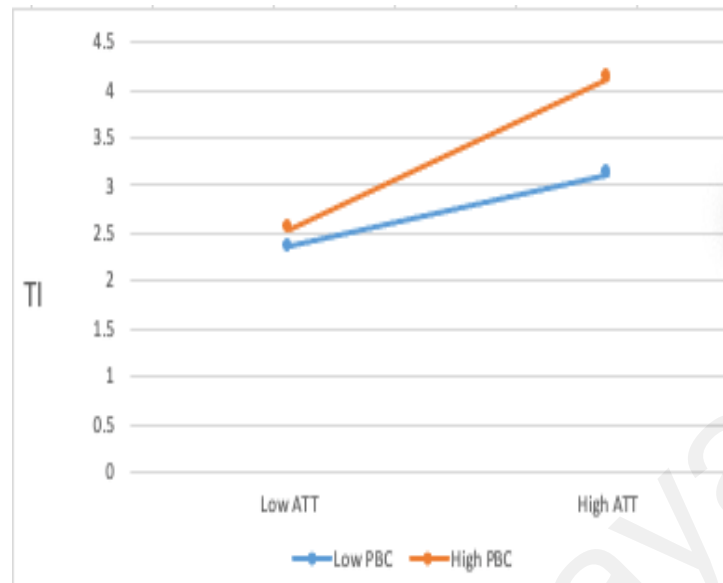
\*\*\* Correlation is significant at the 0.001 level (2-tailed).

**Table 4.22: Effects of attitude and subjective norm on intention at three values of the moderator (PBC)**

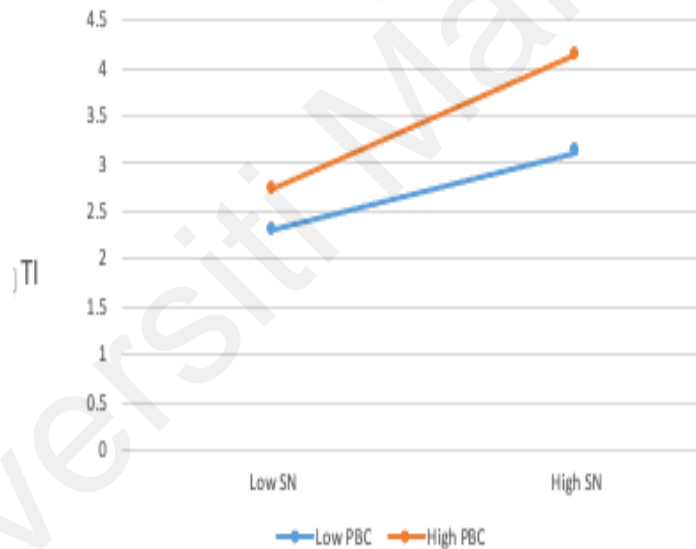
| Independent variable | PBC moderator | Effect  | SE   | T     | LLCI | ULCI |
|----------------------|---------------|---------|------|-------|------|------|
| ATT                  | -1 SD         | 0.35*** | 0.06 | 5.47  | 0.22 | 0.47 |
|                      | M             | 0.53*** | 0.04 | 12.22 | 0.44 | 0.61 |
|                      | + SD          | 0.71*** | 0.06 | 12.05 | 0.60 | 0.83 |
| SN                   | -1 SD         | 0.37*** | 0.06 | 6.22  | 0.25 | 0.48 |
|                      | M             | 0.50*** | 0.04 | 11.70 | 0.42 | 0.58 |
|                      | + SD          | 0.63*** | 0.06 | 10.76 | 0.52 | 0.75 |
| Outcome variable: TI |               |         |      |       |      |      |

Note: ATT=Attitude; SN=Subjective norm; PBC=Perceived behavioural control; TI=Travel intention

\*\*\* Correlation is significant at the 0.001 level (2-tailed).



**Figure 4.5: Simple slopes for the PBC of moderation effect between ATT and TI**



**Figure 4.6: Simple slopes for the PBC of moderation effect between SN and TI**

As shown in Table 4.21, as for the moderating effect of perceived behavioural control on the relationship between subjective norm and travel intention, the results of PROCESS model 1 with 5,000 bootstrapped samples indicated that the subjective norm positively predicted travel intention ( $\beta=0.50$ ,  $SE=0.04$ , 95% bootstrapping  $CI=0.42$  to  $0.58$ ,  $p<0.001$ ). Perceived behavioural control positively predicted travel intention ( $\beta=0.34$ ,  $SE=0.05$ , 95% bootstrapping  $CI=0.24$  to  $0.43$ ,  $p<0.001$ ). Moreover, the interaction effect

between subjective norm and perceived behavioural control was significant ( $\beta = 0.12$ ,  $SE = 0.03$ , 95% bootstrapping  $CI = 0.05$  to  $0.19$ ,  $p < 0.001$ ). The full model accounted for 36% of the variance in travel intention ( $R^2 = 0.36$ ,  $p < 0.001$ ), increased 2% due to interaction ( $R^2\text{-changed} = 0.02$ ). Next, the conditional effect of the independent variable was calculated at the point of the mean  $\pm 1$  standard deviation of the moderator variable to check the statistical significance, and a simple slope verification method was used to validate the significance (Aiken et al., 1991). Table 4.22 also shows the effects of the subjective norm at three levels of perceived behavioural control: one SD below the mean, at the mean, and one SD above the mean. Results of simple slope tests showed that the relationship between subjective norm and travel intention was significantly positive ( $\beta_{\text{simple}} = 0.37$ ,  $SE = 0.06$ ,  $p < 0.001$ , 95%  $CI = [0.25, 0.48]$ ) when perceived behavioural control was low, ( $\beta_{\text{simple}} = 0.63$ ,  $SE = 0.06$ ,  $p < 0.001$ , 95%  $CI = [0.52, 0.75]$ ) when perceived behavioural control was high. It can be seen that the strength of the association between subjective norm and travel intention increased as the perceived behavioural control values increased. Figure 4.6 illustrates the slope, which means that there is positive relationship between SN and TI for respondents with high or low PBC. However, there is stronger positive SN-TI relationship for respondent with higher PBC than those with lower PBC. All these results show that H8<sub>b</sub> was supported.

#### **4.11 Chapter Summary**

This chapter presents an examination and report of the data that was collected through a survey method. The measurement model and structural model were found to be adequately fitting the data from the sample. Furthermore, gender, marital status, and travel experience were found not to be moderating variables influencing the conceptual model. The direct hypotheses of this study indicated that the multidimensional risk perception is significantly positively related to travel intention, attitude, and subjective norm. Additionally, the proposed mediational effects of attitude and subjective norm

demonstrated a partial mediating effect in the relationship between multidimensional risk perception and travel intention. Finally, the proposed moderating effects of perceived behavioral control were revealed in the relationship between attitude and travel intention and subjective norm and travel intention.

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## CHAPTER 5: DISCUSSION

### 5.1 Introduction

This chapter summarizes the key results of the research. The main objective of the study was to examine the interactions between multidimensional risk perceptions, attitude, subjective norm, perceived behavioural control, and travel intention in the context of the COVID-19 pandemic in the context of domestic tourism in China. To the best of our understanding, this is the first research to investigate these latent constructs concurrently. The following section of this chapter highlights the key findings and provides detailed explanations of the outcomes of each hypothesis.

### 5.2 Summary of findings

This section summarizes the research's key results of the research. After review of a large variety of literature on tourists' travel intention, tourists' risk perception, theory of planned behaviour, Tripartite model of risk perception, the relationship between tourist risk perception and behavioural intention, attitude, subjective norm, perceived behavioural control, it is clear that understanding tourist risk perception is important for tourist travel intention to participate in domestic tourism. Based on the review, a model together with eight hypotheses have been proposed to test the relationship between risk perception (deliberative, affective and experiential) and attitude, risk perception (deliberative, affective and experiential) and subjective norm, risk perception (deliberative, affective and experiential) and perceived behavioural control, risk perception (deliberative, affective and experiential) and travel intention, attitude and travel intention, subjective norm and travel intention, perceived behavioural control and travel intention, attitude mediating on risk perception (deliberative, affective and experiential) and travel intention, subjective norm mediating on risk perception

(deliberative, affective and experiential) and travel intention, perceived behavioural control mediating on risk perception (deliberative, affective and experiential) and travel intention, perceived behavioural control moderating on attitude and travel intention, perceived behavioural control moderating on subjective norm and travel intention. The following table 5.1 summarizes the findings of this thesis.

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**Table 5.1: Summary of Research Findings Hypotheses**

| <b>Hypotheses</b> |  | <b>Findings</b>  |
|-------------------|--|--|
| H1 <sub>a</sub>   | Deliberative risk perception influence attitude  | Outcomes revealed that deliberative risk perception exerts a significant positive influence on attitude. (Supported)                         |
| H1 <sub>b</sub>   | Deliberative risk perception influences subjective norm.                                     | Outcomes revealed that deliberative risk perception exerts a significant positive influence on subjective norm. (Supported)                  |
| H1 <sub>c</sub>   | Deliberative risk perception influences perceived behavioural control.                       | Outcomes revealed that deliberative risk perception does not exert a significant influence on perceived behavioural control. (Not Supported) |
| H1 <sub>d</sub>   | Deliberative risk perception influence travel intention                                      | Outcomes revealed that deliberative risk perception exerts a significant positive influence on travel intention. (Supported)                 |
| H2 <sub>a</sub>   | Affective risk perception exerts a significant influence on attitude                         | Outcomes revealed that affective risk perception exerts a significant positive influence on attitude. (Supported)                            |
| H2 <sub>b</sub>   | Affective risk perception exerts a significant influence on subjective norm.                 | Outcomes revealed that affective risk perception exerts a significant positive influence on subjective norm. (Supported)                     |
| H2 <sub>c</sub>   | Affective risk perception exerts a significant influence on perceived behavioural control    | Outcomes revealed that affective risk perception does not exert a significant influence on perceived behavioural control. (Not Supported)    |
| H2 <sub>d</sub>   | Affective risk perception exerts a significant influence on travel intention                 | Outcomes revealed that affective risk perception exerts a significant positive influence on travel intention. (Supported)                    |
| H3 <sub>a</sub>   | Experiential risk perception exerts a significant influence on attitude                      | Outcomes revealed that experiential risk perception exerts a significant positive influence on attitude. (Supported)                         |
| H3 <sub>b</sub>   | Experiential risk perception exerts a significant influence on subjective norm.              | Outcomes revealed that experiential risk perception exerts a significant positive influence on subjective norm. (Supported)                  |
| H3 <sub>c</sub>   | Experiential risk perception exerts a significant influence on perceived behavioural control | Outcomes revealed that experiential risk perception does not exert a significant influence on perceived behavioural control. (Not Supported) |
| H3 <sub>d</sub>   | Experiential risk perception exerts a significant influence on travel intention              | Outcomes revealed that experiential risk perception exerts a significant positive influence on travel intention. (Supported)                 |
| H4 <sub>a</sub>   | Attitude influence travel intention  | Attitude exerts a significant positive influence on travel intention (Supported)   |

|                 |   |   |
|-----------------|---|---|
| H4 <sub>b</sub> | Subjective norm influences travel intention   | Subjective norm exerts a significant positive influence on travel intention (Supported)   |
| H4 <sub>c</sub> | Perceived behavioural control influences travel intention   | Perceived behavioural control exerts a significant positive influence on travel intention (Supported)                                     |
| H5 <sub>a</sub> | Attitude is a significant mediator between deliberative risk perception and travel intention                      | Attitude partially mediates the relationship between deliberative risk perception and travel intention (Supported)                        |
| H5 <sub>b</sub> | Attitude mediates the relationship between affective risk perception and travel intention                         | Attitude partially mediates the relationship between affective risk perception and travel intention (Supported)                           |
| H5 <sub>c</sub> | Attitude mediates the relationship between experiential risk perception and travel intention                      | Attitude partially mediates the relationship between experiential risk perception and travel intention (Supported)                        |
| H6 <sub>a</sub> | Subjective norm mediates the relationship between deliberative risk perception and travel intention               | Subjective norm partially mediates the relationship between deliberative risk perception and travel intention (Supported)                 |
| H6 <sub>b</sub> | Subjective norm mediates the relationship between affective risk perception and travel intention                  | Subjective norm partially mediates the relationship between affective risk perception and travel intention (Supported)                    |
| H6 <sub>c</sub> | Subjective norm mediates the relationship between experiential risk perception and travel intention               | Subjective norm partially mediates the relationship between experiential risk perception and travel intention (Supported)                 |
| H7 <sub>a</sub> | Perceived behavioural control mediates the relationship between deliberative risk perception and travel intention | Perceived behavioural control does not mediate the relationship between deliberative risk perception and travel intention (Not Supported) |
| H7 <sub>b</sub> | Perceived behavioural control mediates the relationship between affective risk perception and travel intention    | Perceived behavioural control does not mediate the relationship between affective risk perception and travel intention (Not Supported)    |
| H7 <sub>c</sub> | Perceived behavioural control mediates the relationship between experiential risk perception and travel intention | Perceived behavioural control partially mediates the relationship between experiential risk perception and travel intention (Supported)   |
| H8 <sub>a</sub> | High perceived behavioural control strengthens the relationship between attitude and travel intention.            | High perceived behavioural control strengthens the positive relationship between attitude and travel intention. (Supported)               |
| H8 <sub>b</sub> | High perceived behavioural control strengthens the relationship between subjective norm and travel intention.     | High perceived behavioural control strengthens the positive relationship between subjective norm and travel intention. (Supported)        |



### **5.3 Discussion on the relationship between deliberative risk perception and attitude, subjective norm, perceived behavioural control, travel intention**

Risk perception (deliberative, affective and experiential) showed a significant influence on attitude and subjective norm (H1<sub>a, b</sub>, H2<sub>a, b</sub>, H3<sub>a, b</sub>). This finding supports earlier research indicating the impact of risk perception on individuals' decision-making processes (Bae & Chang, 2020; Gianluca et al., 2008). That is, a positive attitude toward domestic tourism and subjective norm concerning domestic tourism are based on the Chinese people's a reasoned judgement, emotional worries and assessment of vulnerability to COVID-19. Despite the hypothesized relationship that risk perception (including deliberative, affective, and experiential dimensions) would affect perceived behavioral control, the results of the study did not support this hypothesis. Specifically, the data analysis did not find any significant relationship between the two variables (H1<sub>c</sub>, H2<sub>c</sub>, H3<sub>c</sub>). That is, Chinese people's perceived capability of engaging in domestic travel was not developed based on threatening numbers about disease. The results also indicate deliberative, affective, and experiential risk perceptions are positively associated with intention to domestic tourism (H1<sub>d</sub>, H2<sub>d</sub>, H3<sub>d</sub>). This results are in line with findings from Ouyang et al. (2020). The perception of the likelihood of a threat as a driving factor positively change individual's behaviour (Gadahad et al., 2013). Compared with outbound tourism, Chinese people prefer to choose domestic tourism to release pressures and anxiety from the COVID-19 pandemic. The findings are also in line with the Chinese government's initiative to introduce domestic tourism policies to encourage Chinese people to travel domestically for promoting economy since the COVID-19 crisis have effectively been under controlled. People's passion for travel returned quarter by quarter. According to a report by the China Tourism Academy, the total number of domestic tourist trips in China will reach 4.1 billion in 2021, an increase of 42% over 2020. China's

domestic tourism revenue will reach 3.3 trillion yuan (approximately US\$511 billion) in 2021, a year-on-year increase of 48%. China's domestic tourism industry has seen a substantial recovery so far in 2021. As China further removes travel restrictions amidst the stable COVID-19 situation, it is expected to continue its current momentum.

#### **5.4 Discussion on the relationships of attitude, subjective norm, perceived behavioural control and travel intention**

The second objective of this research is to examine attitude, subjective norm, perceived behavioural control that influence the travel intention regarding the domestic tourism in China during the COVID-19 pandemic. The objective has been achieved from literature review, the descriptive analysis and inferential analysis with the theory used in this research.

The terminology of attitude by Crano et al (2010) states that when someone who has a positive or negative assessment of certain behaviour from human factor. Meanwhile, based on the theory that has been used in this research, namely the Theory of Reasoned Action and the Theory of Planned Behaviour of Ajzen (1975; 1988, 1991 & 2015), it could be seen that if a person has a distinctive positive behaviour, that person will have a positive attitude in performing the behaviour or behaviour intention. Hence, the attitude can influence the intention to domestic tourism. The results show that there is significant positive relationship with the attitude of Chinese potential tourists towards the travel intention to domestic tourism in China.

Subjective norm or known as subject norm is referring to perceptions of relationship where a group of people had a major influence on people's behaviour (Prabandari & Sholihah, 2014) and in Ajzen (1991) the purpose of a belief that is called normative belief, which is the belief of consent and or disapproval of referent another influential person and group. The results show that there is a significant positive relationship with subject

norm of Chinese potential tourists towards the travel intention to domestic tourism in China.

According to Ajzen (2015), the more the individual feels the influential support, the greater the control they feel or the behaviour and vice versa. In the inferential analysis by using the AMOS 23.0 as described in Chapter 4, this study tested the hypothesis that shows in the results (refer to Table 4.16) there is a positive relationship on perceived behaviour control towards the travel intention in the context of domestic tourism.

The findings of this study suggest that travel intention is positively affected by attitude, subjective norm, and perceived behavioural control, which is consistent with previous research (Bae & Chang, 2020; Huang et al., 2014; Lam & Hsu, 2006). The assessment of behaviour, social recognition, and perceived capability to engage in domestic tourism played a crucial role in shaping individuals' behavioural intention towards domestic tourism. In particular, individuals' attitude towards domestic tourism, the subjective norm (i.e., the perception of social pressure to participate in domestic tourism), and their perceived behavioural control (i.e., the perceived ease or difficulty of engaging in domestic tourism) had a significant influence on their travel intention. The findings of this study are consistent with previous research that identified the importance of these factors in predicting travel intention (Bae & Chang, 2020; Huang et al., 2014; Lam & Hsu, 2006).

Attitude, subjective norm and perceived behavioural control will have significant positive effect on domestic travel behavioural intention, with the influence coefficient are: 0.32, 0.24, 0.21. The degree of influence of each variable on domestic tourism behavioural intention is different. From large to small, they are attitude, subjective norm and perceptual behaviour control. Therefore, the attitude strongly influenced the intention of domestic travel behaviour in the present study and can be considered as the most important factor affecting domestic travel intention. In the investigation of this research,

whether the individual likes or dislikes domestic tourism, maintaining a positive or negative evaluation has a significant favourable influence on the travel intention to participate in domestic tourism. Secondly, the subjective norm strongly influences domestic tourism behaviour intention as well. However, the influence is not strong as the attitude of the individual. It shows that the subjective norm of individuals has a certain influence on domestic travel intention. The prediction effect, that is, influential people or groups will have a certain impact on the individual's domestic travel behaviour, such as the active advocacy of family members, friends or schools, may substantially affect the individual's domestic travel behaviour intention. An individual's subjective judgment on factors that promote or hinder domestic tourism travel intention has little impact on their intention to conduct domestic tourism behaviour. And this kind of judgment or evaluation is based on the individual's confidence, opportunities, capability and whether the travel decision is completely up to themselves. The result of the judgment will positively impact the individual's travel intention. Compared to attitude and subjective norm, an individual's subjective judgment on factors that promote or hinder domestic tourism travel intention has the smallest impact on their intention to conduct domestic tourism behaviour. And this kind of judgment or evaluation is based on the individual's confidence, opportunities, capability and whether the travel decision is completely up to themselves. The stronger the individual's perceptual behaviour control, the stronger the domestic travel behaviour intention

### **5.5 Discussion on the mediating of effect of attitude, subjective norm, perceived behavioural control**

Consistent with prior research (Bae & Chang, 2020; Choi et al., 2013; Lee, 2009), the present study found that attitude and subjective norm played a significant mediating role between multidimensional risk perception and travel intention. Specifically, individuals who perceived higher levels of risk demonstrated a more positive attitude towards

domestic tourism and a greater subjective norm, both of which were positively associated with travel intention (Bae & Chang, 2020). These findings suggest that risk perception is not necessarily a deterrent to travel but rather can serve as a motivator for individuals who place greater value on the benefits of domestic tourism and feel confident in their ability to engage in it safely.

Since the outbreak of COVID-19, many Chinese people have been under significant stress due to the pandemic. However, with the increasing vaccination rate and the implementation of effective protective measures, individuals have tried to find coping strategies to alleviate stress by engaging in leisure travel domestically. The Chinese government and the tourism industry have played an important role in encouraging domestic tourism, with the implementation of policies and promotions that have positively influenced people's attitude and subjective norm, leading to an increased willingness to travel domestically (Bae & Chang, 2020; Shim & You, 2015). Nevertheless, perceived behavioural control only mediates the relationship between experiential risk perception and travel intention, and its effect is weak. In the current pandemic situation, domestic tourism has not been fully opened to the public, and Chinese people's perceived ability to engage in domestic travel is limited, which cannot influence the relationship between risk perception and their willingness to travel (Bae & Chang, 2020; Shim & You, 2015). Despite the government's efforts and the implementation of protective measures, individuals' perceived control over their ability to engage in domestic travel remains a limiting factor in the relationship between risk perception and travel intention.

## **5.6 Discussion on the moderating of effect of perceived behavioural control**

Perceived behavioural control refers to an individual's perceived ability to perform a behaviour, which can influence the relationship between attitudes and subjective norms on travel intention. According to the findings of Chapter Four, higher levels of perceived behavioural control can strengthen the association between attitudes and travel intention,

as well as the association between subjective norms and travel intention (H8<sub>a, b</sub>). This suggests that individuals who feel more in control of their ability to perform a behaviour are more likely to act on their positive attitudes and subjective norms towards travel. Furthermore, as perceived behavioural control increases, the predictive power of attitudes and subjective norms also tends to increase. This means that attitudes and subjective norms become more accurate predictors of travel intention when individuals feel that they have greater control over their behaviour. The result which is in line with the findings from the findings of Kim et al. (2011), Castanier et al. (2013), Yzer and Putte (2014), Afridi et al. (2021), Barbera and Ajzen (2021). Their findings emphasize the importance of considering how perceived behavioural control moderates the effects of attitudes and subjective norms on behavioural intentions.

Overall, the moderating effect of perceived behavioural control highlights the importance of considering individuals' perceived ability to perform a behaviour when examining the relationship between attitudes, subjective norms, and travel intention. It also underscores the importance of interventions that aim to increase individuals' sense of control over their behaviour to encourage positive travel-related behaviour.

## **5.7 Chapter Summary**

Chapter 5 provides a comprehensive description of the findings that address each of the research objectives. The study has successfully employed a survey method and a structural equation modelling approach to evaluate the relationships between the variables under investigation, and the measurement model and structural model are found to be an adequately suitable fit to the data from the sample. The results confirm the significant positive relationships between multidimensional risk perception and travel intention, attitude, and subjective norm, which is in line with previous research (Bae & Chang, 2020; Choi et al., 2013; Huang et al., 2014; Lam & Hsu, 2006; Lee, 2009). Furthermore, attitude and subjective norm are found to mediate the relationship between risk perception and

travel intention, while perceived behavioural control only partially mediates the relationship between experiential risk perception and travel intention.

It is worth noting that Chinese people's travel intention is influenced by their assessment of the behaviours, recognition from their society, and their perceived capability to participate in domestic tourism. Despite the pandemic, the Chinese government and the tourism industries have encouraged people to engage in domestic tourism through various policies and promotions, which may have contributed to people's positive attitude and subjective norm towards domestic tourism. However, the findings also suggest that perceived behavioural control has a weak mediating effect on the relationship between risk perception and travel intention, indicating that Chinese people's perceived capability of engaging in domestic travel is limited in the current pandemic situation. In summary, the results of this study provide important insights into the factors that influence Chinese people's willingness to engage in domestic tourism during the COVID-19 pandemic. The study's findings contribute to the existing literature on the relationship between risk perception and travel intention and highlight the importance of attitude, subjective norm, and perceived behavioural control in predicting travel intention. The study's limitations and implications for future research are also discussed in the final chapter.

## **CHAPTER 6: CONCLUSION**

### **6.1 Introduction**

The study revealed that COVID-19 was the primary barrier to domestic tourism. However, despite the negative impact of the pandemic on travel plans, it was found that the cutting down of travel plans had a positive relationship with domestic and domestic Chinese travel intentions, once travel restrictions were lifted. This suggests that the crisis does not only act as a barrier to domestic travel but also motivates people to travel domestically at a later stage. This study provides a meaningful discussion that risk perception influence on travel intention under the unprecedented pandemic. The empirical analysis indicated a significant risk perception and behavioural intention relation. This chapter provides the conclusions of the research which is related to the topic of travel intention toward domestic tourism. The researcher also explains about the proposed future study based on the analysis of the findings for better knowledge in related field and as benefits to relevant industries. Finally, this chapter summarize the research that have been conducted.

### **6.2 Theoretical contribution and implication**

Travel is regarded as a fundamental universal need for modern individuals (Bae & Chang, 2020). At the same time, tourism activities are a complicated process involving risk factors (e.g., health risk) (Bae & Chang, 2020; Ding et al., 2020). The crisis that the tourism industry faced from the beginning of 2020 is definitely one of the most difficult crises that it has ever experienced before. The COVID-19 pandemic has had a significant impact on the tourism industry, and domestic tourism has emerged as a crucial strategy to mitigate its negative consequences. As governments around the world continue to implement measures to control the spread of the virus, the domestic market has become a critical opportunity to support the tourism industry (OCDE, 2020). In this context, the



intentional market has turned its attention to promoting domestic tourism, which can potentially serve as a critical driver for tourism recovery. For instance, China has taken a proactive approach to promoting domestic tourism to stimulate its tourism industry (OCDE, 2020). Domestic tourism is, therefore, increasingly being seen as a way to mitigate the adverse effects of the pandemic on the tourism industry.

However, the outbreak of COVID-19 has brought unprecedented pressure to the tourism industry because of the changes in the composition of tourists, the rise and fall of consumer demand and the control requirements of the pandemic. Especially from the perspective of some small, medium, and micro tourism enterprises, many people lose money or go bankrupt due to operational difficulties. Since 2020, due to the risk of recurrent COVID-19 in various places and the "circuit breaker" mechanism of cross-provincial tourism, tourist attractions or travel agencies have been shut down and restarted repeatedly, and confidence has been continuously hit. In order to ensure the safety of its citizens, China, like all other countries in the world, has to adopt restrictions on international travel due to the pandemic.

Domestic tourism has become a great opportunity to driving recovery. This research also found that deliberative risk perception, affective risk perception, and experiential risk perception (independent variable) influences attitude (mediating variable), subjective norm (mediating variable), and travel intention (dependent variable) in the context of China's domestic tourism during the pandemic. Moreover, deliberative, affective, and experiential risk perception significantly positively influences travel intention. Attitude and subjective norm have a mediational effect between multidimensional risk perception and travel intention to domestic tourism. Perceived behavioural control has a moderating effect in attitude-travel intention and subjective norm-travel intention relationships.

The present study aims to examine the impact of COVID-19 risk perception on the travel intention of domestic tourists in China using an extended Theory of Planned Behavior (TPB) model. The study is unique as it explores multiple dimensions of risk perception, specifically deliberative, affective, and experiential, in relation to travel behavior. The researchers note that although previous studies have investigated risk perception in tourism activities during the pandemic, few have explored the link between multiple dimensions of risk perception and travel behavior. As such, this study is pioneering in introducing new predictors and an extended TPB model for predicting Chinese tourists' domestic travel intention.

This study enhances the extended Theory of Planned Behavior (TPB) model by testing additional causal relationships and moderating variables in relation to multiple dimensions of risk perception, contributing to the literature. Although the proposed model shared similarities with the study by Bea and Chang (2021) that utilized TPB to explore COVID-19-related tourist behavior, the findings of this study were slightly different. This study made significant theoretical contributions to the existing literature by testing more causal relationships and moderating variables. Specifically, while the previous study introduced the perceived behavioral control to behavioral intention paths, this study demonstrated that perceived behavioral control could contribute to the formation of individuals' attitude and subjective norm, and the moderator could improve the predictability of the model. The results of structural equation modelling provide vital evidence for the theorized links among the variables in the extended Theory of Planned Behaviour incorporate with multiple dimensions of risk perception. This study underscores the significance of incorporating additional components, specifically multidimensional risk perception, to the traditional TPB model in investigating travel intention during the COVID-19 pandemic. By extending the model, the researchers have

been able to mildly enhance its predictability, thereby providing valuable insights into the decision-making process behind travel behaviour. Based on the research findings, the study has successfully accomplished its four research objectives, which were to explore the basic causality, mediating effects, and moderating effects of the extended TPB model with TRIRISK model, thus filling the research gap in understanding tourists' travel intention during the COVID-19 pandemic.

More specifically, firstly, the present study employs an extended Theory of Planned Behaviour (TPB) model that incorporates multiple dimensions of risk perception to investigate travel behavioural intentions in the context of the COVID-19 pandemic. The study demonstrates that risk perception, encompassing deliberative, affective, and experiential dimensions, exerts a significant impact on domestic tourist intentions to travel. Notably, the extended TPB model is deemed appropriate for examining the aforementioned research issue. The results reveal that multidimensional risk perception has a positive association with domestic travel intentions. This finding may be attributed to the perception of domestic travel as being comparatively safer than international travel, which possibly explains the preference for domestic leisure travel over international leisure travel during the pandemic.

The study's second significant theoretical contribution and implication lies in the exploration of the positive relationship between the predictive constructs of the Theory of Planned Behaviour (TPB), including attitude, subjective norm, and perceived behavioural control, and behavioural intention. The research effectively fills the knowledge gap in China's domestic tourism research concerning COVID-19 pandemic and travel behaviour. In the context of domestic travel, individuals' positive attitude towards traveling domestically is found to enhance their intention to travel domestically. Moreover, attitude is the most critical factor that influences domestic travel intention in

comparison to subjective norm and perceived behavioural control, as it reflects a more intrinsic and personal motivation to travel. While subjective norm and perceived behavioural control can also impact domestic travel intention, they may be more extrinsic and subject to change based on external factors. In contrast, an individual's attitude is more stable and reflective of their personal beliefs and values towards domestic travel, which can have a stronger impact on their intention to engage in the behaviour. The study identifies attitude, subjective norm, and perceived behavioural control as critical factors positively related to domestic travel intention in China. Therefore, individuals with a positive attitude, subjective norm, and perceived behavioural control are likely to travel domestically once travel restrictions are lifted.

Third, this study contributes to the existing literature by identifying the significant mediating role of attitude and subjective norm in the relationship between risk perception and travel intention. Specifically, the findings suggest that an increase in risk perception would have a positive impact on attitude and subjective norm, which would subsequently affect domestic travel intention in China. Moreover, the study highlights that attitude and subjective norm play a mediating role in the positive relationship between multidimensional risk perception and domestic travel intention by shedding light on the process of travel intention formation despite perceived risks. In particular, attitude refers to an individual's favourable or unfavourable evaluation of a behaviour, such as domestic travel, while subjective norm reflects an individual's perception of social pressure to engage in the behaviour. Therefore, despite perceived risks, a positive attitude towards travel and the perception of social support can increase the likelihood of forming a travel intention, which has important implications for tourism marketers and policymakers aiming to encourage domestic travel in China.

Fourth, the present study has contributed to the existing literature by examining the role of perceived behavioural control as a moderator in the relationship between attitude, subjective norm, and domestic travel intention in China. The findings of this study indicate that individuals with a higher perceived behavioural control are more likely to have a positive attitude towards domestic tourism, comply with the subjective norm of traveling domestically, and express a stronger intention to travel domestically.

The results of this study support the theory of planned behaviour, which suggests that attitudes, subjective norms, and perceived behavioural control are key determinants of individuals' intention to engage in a behaviour. Specifically, the present study found that perceived behavioural control positively moderates the relationship between attitude and domestic travel intention, suggesting that individuals who feel more in control of their travel behaviour are more likely to form positive attitudes towards domestic tourism and express stronger intentions to travel domestically.

In addition, the findings of this study suggest that perceived behavioural control also moderates the relationship between subjective norm and domestic travel intention. Individuals with a higher perceived behavioural control are more likely to comply with the social norms around domestic travel and express a stronger intention to travel domestically. This finding is consistent with previous research that has highlighted the importance of subjective norm in predicting travel behaviour, as it reflects an individual's perception of the social pressure to engage in a particular behaviour.

Moreover, the current study adds to the literature on perceived behavioural control by showing its importance in the context of domestic tourism in China. This finding is particularly relevant given the significant growth of domestic tourism in China in recent years, as well as the country's increasing focus on developing its domestic tourism

industry. The results of this study suggest that enhancing individuals' perceived control over their travel behaviour could be an effective way to promote domestic tourism in China.

Overall, this study highlights the importance of integrating multidimensional risk perception into the traditional TPB model for understanding travel behaviour during the COVID-19 pandemic, and the findings provide valuable insights into the driving factors of domestic travel intention in China.

### **6.3 Practical contribution and implication**

The outbreak of COVID-19 has led to significant changes in the tourism industry, especially in China. Domestic tourism has become a key strategy for the recovery of the industry, and understanding the factors influencing domestic travel intentions is crucial for tourism businesses. This study explored the influence of different types of risk perception on travel intentions of domestic tourism in China. The findings provide practical implications for tourism businesses during the COVID-19 pandemic.

First, the study found that deliberative risk perception exerts the strongest positive influence on travel intention of domestic tourism in China. Deliberative risk perception refers to the cognitive assessment of risk, taking into account the likelihood and consequences of negative events. In the context of COVID-19, this means that individuals who carefully evaluate the risks and benefits of traveling are more likely to travel domestically. This suggests that tourism businesses need to provide clear and accurate information about the risks and preventive measures to attract travellers. Affective risk perception, which refers to the emotional response to risk, also has a significant positive influence on travel intention. This means that individuals who feel anxious or fearful about the risks of travel may be less likely to travel domestically. Tourism businesses

need to take this into account when designing marketing strategies and communication materials. They need to provide reassurance and address the emotional concerns of potential travellers. Experiential risk perception, which refers to the perception of risk based on past experiences, also has a positive influence on travel intention. This means that individuals who have positive past experiences with domestic travel are more likely to travel again. Tourism businesses need to focus on providing high-quality and memorable experiences to attract repeat travellers and build brand loyalty.

Second, deliberative risk perception also exerts a significant positive influence on attitude and subjective norm. Attitude refers to the evaluation of the behaviour (in this case, domestic travel), while subjective norm refers to the perceived social pressure to engage in the behaviour. This suggests that tourism businesses need to focus on building positive attitudes towards domestic travel and create a social norm that encourages travel. They need to highlight the benefits of domestic travel, such as supporting local businesses and promoting cultural exchange. Furthermore, the study found that deliberative risk perception has a stronger influence on attitude compared to subjective norm. This means that individuals' personal assessment of risk is more important in shaping their attitudes towards domestic travel than social pressure. This suggests that tourism businesses need to provide information and guidance to help individuals make informed decisions about travel, rather than relying solely on social pressure or incentives.

This study investigates the relationship between affective risk perception, attitude, and subjective norm in influencing individual behaviour. The research findings indicate that affective risk perception significantly and positively influences attitude and subjective norm. Affective risk perception refers to an individual's emotional response to a risk or hazard. In this study, the researchers focused on how this perception affects an individual's attitude and subjective norm. Attitude refers to an individual's positive or

negative evaluation of a behaviour, while subjective norm refers to an individual's perception of social pressure to perform or not perform a behaviour. The study found that affective risk perception has a significant positive influence on both attitude and subjective norm. This means that individuals who perceive a higher level of risk in a particular behaviour are more likely to have a positive attitude towards it and feel more social pressure to perform that behaviour. Furthermore, the study also found that affective risk perception has a greater influence on subjective norm than attitude. This suggests that social pressure is more strongly influenced by an individual's emotional response to a risk than by their evaluation of the behaviour. The findings of this study have implications for policymakers and practitioners who aim to promote behaviour change in various contexts, such as health promotion and environmental sustainability. The study suggests that increasing affective risk perception could be an effective strategy for promoting positive attitudes and social norms towards a desired behaviour. Additionally, the study highlights the importance of considering both attitude and subjective norm in behaviour change interventions, as they are both important factors in shaping individual behaviour.

Experiential risk perception is a crucial concept in decision-making and has been the focus of research in various fields. This study aimed to investigate the relationship between experiential risk perception, attitude, and subjective norm. The study employed a quantitative research design, and data was collected through a survey administered to a sample of participants. The study found that experiential risk perception exerts a significant positive influence on both attitude and subjective norm. This result implies that people tend to develop more favourable attitudes and perceive social pressure to act in a particular way based on their experience of risk. This finding aligns with previous research that suggests experiential factors, such as personal experience and emotional response, play a critical role in shaping individuals' perceptions and decision-making.



Furthermore, the study revealed that experiential risk perception has a greater impact on subjective norm than on attitude. This finding suggests that experiential risk perception is a more potent predictor of social pressure than personal attitudes, which are more likely to be influenced by other factors such as beliefs, values, and cognitive processing. Overall, the findings of this study highlight the importance of experiential risk perception in shaping individuals' attitudes and behaviours. The study's results have significant implications for risk communication strategies, as they suggest that experiential factors should be taken into account when designing risk messages aimed at changing attitudes and behaviours. Additionally, the finding that experiential risk perception has a stronger influence on subjective norm than attitude can inform interventions that seek to influence social norms and promote behaviour change.

Third, attitude, subjective norm, and perceived behavioural control have been found to be significant predictors of travel intention. These factors have been studied extensively in the context of understanding the behaviour of tourists, and their impact on travel intention has been found to be significant. Attitude is a key determinant of travel intention, as it reflects an individual's overall evaluation of travel as an experience. The more positive the attitude towards travel, the greater the likelihood of a person intending to travel. Positive attitudes are influenced by a variety of factors, such as the perceived benefits of travel, the social and cultural experiences associated with travel, and the emotional fulfilment that travel provides. Thus, individuals with positive attitudes towards travel are more likely to intend to travel. Subjective norm, on the other hand, is related to the influence of social pressure and the opinions of others on travel intention. It reflects an individual's perception of whether or not those around them approve of travel. The stronger the perceived social pressure to travel, the greater the likelihood of a person intending to travel. Therefore, the approval and encouragement of others can have a

significant impact on travel intention. Perceived behavioural control is another significant predictor of travel intention. It reflects an individual's perception of the ease or difficulty of performing a behaviour, such as traveling. The greater the perceived control over the travel behaviour, the greater the likelihood of travel intention. For example, individuals who believe that they have the resources and abilities necessary to travel are more likely to intend to do so. The outcomes of studies examining the impact of these three factors on travel intention have shown that attitude has a stronger influence on travel intention than subjective norm and perceived behavioural control. This is likely because attitudes are more closely linked to personal beliefs and values, and are therefore more influential in shaping behaviour. Overall, understanding the interplay between attitude, subjective norm, and perceived behavioural control can help to inform the development of effective strategies for promoting travel behaviour.

Fourth, this study aimed to investigate the role of attitude as a mediator in the relationship between different types of risk perception and travel intention. The findings of this study support the notion that attitude partially mediates the relationship between deliberative, affective, and experiential risk perception and travel intention. Attitude, in this context, refers to a person's overall evaluation or feeling towards a particular object or situation. In this case, it is the person's attitude towards the travel. The study found that a positive attitude towards the destination mediates the relationship between risk perception and travel intention. The practical contribution of this study is that it highlights the importance of promoting a positive attitude towards a travel destination in order to increase travel intention. Tourist destinations can use this information to design their marketing strategies in a way that emphasizes the positive aspects of the destination while also addressing any potential risks. This study can help tourism organizations to better understand the relationship between risk perception and travel intention, and design

effective communication strategies to encourage potential travellers to make informed decisions while mitigating any risks involved. In conclusion, this study provides valuable insights into the role of attitude as a mediator in the relationship between different types of risk perception and travel intention. The findings suggest that a positive attitude towards the destination is a key factor in increasing travel intention, and that tourism organizations can use this information to design effective communication strategies to promote the destination while also addressing any potential risks.

The current research explores the role of subjective norm in mediating the relationship between different types of risk perception and travel intention. The study finds that subjective norm partially mediates the relationship between deliberative, affective, and experiential risk perception and travel intention. The results indicate that subjective norm plays a significant role in shaping travel intention, as it partially mediates the relationship between all three types of risk perception and travel intention. This suggests that individuals' travel intentions are influenced not only by their perception of risks but also by the opinions and expectations of significant others, such as family and friends. These findings have practical implications for the travel industry, as they suggest that travel-related messaging and marketing efforts should not only focus on reducing risk perceptions but also on promoting positive social norms that support travel. By emphasizing the positive aspects of travel and highlighting the social benefits of travel, travel companies can help create a more positive perception of travel and increase travel intention. Overall, this study contributes to the understanding of the factors that shape travel intention and provides insights that can be used to design effective interventions and marketing strategies that encourage travel. It also highlights the importance of considering subjective norm as a key factor in shaping individuals' travel behaviour.

Fifth, the concept of risk perception has been extensively studied in the travel industry, as travellers face a range of risks and uncertainties associated with their travel decisions. The current study aimed to investigate the role of perceived behavioural control (PBC) as a mediator of the relationship between different types of risk perception and travel intention. The results of the study indicated that PBC does not mediate the relationship between deliberative and affective risk perception and travel intention. This suggests that travellers' decision-making process is not significantly influenced by their deliberate or emotional assessment of risk, as they feel that they have sufficient control over their travel plans to mitigate any perceived risks. However, the study found that PBC does partially mediate the relationship between experiential risk perception and travel intention. This suggests that when travellers base their risk perceptions on prior experiences, their perceived control over the travel decision plays a more significant role in their travel intention. These findings have practical implications for the travel industry, as they suggest that travel companies need to focus on providing a sense of control to their customers, particularly in situations where travellers base their risk perceptions on their past experiences. This could involve offering flexible cancellation policies, clear and transparent communication about safety measures, and providing tools that enable customers to modify their travel plans according to their preferences. Overall, this study highlights the importance of considering the different factors that influence travellers' risk perceptions and decision-making processes when developing travel-related policies and services. By taking into account the role of PBC in shaping travel intentions, travel companies can better understand their customers' needs and preferences, and tailor their offerings accordingly.

Sixth, the current study investigated the role of perceived behavioural control (PBC) as a moderator of the relationship between attitude and subjective norm and travel

intention. The results indicated that PBC plays a crucial role in strengthening the relationship between both attitude and subjective norm, and travel intention. The first finding is that high perceived behavioural control strengthens the positive relationship between attitude and travel intention of domestic tourism in China during the pandemic. This means that when people feel they have more control over their behaviour, their positive attitudes towards travel will have a stronger influence on their travel intentions. The practical implications of this finding are significant for policymakers and tourism managers. Firstly, it suggests that providing travellers with information and resources to make informed decisions about their travel plans is essential. This can include information about safety protocols and measures in place to prevent the spread of COVID-19. It can also involve providing resources for travellers to plan their trips, such as travel guides and itineraries. By providing travellers with these resources, they will feel more in control of their travel decisions and may be more likely to have positive attitudes towards travel. Secondly, tourism managers should focus on creating a safe and enjoyable travel experience for travellers. This can involve implementing safety measures and protocols to ensure the health and safety of travellers. It can also involve creating engaging and exciting travel experiences that will encourage travellers to have positive attitudes towards travel. By creating a positive travel experience, travellers are more likely to have positive attitudes towards travel and be more likely to intend to travel. The second finding is that high perceived behavioural control strengthens the positive relationship between subjective norm and travel intention of domestic tourism in China during the pandemic. This means that when people feel they have more control over their behaviour, their perception of what others think about their travel intentions will have a stronger influence on their travel intentions. The practical implications of this finding are also significant for policymakers and tourism managers. Firstly, it suggests that promoting positive social norms surrounding travel can encourage more people to travel

domestically during the pandemic. This can involve promoting the benefits of domestic travel to society and highlighting positive stories of safe and enjoyable domestic travel experiences. By promoting positive social norms surrounding travel, travellers are more likely to have positive attitudes towards travel and be more likely to intend to travel. Secondly, tourism managers should focus on creating a sense of community and belonging for travellers. This can involve creating travel experiences that allow travellers to connect with others and share their travel experiences. By creating a sense of community, travellers are more likely to feel that their travel intentions align with positive social norms and be more likely to intend to travel. By providing travellers with information and resources, creating a safe and enjoyable travel experience, promoting positive social norms, and creating a sense of community and belonging for travellers, tourism managers can encourage more people to travel domestically during the pandemic. These practical implications can help to support the recovery of the tourism industry in China and promote safe and enjoyable domestic travel experiences for travellers.

The practical implications of these findings for tourism businesses during the COVID-19 pandemic are clear. They need to provide clear and accurate information about the risks and preventive measures, address emotional concerns, focus on providing high-quality experiences, build positive attitudes towards domestic travel, and help individuals make informed decisions. They also need to adapt to the changing circumstances and regulations related to the pandemic, such as implementing social distancing measures and offering flexible cancellation policies. In conclusion, this study provides valuable insights into the factors influencing travel intentions of domestic tourism in China during the COVID-19 pandemic. The findings have practical implications for tourism businesses in terms of designing marketing strategies, communication materials, and providing high-quality experiences. By addressing the different types of risk perception and helping

individuals make informed decisions, tourism businesses can attract travellers and contribute to the recovery of the tourism industry.

#### **6.4 Policy contribution and implication**

The outbreak of COVID-19 has led to significant changes in the tourism industry, especially in China. Domestic tourism has become a key strategy for the recovery of the industry, and understanding the factors influencing domestic travel intentions is crucial for tourism businesses. The COVID-19 pandemic has brought significant changes to the tourism market, and it is essential for the tourism industry to reconsider tourists' behavior and the new norms in tourism. The results of this study have policy implications for the tourism industry, which has been profoundly impacted by the COVID-19 pandemic. The study indirectly impacts the tourism industry by providing information on the risk perception of Chinese domestic tourists related to COVID-19. These findings may help policymakers to observe tourists' behavioral intention and develop better strategies and implications to encourage tourists to take an interest in domestic tourism and support the tourism industry.

To address deliberative risk perceptions, the government should provide clear and transparent information on the health and safety measures in place to prevent the spread of COVID-19. This could include information on the cleanliness and sanitation of hotels and tourist attractions, as well as measures to ensure social distancing and mask-wearing. By providing this information, potential travellers can make more informed decisions about the risks of travel and may be more likely to consider domestic tourism. Efforts to address affective risk perceptions should focus on promoting positive emotions associated with travel, such as enjoyment, relaxation, and excitement. This could include marketing campaigns that highlight the beauty and uniqueness of domestic tourist destinations, as

well as emphasizing the benefits of taking a break from the stresses of daily life. By promoting positive emotions, potential travellers may be more likely to view travel as a desirable and worthwhile activity, despite the risks associated with the pandemic. Experiential risk perceptions can be addressed by providing opportunities for potential travellers to experience domestic tourism in a safe and controlled environment. This could include offering trial travel programs, where travellers can visit destinations and participate in activities under the guidance of experienced and knowledgeable tour guides. By providing a positive and memorable travel experience, potential travellers may be more likely to consider future domestic tourism, despite the risks associated with the pandemic.

In addition to addressing risk perceptions, efforts to promote domestic tourism in China should also focus on attitude and subjective norm. The study also found that attitudes and subjective norms play a mediating role in the relationship between risk perceptions and travel intentions. Attitude refers to people's overall evaluation of domestic tourism, whether they see it as something positive or negative. Subjective norms, on the other hand, refer to the social pressure and expectations that people feel from their family, friends, and other influential individuals. In other words, even if people perceive that domestic tourism is safe, they may still choose not to engage in it if they have a negative attitude towards it or if they feel that their friends and family disapprove of it. Therefore, efforts to promote domestic tourism should also focus on promoting positive attitudes and social norms around it. The government could work to promote positive attitudes towards domestic tourism by highlighting the benefits of traveling within the country, such as supporting local businesses and experiencing the cultural and natural beauty of different regions. They could also use social media campaigns to showcase the positive experiences of people who have travelled domestically during the pandemic. In



addition, the government could work to create a social norm around domestic tourism by encouraging influential individuals, such as celebrities and community leaders, to promote it. They could also work with travel agencies and tourism businesses to develop packages and promotions that encourage group travel, which may help to create a sense of social support for domestic tourism. In summary, the statement suggests that promoting domestic tourism in China during the pandemic requires addressing risk perceptions, attitudes, and subjective norms. By promoting positive attitudes and social norms around domestic tourism, the government could help to encourage more people to engage in it, which could provide a much-needed boost to the tourism industry and local economies.

In the context of the COVID-19 pandemic, perceived behavioural control plays a critical role in determining travel intention. This is because the pandemic has led to significant restrictions on travel, making it difficult for people to travel even if they have a positive attitude towards domestic tourism. High perceived behavioural control strengthens the positive relationship between attitude and travel intention of domestic tourism in China during the pandemic. This suggests that if people believe they have the capacity and opportunity to travel domestically, they are more likely to intend to travel. Similarly, high perceived behavioural control strengthens the positive relationship between subjective norm and travel intention of domestic tourism in China during the pandemic. This implies that if people believe that their social circle expects them to travel domestically and they have the capacity and opportunity to do so, they are more likely to intend to travel. The findings of this research have significant policy implications for the domestic tourism industry in China during the COVID-19 pandemic. First and foremost, it suggests that it is essential to provide people with the capacity and opportunity to travel domestically. This means that measures must be taken to ensure that transportation is available, and travel plans can be made with ease. For instance, the government may

implement relevant policies to encourage tour operators and transportation providers to offer attractive packages and convenient booking options in order to attract people to travel. Additionally, it is critical to address the financial constraints that people may face in traveling domestically. The pandemic has had a significant impact on people's income, and many may not have the financial resources to travel. To address this, the government can offer incentives and subsidies to encourage domestic travel. For example, discounts on travel packages or subsidies for transportation costs can be provided to make domestic travel more accessible and affordable. Moreover, Chinese provinces can make use of the opportunities, such as the emerging medical tourism or cultural tourism to deliberate for facilitating cross-border movement of education and health personnel and investment depending on the host provinces' demand and supply conditions. Public private partnership both at the national and provincial levels should be encouraged to build effective education and healthcare services infrastructure through eliminating province-specific constraints.

## **6.5 Recommendation for tourism industry**

Zikmund and Babin (2007) define conclusions as "opinions based on the results" and recommendations as "suggestions for action." In this study, conclusions are drawn based on a comprehensive interpretation of theoretical and empirical findings. Based on these findings and conclusions, recommendations are made to domestic tourism marketers in China. The hypotheses in Chapter 4 confirm that tourists' travel intention is directly affected by attitude, subjective norm, perceived behavioral control, and risk perceptions (deliberative, affective, and experiential). Additionally, risk perceptions positively and significantly affect tourists' behavioral intention through mediating variables, such as attitude and subjective norm. Perceived behavioral control highlights the moderating relationships in the extension model of the theory of planned behavior. It plays a

moderating role in the process of attitude and subjective norm affecting behavioral intention. The extension model of the theory of planned behavior is used to construct the conceptual model of tourists' behavioral intention to domestic tourism, providing valuable information and reference for the Chinese domestic tourism market during the pandemic.

Through the above empirical analysis and combined with the current situation of domestic tourism development in China, this study will put forward policies and suggestions to benefit domestic tourism from the two levels of government and tourism enterprises. Wellness tourism will become a new choice for elderly tourists. According to the data of the Seventh National Population Census of the People's Republic of China, the total number of older people aged 60 and above in mainland China was 264 million, accounting for 18.7% of the total population in 2020 (Akimov et al., 2021). While the aging process in China is accelerating, the consumption power of the elderly group is also improving, and the elderly group's demand for retirement life is also more robust. It is predicted that the global wellness tourism market will reach \$1,592.6 billion by 2030 worldwide (Allied Market Research, 2021). Sports tourism will continue to heat up and become popular. The deep integration of sports and tourism has opened up new markets for leisure sports, and market segments such as skiing, rafting, rock climbing, hiking, and wingsuit flying have attracted more and more attention. The number of sports tourism-related enterprises were increased from 52,400 in 2019 to 235,200 in 2021, a year-on-year increase of 348.85% (World Travel News, 2022). Sports tourism shows a rapid growth trend. The integration technology group is becoming more and more mature or will stimulate the infinite possibilities of the metaverse and non-fungible token (NFT) data units. In 2021, the concept of "metaverse" was exploded. It has become a hot topic on the Internet. From the perspective of future trends, on the one hand, the blessing of technology provides the technical prerequisites for the future new visions of the virtual world such as the Metaverse and NFT, derives more business forms and industrial visions,

and accelerates the deep integration of the digital economy and the real economy. On the other hand, the maturing of integrated technology brings new development opportunities for digital culture. In addition, with the close integration of the metaverse with the cultural industry and tourism, the cultural metaverse and tourism metaverse may become a new way of cultural inheritance and innovation and tourism sensory upgrading, stimulating infinite possibilities for the future development of virtual worlds. Tourism enterprises should try to develop a variety of tourism products according to the characteristics of tourists, so as to fill the gaps in the domestic market. Moreover, a growing emphasis on a low-carbon economy in many countries. With the continuous advancement of the carbon neutrality goal, low-carbon development has become an important transformation direction for various industries. As a highly sensitive industry that is greatly affected by climate change, the transition to low-carbon tourism is not only the need for its own sustainable development, but also the practice of low-carbon economy. It is imperative to develop low-carbon domestic tourism products.

The COVID-19 pandemic has had a significant impact on the tourism industry, causing a sharp decline in international travel and tourism activity. Many countries have implemented travel restrictions and lockdown measures to prevent the spread of the virus, leading to significant economic losses for the industry. The pandemic has also highlighted the importance of sustainable tourism and the need for resilient tourism systems that can adapt to changing circumstances. Despite the challenges presented by the COVID-19 pandemic, the tourism industry is expected to recover and continue to grow in the coming years. With the rise of new technologies and the increasing focus on sustainable and responsible tourism practices, the industry has the potential to drive economic growth, create jobs, and promote cultural exchange and understanding.

In conclusion, the tourism industry is an important and dynamic sector that provides economic, social, and cultural benefits to countries around the world. While there are

challenges and risks associated with the industry, such as environmental impact, over-tourism, and the disruption of local communities, these can be managed through sustainable tourism practices and responsible tourism policies. The tourism industry has the potential to drive economic growth, create jobs, and promote cultural exchange and understanding. As the industry recovers from the impacts of the COVID-19 pandemic, it will be important to prioritize sustainable and resilient tourism systems that can adapt to changing circumstances and promote long-term economic and social benefits. With the right policies and practices, the tourism industry can continue to thrive and make a positive contribution to global development.

## **6.6 Limitation and future research**

This study examines the impact of risk perception of COVID-19 on the behavioural intention of domestic tourism in China. However, there are several limitations that should be acknowledged. One of the main limitations of this study is related to the statistical analysis used. While the study provides valuable insights, the use of structural equation modelling (SEM) with cross-sectional data limits the ability to infer causality. Moreover, the study is based on a sample of Chinese populations and thus, the generalizability of the findings to other populations is uncertain. In order to enhance the external validity of the study, future research should test the research model in different contexts to determine if the results can be replicated.

Another limitation is the pooling of cross-sectional data, which means that the data was collected at a specific point in time. This may limit the ability to observe changes in behavioural intention over time. It is possible that the behavioural intention during the COVID-19 pandemic may not remain the same way after the end of the pandemic. Therefore, researchers should collect data at different time points for longitudinal

examination of the issue. This would allow for the examination of the relationship between behavioural intention in the COVID-19 early time and the later period.

Despite the limitations, this study provides important insights into the impact of risk perception of COVID-19 on domestic tourism in China. Chinese people have shown high interest in domestic tourism due to the restrictions on outbound tourism. Therefore, the tourism industry and related companies may transform or focus more on domestic tourism. Domestic tourism policies and strategies should be more imaginative and innovative to attract tourists during the pandemic. For example, domestic tourism could add some Chinese cultural elements to create a deeper impression for tourists. This highlights the importance of paying more attention to the discovery of Chinese cultural tourism, which is not only an economic activity but also a cultural activity. Promoting and integrating the development of cultural and tourism industries is an important way to upgrade and promote the transformation of the tourism industry.

Future research could explore the post-pandemic period more explicitly to research what will be the strategic solutions of the tourism industry after the lockdown period. This could include examining how the industry will manage to maintain its workforce and keep the focus on the issues of social sustainability. After the tourism industry finally overcomes the crisis, research should explore the final results in the industry in order to assess a broader and more comprehensive picture.

In conclusion, while this study provides important insights into the impact of risk perception of COVID-19 on domestic tourism in China, it is limited by the statistical analysis used and the generalizability of the findings to other populations. The findings suggest that the tourism industry and related companies may need to transform or focus more on domestic tourism, and domestic tourism policies and strategies should be more imaginative and innovative. The integration of cultural and tourism industries is an important way to upgrade and promote the transformation of the tourism industry. Further

research is needed to explore the post-lockdown period more explicitly and assess the final results in the industry.

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