

Extending the Theory of Planned Behavior to Understand Travelers' Intentions to Visit China in Hong Kong Context

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Abstract: *This study aims to understand the travel intentions of Hong Kong residents to China after the COVID-19 pandemic by using an Extended Theory of Planned Behavior (ETPB) that integrates two additional factors: "pandemic-related travel restrictions" and "perceived destination health and safety". Findings from 320 valid surveys indicated that the five factors in the ETPB model are directly related to travel intention, and the ETPB model has a predictive power on the Hong Kong travelers' travel intention to China. The findings of this study extend our knowledge of application of ETPB and provide useful information to tourism industry in China and Hong Kong in marketing strategy formulation and implementation.*

Keywords: China; Hong Kong; ETPB; COVID-19; Travel intention.

1. INTRODUCTION

After entering the 21st century, due to the rapid economic development, the gradual improvement of international status, and the continuous progress of society, China has not only become one of the world's emerging popular tourist destinations but also gradually formed a large-scale tourism industry. According to Ministry of Culture and Tourism of the People's Republic of China (2019), the number of domestic and inbound tourists in China increased in 2019 compared to 2018. Among them, the number of inbound tourists was 145.31 million, an increase of 2.9% compared to 2018. In addition, China's total tourism revenue in 2019 was 6.63 trillion RMB (\approx US\$936.1 billion), an increase of 11.1% compared to 2018. Moreover, in the ten years from 2010 to 2019, the number of inbound tourists has maintained an increasing trend. The number of inbound tourists in China continued to grow from 2010 to 2019, from 130 million to 145.3 million, a year-on-year increase of about 15.3 million within 10 years (National Bureau of Statistics, 2021).

Outbound tourism can be defined as a form of tourism in which tourists travel to other countries for sightseeing (UNWTO, 1994). Benefiting from the internationalization of Hong Kong and its convenient transportation as an international transportation hub, Hong Kong's outbound tourism development has always been ahead of the world. In the ten years from 2008 to 2018, the number of departures from Hong Kong increased from about 82 million initially to about 92 million, an increase of 10 million (World Bank, 2018). In terms of overseas spending, Hong Kong tourists spent US\$26.5 billion on international travel in 2018. This data has been in the growing trend from 2009 to 2018 and reached a new peak in 2018 (World Bank, 2018).

All along, the cross-border connection between Hong Kong and Mainland has become increasingly closer. Related scholars have called this phenomenon as an excellent result of economic globalization (Shen, 2003). Today, Hong Kong tourists have become the main group of Chinese inbound tourists. Taking 2018 as an example, the total number of inbound tourists to China in the whole year was 141.2 million, of which the total number of tourists from Hong Kong was 79.37 million, accounting for 56.2% of the total number of tourists (WTA 2019). Moreover, from 2009 to 2018, the proportion of inbound tourists from Hong Kong and Macau has been much higher than that of other regions, and the proportion every year exceeded 58.55% (WTA, 2022).

Amid outbreak of Covid 19 epidemic in 2020, China's inbound tourism industry has taken an unprecedented hit. The number of overseas tourists received by mainland China was only 14.51 million in the first half of 2020, a decrease of 80.1% compared with the same period in 2019 (China Tourism Academy, 2020). In addition, under the covid 19 pandemic, the number of outbound tourists from Hong Kong residents also experienced a cliff-like decline. According to Hong Kong Census and Statistics Department (2020), about 1.86 million Hong Kong residents left Hong Kong in 2020, down about 86% from 12.97 million in 2019. After the epidemic, promoting the

overall recovery of inbound tourism will become the important tasks of the Chinese administrative department (China Tourism Academy, 2020). Hong Kong is one of the major tourists generating markets from Mainland China perspective as a tourism destination region (TDR). By the same token, Mainland China is one of the important tourist destinations from Hong Kong perspective as a tourist generating region (TGR). The lack of Hong Kong tourists will inevitably seriously affect the profitability and development of the mainland inbound tourism industry. Therefore, an accurate understanding of the intention of Hong Kong residents to travel to mainland China and re-attracting Hong Kong tourists will play a vital role in the recovery of inbound tourism in mainland China. Theory of Planned Behavior (TPB) (Ajzen, 1991) examines one's behavioral intention at a specific time and circumstance. The model suggested three core dimensions namely attitudes, subjective norms (SN), and perceived behavioral control (PBC) to study individuals' beliefs and behavior in different situations (Ajzen, 1991). At present, this model is considered as one of the major psychological theories that can effectively predict people's behavioral intentions (Armitage, 2001). However, since individuals' behavioral intentions are often influenced by multiple factors, conventional TPB theory may affect the accuracy of research. Therefore, it is necessary to extend the original model by incorporating new constructs to understand and predict individuals' behaviors (Conner, 1998). Previous research has shown that individuals' perception of travel risk in a region negatively affects their intention to visit the region (Khan, 2019). In addition, other studies have found that travel restrictions and social restraints imposed during the pandemic to prevent the spread of the disease also negatively impact travelers' willingness to travel (Shin, 2022). Hence, it is importance to incorporate pandemic related travel restrictions and perceived destination health and safety as extended constructs when examining Hong Kong people's travel intentions to Mainland China after the COVID-19 pandemic.

2. LITERATURE REVIEW

2.1 Travel intention

Extant studies have shown that people's intention to perform a particular behavior is one of the key factors in the implementation of the behavior (Sheeran, 2005). As one of the common behaviors in people's daily life, actual travel behavior is closely related to the traveler's personal intention to a large extent (Hsu, 2010). Therefore, research on the traveler's travel intention may effectively judge and predict the traveler's travel behavior. The intention of Hong Kong residents to travel abroad has shown some distinctive differences over different times. For example, from 2005 to 2009, although the number of Hong Kong residents who chose mainland China as their future tourist destination showed a decreasing trend, the proportion was still higher than that of Macau and other overseas countries (Law, 2011). However, an online survey conducted by ITE (2022) found that 77% of respondents would choose Northeast Asia (i.e., Japan, South Korea) as travel destinations after the pandemic. The formation of intentions is generally affected by practical and psychological factors (Anscombe, 2000). For example, the study on the influence of Korean popular culture on Hong Kong people's travel intentions to South Korea confirmed that media as an external factor significantly impact on people's travel intentions (Kim, 2008). The study showed that the more enthusiastic respondents were about Korean pop culture, the higher their willingness to travel to South Korea.

2.2 Theory of Planned Behaviour

The TPB theory proposed by Ajzen (1991) divides factors affecting individual behavioural intentions into three dimensions: Attitude, Subjective norms (SN), Perceived behavioural control (PBC). According to this theory, the formation of individual behavioural intentions is closely related to these three dimensions. Attitude could be defined as a person's feeling towards a particular behaviour. This means whether someone has a positive or negative view of some behaviour. Subjective norm (SN) is defined as a person's perceived social pressure to perform a certain behaviour. These pressures generally come from specific groups (such as parents, spouses, friends, teachers, colleagues, etc.). Perceived Behavioural Control (PBC) is defined as the personal resources and individual ability (e.g., time and money) when a person carries out a particular behaviour. Under the joint influence of these factors, people perceive the difficulties and opportunities of turning behavioural intention into actions (Ajzen, 1991). TPB has been proven to be one of the theoretical models that can effectively predict and evaluate behavioural intentions (Armitage, 2001). The theory has been widely used in other fields outside of psychology and has demonstrated its effectiveness in predicting consumer behaviour in tourism industry research. For example, in the studies examining travel intention of Taiwanese youth and Chinese university students to visit Japan respectively (Hsieh, 2016; Park, 2016), similar findings were reported that attitude, subjective norms, and perceived behavioural control was significantly associated with travel intention (Nguyen et al., 2023; Lam & Hsu, 2006). Moreover, among these three factors, Attitude has the most important influence on the formation of

intention (Hamid et al., 2021). However, the formation of human behaviour intention is affected and restricted by many factors, not only by the three conventional psychological dimensions of TPB theory. In this regard, researchers considered the influence of other factors and expanded the TPB theory to make the research results more complete (Conner, 1998).

For example, Soliman (2019) investigated tourist revisits intentions to Egypt showed that Motivation (MOT), Electronic Word of Mouth (EWOM), Destination Familiarity (FAM) and Destination Image (IMG) have significant influence on tourist travel intentions. Therefore, it is necessary to integrate additional constructs when applying the TPB theory to investigate the intention of Hong Kong residents to visit the mainland.

2.3 Pandemic Related Travel Constraint

After the Covid19 pandemic, countries around the world have adopted strict social restrictions to ensure that the epidemic is effectively controlled. These restrictions include quarantine, border restrictions, regional travel restrictions, personal precautions. However, strict travel constraints had a severe negative impact on the travel industry. Due to strict travel constraints, outbound travel is devastating because the number of travelers has dropped significantly (Stefan et.al, 2020). Moreover, social constraints not only make it difficult for people's behavioral intentions to become actual tourist behaviors, the emergence of social constraints also caused a series of impacts on people's travel intentions (Karl et.al, 2020). An online survey from ITE (2022) found that when travelers plan to travel abroad, travel restrictions and quarantine policies are the most important factors affecting their choice of travel destinations. Similar result also shown in a survey that majority of travellers' intention to travel to South Korea after pandemic. Studies revealed that social distancing has become a negative factor that significantly affects travelers' travel intentions (Shin et al., 2022). Therefore, understanding the relationship between travel constraints in tourist destinations and travelers' intentions contribute to the accuracy and authenticity of the current study.

2.4 Perceived destination health and safety

Risk perception can be defined as an individual's perception and judgment of the likelihood of an accident or sudden negative event occurring (Oltedal, 2004). Existing findings found that people's risk perception of tourist destinations has a negative impact. When people perceived risk about going to a certain place, their travel intention to that place decreased correspondingly (Khan, 2019). In the context of the covid 19 pandemic, people's chances of being infected by the virus while travelling increase significantly. In this case, people's perception of the risk of infecting covid19 has a significant impact on their travel intentions (Meng et al., 2021). In a study on Serbia residents' travel intentions during the pandemic, the potential travel risks due to the covid19 pandemic had a significant negative impact on overseas travel intention (Perić et.al, 2021). In addition, some scholars have extended the theory of planned behavior by adding factors of covid19 risk perception to examined travel intentions. Hamid et al. (2021) found that risk perception has the same significant impact on travel intention as attitude and perceived behavioral control while the impact of subjective norms on respondents' travel intention was not obvious. Liu et al. (2021) also extended the theory of planned behavior in their research on Chinese travel intentions during the pandemic. The study found that respondents' risk perception of covid19 played a negative moderating role in respondents' travel intentions. Therefore, considering the context of the Covid 19 pandemic in today's world when conducting travel intention research, the current study facilitates better understanding tourists' travel intentions to travel to a certain destination.

2.5 Research Gap and Research question

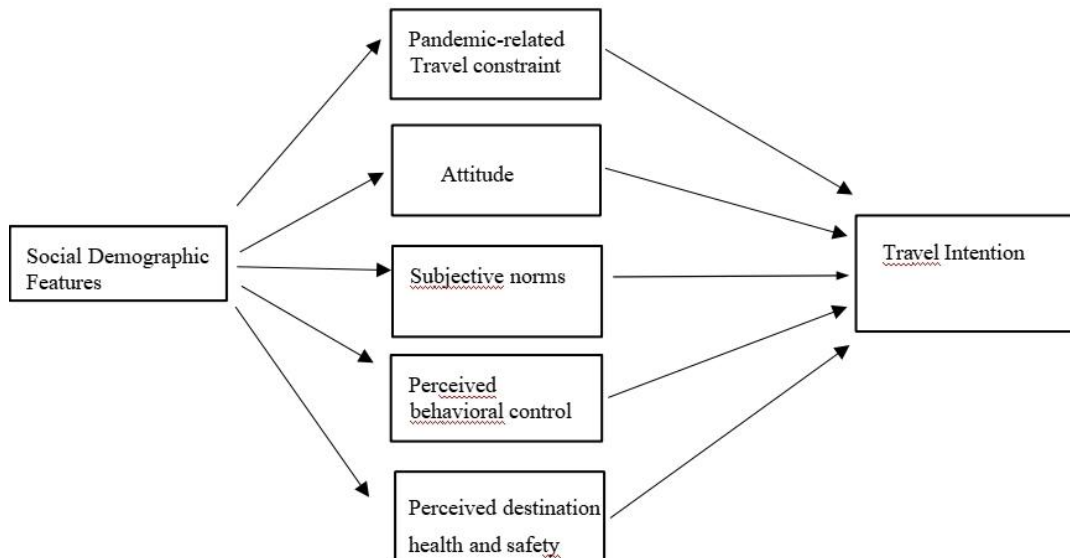
In general, most of the tourism research using TPB theory was examining the overall tourism generating and hosting market. Less attention has been paid to investigate Hong Kong tourists' post covid travel intention to mainland China. Furthermore, since responses from relevant study were collected from only one travel website, this may lead to a weakening the external validity (Wang et al., 2020). Therefore, this study fills these research gaps by simultaneously evaluating Hong Kong tourists' travel intentions to China using TPB. The overall goal of this study to apply extended theory of planned behavior (ETPB) in Hong Kong context to understand travelers' intentions to visit mainland China. More specifically, the study focuses on the following research questions:

RQ1: Investigating the predictive power of attitudes, subjective norms, and perceived behavioral control on Hong Kong people's intention to travel to Mainland China after the COVID-19 pandemic.

RQ2: To examine the impact of pandemic-related travel restrictions and perceived destination health and safety on Hong Kong people's travel intentions to Mainland China after the COVID-19 pandemic.

RQ3: To examine the direct impact of demographic factors on the five elements in the ETPB model

2.6 Research framework



3. METHODOLOGY

This study is proposed to use quantitative approach to better understand Hong Kong residents' travel intentions to Mainland China and provide a reference for the inbound tourism industry in mainland China to recover from pandemic. This study aims to use the Theory of Planned Behaviour (TPB) incorporated with pandemic-related travel constraints and perceived destination health and safety to investigate the factors that affect Hong Kong residents' travel intentions to mainland and hotel selection criteria after the COVID-19 pandemic.

3.1 Sampling, Data Collection and Pilot Test

This study investigates post-covid travel intentions of Hong Kong residents to mainland China, Hong Kong permanent residents were the subject of this study. In considering limited time and resources, convenience sampling was used to draw participants that are the easiest to reach or access and simplify the data collection process easier (Acharya, 2013). A link connecting to an online self-administrative questionnaire was distributed to Hong Kong permanent residents aged 18 or above through social media such as Facebook, Instagram, WeChat. The questionnaire questions were adopted from relevant existing studies. We collected data from January to March 2023 after ethical approval is obtained. To ensure the accuracy and validity of the questionnaire, the researcher invited three volunteers to conduct a pilot test of the questionnaire in the first two weeks before actual data collection was conducted make sure respondents can understand the language expression and avoid syntax errors. Survey questions were refined after obtaining comments from the participants of pilot test (Durberry, 2018).

3.2 Research instrument

The study's questionnaire has two parts with 34 questions. The main research subjects of the two parts are to investigate the intention of Hong Kong travelers to mainland China based on the ETPB theoretical framework. The research items contained in these sections are adopted from previous relevant studies. In the first part, the 6 components within the ETPB theoretical framework: attitudes, subjective norms, perceived behavioral control, pandemic-related travel restrictions and perceived destination health and safety are tested with 26 items. The questions in the second part aim to understand the respondents' basic information such as gender, age, income, occupation, and educational background. Moreover, A 5-point Likert scale ranging from strongly disagree to strongly agree was used in the first part.

| Topice | Item | Research Questions Answered | Author, Year |
|--|------|-----------------------------|---|
| Extended Theory of planned behaviour (TPB) | | | Liu et al 2021 |
| Attitude | 4 | RQ1 | |
| Subjective norm | 5 | RQ1 | |
| Perceived behavioural control | 4 | RQ1 | |
| Post-pandemic outbound travel intention | 4 | RQ2 | |
| Pandemic-related Travel constraints | 4 | RQ2 | Developed by author |
| Perceived Destination health and safety | 5 | | Khanet al, 2017; Harties et al, 2009; Khanet al, 2020 |

| Topice | Item | Research Questions Answered | Author, Year |
|-----------------------------|------|-----------------------------|----------------------|
| Social-demographic factor | | RQ1-3 | Developed by Authore |
| Gender | 1 | | |
| Age | 1 | | |
| Educational attainment | 1 | | |
| Occupation | 1 | | |
| Monthly personal employment | 1 | | |
| learnings (HK\$) | 1 | | |

4. FINDINGS

4.1 Personal Profile

A total of 373 respondents participated in this survey. After excluding invalid questionnaires and unqualified respondents, 320 questionnaires were collected for data analysis. As shown in the table below, there were more male respondents (56.9%) than female respondents (43.1%). The age range of the respondents was generally between 18-25 years old, accounting for 9.4% of the total. Among them, the age group with the highest percentage of respondents was 56-65 years old (32.8%), followed by 46-55 years old (23.1%), while the age group with the lowest percentage of respondents was over 66 years old, accounting for only 8.8%. In terms of educational background and occupation, the majority of respondents held a bachelor's degree (40.6%) or a master's degree (28.1%), with only 0.6% having a primary school education or lower. The most common occupations among the respondents were administrators and professionals, accounting for more than half of the respondents (55%), while the least common occupation was housewives (1.9%). In terms of monthly household income, the largest proportion of respondents reported an income of 20,000-40,000 (26.3%), followed by 40,000-60,000 (20.0%), while the least common income range was 80,000-100,000 (7.5%).

| Variable | Category | Frequency (N) | Percentage (%) |
|-----------------|-------------------|---------------|----------------|
| Gender | Male | 182 | 56.9 |
| | Female | 138 | 43.1 |
| AgeRange | 18-25 | 30 | 9.4 |
| | 26-35 | 30 | 9.4 |
| | 36-45 | 53 | 16.6 |
| | 46-55 | 74 | 23.1 |
| | 56-65 | 105 | 32.8 |
| | 66 or above | 28 | 8.8 |
| | | | |
| Education Level | Primary andbelow | 2 | 0.6 |
| | Secondary | 51 | 15.9 |
| | Post-Secondary | 47 | 14.7 |
| | Bachelor's Degree | 130 | 40.6 |
| | Master'sor abov | 90 | 28.1 |

| | | | |
|--------------------------|------------------------------------|-----|-------|
| Occupation | Administrator and Professionals | 176 | 55.0 |
| | Clerk and Service Workers | 38 | 11.9 |
| | Workers | 8 | 2.5 |
| | Homemakers / Housewives | 6 | 1.9 |
| | Students | 21 | 6.6 |
| | Retired | 59 | 18.4 |
| | Unemployed | 12 | 3.8 |
| Monthly Household Income | Less than HKD20,000 | 58 | 18.1 |
| | HKD 20,000 to Less than HKD 40,000 | 84 | 26.3 |
| | HKD 40,000 to Less than HKD60,000 | 64 | 20.0 |
| | HKD 60,000 to Less than HKD80,000 | 33 | 10.3 |
| | HKD 80,000 to Less than HKD100,000 | 24 | 7.5 |
| | HKD 100,000 or above | 57 | 17.8 |
| Total Sample Size | | 320 | 100.0 |

4.2 ETPB Model (RQ1, RQ2)

The table below displays the average scores of the five elements in the ETPB model, namely Attitude, Subject Norm, Perceived Behavioral Control, Pandemic-Related Travel Constraints, and Perceived Destination Health and Safety, as well as the average score of respondents' travel intention in this survey. The respondents' average score for travel intention was 3.3977, indicating a relatively high intention to travel to Mainland China. The range of the five elements in the ETPB model was between 2.8891 and 3.5750, with the highest score being Perceived Behavioral Control (3.5750) and the lowest score being Pandemic-Related Travel Constraints (2.8891). Attitude (3.501), Subject Norm (3.127), and Perceived Destination Health and Safety (2.943) ranked second, third, and fourth, respectively.

| VARIABLE | MEAN | SD |
|--|--------|---------|
| I think it is good to travel Mainland China when the pandemic is over. | 3.61 | 1.164 |
| I think it is valuable to travel Mainland China when the pandemic is over. | 3.52 | 1.185 |
| I think it is interesting to travel Mainland China when the pandemic is over. | 3.47 | 1.211 |
| I think it is delightful to travel Mainland China when the pandemic is over. | 3.46 | 1.208 |
| I like to travel Mainland China when the pandemic is over. | 3.46 | 1.271 |
| Attitude Average | 3.501 | 1.1589 |
| Most people who are important to me think that I should travel Mainland China when the pandemic is over. | 3.06 | 1.223 |
| Most people who are important to me understand that I travel Mainland China when the pandemic is over. | 3.20 | 1.263 |
| Most people whose opinions I value agree with me about traveling Mainland China when the pandemic is over. | 3.15 | 1.224 |
| Most people whose opinions I value support that I travel Mainland China when the pandemic is over. | 3.14 | 1.228 |
| Most of the people whose opinions I value recommend that I travel Mainland China when the pandemic is over. | 3.08 | 1.273 |
| Subject Norm Average | 3.127 | 1.1917 |
| I have enough time to travel Mainland China when the pandemic is over. | 3.47 | 1.094 |
| I have enough money to travel Mainland China when the pandemic is over. | 3.58 | 1.114 |
| I am confident that if I want, I can travel Mainland China when the pandemic is over. | 3.68 | 1.109 |
| I feel there is nothing that prevents me from traveling Mainland China when the pandemic is over if I want to. | 3.58 | 1.131 |
| Perceived Behavioral Control Average | 3.5750 | 0.98631 |
| I want to travel Mainland China after the pandemic. | 3.48 | 1.269 |
| I intend to travel Mainland China after the pandemic. | 3.42 | 1.287 |
| I am planning to travel Mainland China after the pandemic. | 3.39 | 1.294 |
| I will certainly invest time and money to travel Mainland China after the pandemic. | 3.30 | 1.319 |
| Travel Intention Average | 3.3977 | 1.26173 |
| I accept receiving required doses of vaccination for travel Mainland China. | 3.42 | 1.224 |

| VARIABLE | MEAN | SD |
|--|--------|---------|
| I accept quarantine at destination. | 2.42 | 1.094 |
| I accept quarantine after returning to Hong Kong. | 2.49 | 1.161 |
| I accept receiving PCR-based nucleic acid test for travel abroad, at the destination and arriving Hong Kong. | 3.23 | 1.230 |
| Pandemic-related Travel Constraints Average | 2.8891 | 0.97971 |
| Mainland China offers personal safety. | 3.17 | 1.204 |
| Mainland China has standard hygiene and cleanliness | 3.02 | 1.165 |
| Travel to Mainland China after pandemic will get the illness | 2.79 | 0.977 |
| Travel to Mainland China after pandemic will experience sanitation and hygiene problems | 2.84 | 1.036 |
| Mainland China offers high quality of medical services at reasonable price to tourists. | 2.89 | 1.087 |
| Perceived Destination Health and Safety Average | 2.943 | 0.6844 |

The regression analysis results demonstrate that all three factors in the TPB model have a direct impact on respondents' travel intentions. In terms of the traditional TPB model, attitude ($B=0.881$, $\text{sig}<0.001^{***}$), subject norm ($B=0.840$, $\text{sig}<0.001^{***}$), and perceived behavioral control ($B=0.749$, $\text{sig}<0.001^{***}$) all have a significant impact on travel intention. These results indicate that all three factors in the TPB model have a direct impact on travelers' travel intentions, and the TPB model is an effective predictor of travelers' intention to travel. Furthermore, since the standardized coefficient beta of attitude is the largest among the three factors, it plays the most critical role in the formation of travelers' travel intentions.

Regarding pandemic-related travel constraints and perceived destination health and safety, the results show that both factors have a significant impact on travel intention, with pandemic-related travel constraints ($B=0.605$, $\text{sig}<0.001^{***}$) and perceived destination health and safety ($B=0.624$, $\text{sig}<0.001^{***}$) both having a significant impact on travel intention. These findings demonstrate that the two additional factors applied in the ETPB model in this study also have a significant impact on travelers' travel intentions, and these factors are closely related to the formation of travelers' travel intentions.

Based on the above research results, it can be concluded that the three elements of attitude, subject norms, and perceived behavioral control in the traditional TPB model have a direct impact on the formation of travelers' travel intentions, and this model can predict travelers' travel intentions for certain destinations. However, since pandemic-related travel constraints and perceived destination health and safety also have a significant impact on travelers' travel intentions, these two factors are also closely related to the formation of travelers' travel intentions.

| Regression RQ | | Adjusted R Square | Standardized Coefficient Beta | Sig |
|---------------|--|-------------------|-------------------------------|-----------|
| RQ1(1) | Attitude—>Travel Intention | 0.776 | 0.881 | <0.001*** |
| RQ1(2) | Subject Norm—>Travel Intention | 0.705 | 0.840 | <0.001*** |
| RQ1(3) | Perceived Behavioural Control—>Travel Intention | 0.559 | 0.749 | <0.001*** |
| RQ2(1) | Pandemic-related Travel Constraints —>Travel Intention | 0.364 | 0.605 | <0.001*** |
| RQ2(2) | Perceived Destination Health and Safety —>Travel Intention | 0.387 | 0.624 | <0.001*** |

In addition, the one-way ANOVA was used to compare the scores of Hong Kong residents in different age groups on various factors. The results indicated that respondents aged 18-25, 26-35, and 36-45 had significant differences compared to respondents aged 46-55, 56-65, and 66 and above. According to the post-hoc test results and the comparison of average scores, the average scores of the six factors for respondents aged 18-25, 26-35, and 36-45 were significantly lower than those for respondents aged 46-55, 56-65, and 66 and above.

Specifically, in terms of attitude, the average scores of respondents aged 18-25, 26-35, and 36-45 were 2.793, 2.680, and 3.136, respectively, while the average scores of respondents aged 46-55, 56-65, and 66 and above were 3.743, 3.867, and 3.821, respectively. In terms of travel intention, the average scores of respondents aged 18-25, 26-35, and 36-45 were 2.7417, 2.4583, and 3.0330, respectively, while the average scores of respondents aged 46-55, 56-65, and 66 and above were 3.5980, 3.7714, and 3.8661, respectively. The results indicate that respondents aged 45 and under have a relatively negative attitude towards traveling to Mainland China, and their intention to travel to the mainland is relatively low.

| Attitude Average | | | Sig. |
|---|-------|-------------|-----------|
| LSD | 18-25 | 26-35 | 0.684 |
| | | 36-45 | 0.165 |
| | | 46-55 | <0.001*** |
| | | 56-66 | <0.001*** |
| | | 66 or above | <0.001*** |
| | 26-35 | 18-25 | 0.684 |
| | | 36-45 | 0.65 |
| | | 46-55 | <0.001*** |
| | | 56-65 | <0.001*** |
| | | 66 or above | <0.001*** |
| | 36-45 | 18-25 | 0.165 |
| | | 26-35 | 0.65 |
| | | 46-55 | 0.002** |
| | | 56-65 | <0.001*** |
| | | 66 or above | <0.001*** |
| Subject Norm Average | | | |
| LSD | 18-25 | 26-35 | 0.392 |
| | | 36-45 | 0.611 |
| | | 46-55 | 0.001** |
| | | 56-66 | <0.001*** |
| | | 66 or above | <0.001*** |
| | 26-35 | 18-25 | 0.392 |
| | | 36-45 | 0.141 |
| | | 46-55 | <0.001*** |
| | | 56-65 | <0.001*** |
| | | 66 or above | <0.001*** |
| | 36-45 | 18-25 | 0.611 |
| | | 26-35 | 0.141 |
| | | 46-55 | 0.001** |
| | | 56-65 | <0.001*** |
| | | 66 or above | 0.001** |
| Perceived Behavioral Control Average | | | |
| LSD | 18-25 | 26-35 | 0.709 |
| | | 36-45 | 0.420 |
| | | 46-55 | 0.014 |
| | | 56-66 | <0.001*** |
| | | 66 or above | 0.003** |
| | 26-35 | 18-25 | 0.709 |
| | | 36-45 | 0.220 |
| | | 46-55 | 0.004** |
| | | 56-65 | <0.001*** |
| | | 66 or above | <0.001*** |
| | 36-45 | 18-25 | 0.420 |
| | | 26-35 | 0.220 |
| | | 46-55 | 0.052 |
| | | 56-65 | 0.002** |
| | | 66 or above | 0.011* |
| Travel Intention Average | | | |
| LSD | 18-25 | 26-35 | 0.353 |
| | | 36-45 | 0.281 |
| | | 46-55 | <0.001*** |
| | | 56-66 | <0.001*** |
| | | 66 or above | <0.001*** |
| | 26-35 | 18-25 | 0.353 |
| | | 36-45 | 0.034* |
| | | 46-55 | <0.001*** |
| | | 56-65 | <0.001*** |
| | | 66 or above | <0.001*** |
| | 36-45 | 18-25 | 0.281 |
| | | 26-35 | 0.034* |
| | | 46-55 | 0.008** |
| | | 56-65 | <0.001*** |
| | | 66 or above | 0.003** |
| Pandemic-related Travel Constraints Average | | | |
| LSD | 18-25 | 26-35 | 0.135 |
| | | 36-45 | 0.476 |
| | | 46-55 | 0.020 |
| | | 56-66 | 0.004 |
| | | 66 or above | 0.018 |
| | 26-35 | 18-25 | 0.135 |
| | | 36-45 | 0.327 |
| | | 46-55 | <0.001*** |
| | | 56-65 | <0.001*** |
| | | 66 or above | <0.001*** |
| | 36-45 | 18-25 | 0.476 |
| | | 26-35 | 0.327 |
| | | 46-55 | <0.001*** |
| | | 56-65 | <0.001*** |
| | | 66 or above | <0.001*** |
| Perceived Destination Health and Safety Average | | | |
| Tamhane | 18-25 | 26-35 | 1.000 |
| | | 36-45 | 0.965 |
| | | 46-55 | 0.048* |
| | | 56-66 | 0.007** |
| | | 66 or above | 0.010* |
| | 26-35 | 18-25 | 1.000 |
| | | 36-45 | 0.999 |
| | | 46-55 | 0.041* |
| | | 56-65 | 0.003** |
| | | 66 or above | 0.007** |
| | 36-45 | 18-25 | 0.965 |
| | | 26-35 | 0.999 |
| | | 46-55 | 0.304 |
| | | 56-65 | 0.023* |
| | | 66 or above | 0.056 |

5. DISCUSSION

5.1 TPB Model and ETPB Model (RQ1 & 2)

The results of the study demonstrate that the three original components in the TPB model, namely Attitude, Subject Norm, and Perceived Behavior Control, significantly impact the travel intention of Hong Kong tourists to the Chinese Mainland. This finding is consistent with previous research (Nguyen et al., 2023; Lam & Hsu, 2006; Armitage, 2001), which suggests that the TPB model is useful in predicting the intention of specific groups to perform certain behaviors. Additionally, the result is similar with previous studies suggested the high predictive power of the TPB model in generating prediction about intention of specific groups to travel to specific regions, with attitude occupying a primary position in the model (Hsieh, 2016; Park, 2016). Overall, the findings support the existing findings about usage of the TPB model in predicting the travel intentions of Hong Kong tourists to the Chinese Mainland and highlight the importance of attitudes in the formation of tourism intention (Hamid et al., 2021). The study's results add to the existing body of literature on travel behavioral intention, demonstrating the utility of the TPB model in Hong Kong context.

The study's findings also confirm the significant impact of travel constraints and perceived destination health and safety on the travel intentions of Hong Kong tourists to the Chinese Mainland and highlight the need to expand the TPB model when examining travelers' travel intentions in the post-pandemic era. Consistent with previous research (Conner, 1998), multiple factors can influence people's behavioral intentions, emphasizing the importance of incorporating realistic factors when investigating respondents' intentions by TPB model. The study's results reveal that COVID-19 related travel constraints can cause travel difficulties and increase the cost of travel, directly affecting Hong Kong tourists' travel intentions to the Chinese Mainland, which is in line with previous studies (Karl et al., 2020; Xu et al., 2022). Additionally, the study's findings indicate that perceived destination health and safety have a direct impact on travel intentions, reflecting Hong Kong tourists' concerns about the health and safety of their destinations, which is consistent with earlier research (Khan, 2019). The potential risk of infection during the COVID-19 pandemic has further intensified Hong Kong tourists' concerns about the health and safety of their destinations, with personal safety and health becoming a key consideration for travelers. Therefore, the perception of Hong Kong tourists regarding the health and safety of the destination has a direct impact on their travel intention to the Chinese Mainland, which is consistent with previous studies (Perić et al., 2021; Hamid et al., 2021; Liu et al., 2021).

Overall, the study's results suggest that the TPB model's three original factors, namely attitude, subject norm, and perceived behavioral control, as well as the two expansion elements in the ETPB model, pandemic related travel constraints and perceived destination health and safety, are directly related to the travel intentions of Hong Kong tourists to the Chinese Mainland. Therefore, ETPB model can be used to predict Hong Kong tourists' travel intentions to the Chinese Mainland, providing important insights for tourism marketing and policy making in the post-pandemic era.

Judging from the age differences in the average scores of the five elements, the average scores of respondents under the age of 45 in each variable are significantly lower than those over the age of 45, reflecting the relatively negative attitude of young respondents towards traveling to mainland China, with greater anxiety and lower willingness. This phenomenon shows that the long-standing civil conflicts and a series of political issues between mainland China and Hong Kong over the years have caused Hong Kong youths to have a negative impression and sense of rejection to the mainland (Lin, 2017).

Previous studies also confirmed that the country image has a direct relationship with the destination image and indirectly affects the travel intention (Chaulagain et al., 2019). Therefore, this problem has directly contributed to the negative country image and the lower willingness of Hong Kong's younger generation to travel to the mainland China.

6. CONCLUSION AND RECOMMENDATION

This study aims to understand the intention of Hong Kong tourists to travel to Mainland China post pandemic through Extended the Theory of Planned Behavior model by two extra factors: pandemic-related travel constraints and perceived destination health and safety, and to study the main considerations of Hong Kong tourists in choosing hotels when traveling to Mainland China. The finding of this study may benefit the tourism industry of both places. On the one hand, the finding provides a reference for mainland Destination Marketing Organization

(DMO) and tourism operators to formulate marketing strategies and help the recovery of inbound tourism in the mainland. On the other hand, the finding can assist Hong Kong travel agencies to develop travel products that better meet the needs of Hong Kong tourists. This study also tests the applicability of the TPB model and the ETPB model in the study of Hong Kong residents' willingness to travel to China. The results indicate that the five factors in the ETPB model are directly related to tourism intention, and the theoretical model has a predictive effect on the willingness of Hong Kong tourists to travel to the mainland China. The findings fill the gap in the application of the ETPB model in the study of travel intentions of Hong Kong residents in mainland China after the pandemic and provide a theoretical basis for future related research in this field.

The results of the study show that attitude is the most important factor influencing Hong Kong travelers to go to the mainland. Therefore, improving Hong Kong tourists' attitudes towards traveling to mainland China can lead to positive changes in travel intentions of Hong Kong tourists. According to Phillips (2008), destination image, including cognitive image and affective image, are closely related to tourists' attitudes. Therefore, the relevant departments in Mainland China can enhance Hong Kong residents' destination image to Mainland China through tourism promotion, media publicity, cultural exhibitions, and other means. In addition, the tourism industries of the two places can also continue to launch new travel products and carry out promotional activities to attract more local tourists from Hong Kong. For Hong Kong youth, carrying out relevant activities, creating communication opportunities, and changing their understanding of China will benefit to reduce their concerns about China, improving their attitude towards China, and ultimately enhancing their travel intentions.

The limitations of this study are mainly reflected in the following two aspects. First, this study only tested the direct relationship between the five dependent and independent variables in the theoretical model, while ignoring the possibility of the two expansion factors as moderators and their moderating effects on the relationship between the traditional TPB elements and the travel intention. Therefore, in future studies, multiple linear regression and structural equation modeling (SEM) are suggested to employ to examine the joint effects of multiple independent variables on the dependent variable. Second, this study only takes the whole of mainland China as the survey area but does not investigate the travel intentions of Hong Kong tourists to a specific region in China. Given the mega size of mainland China, Hong Kong travelers may be more inclined to travel to a particular area of mainland China. Therefore, future research could narrow the scope of the survey and focus on a specific area of mainland China, such as the Greater Bay Area.

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