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# TẠP CHÍ KHOA HỌC XÃ HỘI, NHÂN VĂN VÀ GIÁO DỤC

# THE EFFECT OF THE COVID-19 PANDEMIC RISK PERCEPTION ON STUDENTS' BEHAVIOURAL INTENTION TOWARDS RETURNING HOME FOR STUDYING

Bui Huynh Nguyen, Phung Nam Phuong

The University of Danang – University of Economics, Vietnam Author corresponding: Phung Nam Phuong - Email: phuongpn@due.edu.vn Article History: Received on 23<sup>rd</sup> May 2021; Revised on 15<sup>nd</sup> June 2021; Published on 17<sup>th</sup> June 2021

Tóm tắt: Due to the COVID-19 crisis, it is more difficult for international students to complete their study abroad. There has been little discussion concerning international students' perspectives regarding their study plan during this health-related crisis. Based on the frameworks of risk perception theory and the extended Theory of Planned Behaviour, this study highlights returning home for studying as a health-protective behaviour stemming from international students' perceptions of COVID-19 risk. In other words, overseas students' behavioural intention is scrutinized through the lens of the risk perception.

An online survey with random sampling method was administered to the Vietnamese students who were studying in the UK in February and March 2021. A total of 588 responses were collected for data analysis.

The results reveal that international students' cognitive and affective risk perceptions are positively related to their attitude, subjective norms and perceived behavioural control over returning home for studying. There also exists a significant influence of both cognitive and affective risk perceptions on the students' behavioural intention. Attitude, subject norms, and perceived behavioural control are considered significant mediators between risk perception and behavioural intention.

Từ khóa: affective risk perception; xognitive risk perception; COVID-19; International students; theory of planned behaviour.

#### 1. Introduction

The whole world is witnessing chaos and uncertainties caused by a highly contagious epidemic. The Coronavirus Disease 2019 (COVID-19), also known as the coronavirus pandemic, was first recorded in December 2019 in Wuhan, China (World Health Organization, 2020) and has since been one of the most severe pandemics hurting millions of people in terms of health and economy (Ding et al., 2020). According to World Health Organization (2020), COVID-19 becomes an unwanted winner in the race of deadliest pandemics in human history, with more than 156 million confirmed cases and more than 3.27 million deaths. Several

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vaccines have been developed but have yet to stop the rise in both infected cases and death rates, and no one knows when the COVID-19 crisis will come to an end.

The outbreak has exerted a significant influence on international students' education process. Many of them have decided to defer their studies as a result of the situation's uncertainty. They hope to come back to their schools next academic year, but it is said that the international student mobility, the ability to come back and forth, will be limited due to numerous restrictions and requirements for health safety (Martel & Rumbley, 2020). These negative impacts lead to the change in overseas students' perception of COVID-19 and their returning plans (Rusu, 2020). According to a recent survey of Studyportals, nearly 36% of participants consider changing their abroad study plans. 50% of them are thinking of reserving the study results and postponing their enrolment next year, while 21% are considering stopping their study at UK universities to enrol in a domestic university. There are many reasons for the

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above-mentioned decisions, such as global mobility restrictions, difficulty in financial situation, or studyrelated pressures during the pandemic (Rusu, 2020).

However, the need for quality degrees from universities in developed countries remains strong. For example, the number of students pursuing education internationally in Vietnam, an emerging academic market, has steadily increased. The country's Ministry of Education and Training revealed that 190,000 Vietnamese students studied a foreign higher education degree in 2020. This number in 2014, 2016, and 2018 were 110,000, 130,000, and 170,000, respectively (BMI, 2020). The increasing rate at the tertiary level in 2017 was the same that is 30%, compared to that in 2013. Several studies (Phung & Bui, 2021; Phung et al., 2015) claim that this phenomenon occurs as there are still many untapped areas in education in developing countries, although domestic sectors have improved their capabilities lately. However, the COVID-19 can be a game-changer as many overseas students from developing countries are reviewing their study plan when the deadly virus is still not fully controlled. For them, living in a new country is such a costly and dangerous challenge.

Their fear is understandable because risk factors like coronavirus that can physically and mentally harm people may significantly impact their travel decisions (Chew & Jahari, 2014). The more they perceive the risk, the less likely they are willing to make any unnecessary trips. This is in line with Health Belief Model (HBM) introduced by Rosenstock in 1974. People who rated high on the risk perception scale are believed to comply with health-protective procedures to deal with the risk. For example, students who perceive a high level of risk to their health often solve their conflicting needs of studying abroad and health safety by engaging in selfprotection behaviours (Brewer et al., 2004). A behaviour that can be categorised as health-protective is returning to one's hometown for enrolling in a domestic university or transnational education programmes. In that way, they can mitigate their perceived risk of COVID-19 while still fulfilling their wish of studying in another country.

Risk perception, especially concerning COVID-19, has been well documented in some fields of study like

psychology, healthcare, tourism, and business (Bar & Chang, 2020; Cori, 2020; Ding et al., 2020). The previous studies are noteworthy, but each research focused on different disciplines, and the results were based on different countries and populations, so they may fail to validate and generalise to a broader milieu. Besides, far too little attention has been drawn to how Vietnamese students' risk perception of the COVID-19 pandemic has affected their behavioural intention towards returning home for studying. It is said that being aware of the risk perception could be an effective way to understand overseas students' behavioural intention. Similar to the risk perception, The Theory of Planned Behaviour (TPB) has been employed to predict individuals' behaviours in various disciplines, such as tourism (Lam & Hsu, 2004), marketing (Geogre, 2004; Maichum et al., 2016), medicine (Godin & Kok, 1996), investment (Alleyne, 2011) but seldom used in social science research related to international students' attitudes and behavioural intentions, particularly in the Vietnamese setting.

There is a lack of research in education regarding health-protective behavioural intention stemming from individual perception of the COVID-19 risk. To fill this research gap, this study, based on the extended Theory of Planned Behaviour (eTPB), is the first study dedicated to examining the effect of COVID-19 risk perception on behavioural intention towards returning home to study with the case of Vietnamese students in the UK. Therefore, the research questions of this study were articulated as below:

RQ1: Is there any relationship between risk perception and behavioural intention?

RQ2: Are there any relationships between risk perception and determinants of behavioural intention including attitude, subjective norms, and perceived behavioural control?

### 2. Literature review

### 2.1. Risk perception

Bauer first introduced risk perception in 1960. He claimed that risk perception is an individual's subjective beliefs or value judgments which stemmed from various objective dangers under uncertain circumstances. The term has long been the focal point in psychology (Ding

et al., 2020). Risk perception plays a vital role in affecting risk behaviours (Bauer, 1960; Ding et al., 2020). In general, individuals with lower risk perception are likely to take risk behaviours or reduce preventive ones (Adefuye et al., 2020). In contrast, individuals with high-risk perception are keen to take preventive behaviour (Brug et al., 2004). Risk is believed to be perceived and acted upon in many different ways, and with different emerging infectious diseases, risk perception enormously varies across people (Bauer, 1960; Ding et al., 2020).

Two major aspects of risk perception are cognitive and affective one (Bar & Chang, 2020; Bonnet, Amalric, Chevé, & Travers, 2012; Cori, 2020; Ding et al., 2020; Lee, Lemyre, & Krewski, 2010; Sjöberg, 1998; Shim et al., 2015). Cognitive risk perception, perceived which consists of an individual's susceptibility and severity of risks (Sjöberg, 1998) has drawn much attention in earlier studies (Shim & You, 2015). These dimensions are related to the probability and severity of consequences when people assess available information (Bonnet et al., 2012; Lee, Lemyre, & Krewski, 2010). However, the dimensions of affective risk perception on some specific types of behaviour are later explored based on their risk-asfeelings theory (Lowenstein et al., 2001). The perception refers to an individual's anxiety or worries about their perceived exposure to a particular risk (Sjöberg, 1998), human's instinctive and intuitive reactions under dangerous situations (Slovic & Peters, 2006). In the extant literature, there is an agreement that both the cognitive and affective dimension of risk perception are key factors to explain human behaviours when people take a highly fearful risk (Bae & Chang, 2020; Brug et al., 2004; Cori, 2020; Ding et al., 2020).

Risk perception, especially concerning COVID-19, has been well studied in some areas, such as tourism, healthcare, psychology and business (Bae & Chang, 2020; Cori, 2020; Ding et al., 2020). One of the most recent studies related to risk perception is the one conducted by Bae and Chang (2020). The authors combined the frameworks of the Health Belief Model and the extended Theory of Planned Behaviour to analyse the effect of COVID-19 risk perception on the behavioural intention of "untact" tourism (aka. non-contact tourism). The findings showed that there is a

disagreement between the impact of two aspects of risk behaviour. While cognitive risk perception exerts a significantly positive influence on behavioural intention, affective risk perception negatively influenced behavioural intention (Bar & Chang, 2020). The second study that is equally noteworthy is the one implemented by Ding and his colleagues (2020). Their purpose was to examine the risk perception of COVID- 19 among college students in China during the quarantine. The results suggested that health education could boost the risk perception of the students, especially for ones with low-risk perception. The study emphasised that evaluating risk perception could enable better understanding of overseas students' behavioural intention (Ding et al., 2020).

# 2.2. Theory of planned behaviour (TPB)

The behavioural intention of choosing to return home for studying after the COVID-19 pandemic is a starting point that launches the decision-making process. Thus, recognising such intention is essential for understanding overseas students' decision on their study plan. TPB is constructed based on the theory of reasoned action (TRA) (Ajzen & Fishbein, 1975) to overcome limits, especially when coping with behaviours in which people possess incomplete volitional control. First of all, to understand the TPB, its ancestor, TRA, needs to be introduced. The theory was developed and refined by Fishbein and Ajzen (Ajzen & Fishbein, 1975; Fishbein & Ajzen, 1972), with behavioural intention as its focal point. Intention refers to the motivation needed to engage in a certain behaviour (Lam & Hsu, 2004). For example, one's intention to perform a particular action to a given stimulus in a given context is a function of his or her attitude and subjective norm toward the behaviour (Fishbein, 1967). Attitude can be regarded as a positive or negative feeling about achieving an objective (Salgues, 2016), subjective norm refers to the perceived social pressure of whether to perform that behaviour (Ajzen, 1991).

Like TRA, an individual's intention to perform an actual behaviour lies in the central of TPB. The intention has an additional factor: perceived behavioural control (Ajzen, 1991). The relationship between the new factor and intention was derived from two main assumptions. First of all, the

perceived behavioural control and the behavioural intention are positively related. Secondly, the control will directly impact the actual behaviour if the perceived control matches the actual control (Armitage & Conner, 2001).

The TPB keeps evolving, and risk-related factors were recently introduced to the model. For instance, Quintal et al. (2010) tested the influence of perceived risk and perceived uncertainty on the intention to visit Australia of the people who were living in Korean, Chinese, and Japanese. Similarly, Bae & Chang (2020) discussed the impact of COVID-19 risk perception on behavioural intention towards "untact" tourism. However, there is no study that has paid attention to the effect of COVID-19 risk perception on international students. Therefore, there is a research gap when the COVID-19 pandemic situation has destroyed lives physically and mentally, challenging the existing social norms about health and prosperity and pointing to the need to anticipate international students' future behavioural intentions.

In the current research, the theories of risk perception and TPB are used to build a theoretical framework. Because of the COVID-19 crisis, there is an assumption that students tend to acquire a healthprotective behaviour under perceived risks. In other words, returning home for studying can be considered students' attempt to protect and promote their health under their risk perceptions towards the COVID-19 crisis. Therefore, behavioural intention towards returning home for studying was our outcome variable, and three variables (i.e., attitude, subjective norms and perceived behavioural control) were specified as antecedents based on TPB.

#### 3. Research model and hypotheses

International students are the most vulnerable, and the least cared for by social work organisations amid COVID-19 (Firang, 2020). However, they seem to have found out their coping strategies to minimise the perceived risk. Therefore, this study aims to observe international students' behavioural intention towards returning home for studying in the COVID-19 pandemic. In this context, with an additional variable of risk perception including cognitive and affective dimensions, an extended TPB is applied to build a research model to predict international students' behavioural intention towards returning home for studying.

#### **Staying Intention of Vietnamese students**



Figure 1. The research model

Previous studies have indicated that perceived risk influences attitude, which in turn impacts behavioural intention (Bashir & Madhavaiah, 2015; Quintal et al., 2010). Moreover, risk perception was long known as the main determinant of subjective norms and perceived behavioural controls (Bae & Chang, 2021; Lee, 2009). Hence, in this study, risk perception is hypothesised to impact the TPB factors positively as follows.

H1: Risk perception (i.e., cognitive/affective) exerts a significant positive influence on attitude.

H2: Risk perception (i.e., cognitive/affective) exerts a significant positive influence on subjective norms.

H3: Risk perception (i.e., cognitive/affective) exerts a significant positive influence on perceived behavioural control.

Moreover, several previous research pieces showed that risk perception positively impacts behavioural intention (Van den Berg et al., 2006). Thus, in this study, the relationships are hypothesized the following.

H4: Risk perception (i.e. cognitive/affective) will exert a significant positive influence on behavioural intention.

The TPB accounts for an individual's attitude, perceived behavioural control, and society's subjective norms, which all impact his or her intention and the actual behaviour (Ajzen,1991). The links between these variables and behavioural intentions, and their validity, have been confirmed in numerous past research (Alleyne & Broome, 2011; Chen & Tung, 2014; Iakovleva et al., 2011). As a result, based on previous TPB studies, the following hypotheses are provided:

H5: Attitude will exert a significant positive influence on behavioural intention.

H6: Subjective norms will exert a significant positive influence on behavioural intention.

H7: Perceived behavioural control will exert a significant positive influence on behavioural intention.

Attitude, subjective norms, and perceived behavioural control are known as established mediators between risk perception and behavioural intention. For example, a high level of risk perception impacts attitude, which, in turn, influences ones' behavioural intention (Hugson & Thul, 2013; Lee, 2009). In this context, the mediating effect of attitude, subjective norms, and perceived behavioural control between risk perceptions and behavioural intention are hypothesised as below:

H8: Attitude is a significant mediator between risk perceptions (i.e., cognitive/affective) and behavioural intention.

H9: Subjective norm is a significant mediator between risk perceptions (i.e., cognitive/affective) and behavioural intention.

H10: Perceived behavioural control is a significant mediator between risk perceptions (i.e., cognitive/affective) and behavioural intention.

#### 4. Research method

This study applied the quantitative method to examine the effect of the COVID-19 pandemic risk perception on students' behavioural intention towards returning home for studying. The population of this study was composed of Vietnamese students studying in the UK. This country has always been a popular destination for Vietnamese students (BMI, 2020). According to UNESCO (2017), 3,480 Vietnamese students were studying HE in 2017/18. Within the HE sector, Vietnamese students study abroad showed a keen interest in undergraduate degrees, postgraduate degrees and English language studies.

An online questionnaire was distributed from February 20 to March 10, 2021, to the above group. 588 valid responses were successfully collected over the period from the online survey system. Around that time, Vietnamese students studying in the UK had experienced the COVID-19 pandemic's consequences for a while; therefore, the data collection is useful as it can be considered a benchmark for follow-up research to record long-term behavioural changes.

The questionnaire consists of six parts: risk perception, attitude, subjective norms, perceived behavioural control, behavioural intention, and demographic information. Risk perception referred to the degree of an individual's perception of COVID-19 risk and was constructed by two subscales, cognitive and affective perceptions, four items apiece (Brug et al., 2004). Next, the four variables of the TPB (i.e., attitude, subjective norms, perceived behavioural control, and behavioural intention towards returning home) were measured with four items each (Ajzen, 1991). All items were measured on a 5-point Likert scale (from Strongly Disagree to Strongly Agree). The participants were asked to provide their demographic information (i.e., age, gender, employment status and education level).

The data were analysed using R. First, to understand the relationships of each construct, a confirmatory factor analysis (CFA) was conducted. Second, after the CFA findings were gathered, structural equation modelling (SEM) was carried out to test and map the causal relationships between constructs. Next, the bootstrapping method was employed to examine mediating effects from attitude, subjective norms, and behavioural control between risk perception and behavioural intention. Last but not least, in comparing the differences by gender, education level, employment status, a multi-group invariance analysis was carried out to demonstrate the potential moderating effect of the above demographic factors.

#### 5. Results

### 5.1. Demographic information

		Total	%
Gender	female	295	50.17
	male	293	49.83
Employment Status	employed	272	46.26
	unemployed	316	53.74

Table 1. Demographic information

The demographic information of the respondents was displayed in Table 1. Among 588 participants,

50.17% are females, and 49.83% are males. Regarding the study levels at universities, 52.92% of students were studying Bachelor's programs as of the survey time. 46.27% of the participants were having a part-time job with a monthly average income of 1,000 - 1,500 GBP.

#### 5.2. Measurement model

As shown in Table 2, the goodness-of-fit indices for the measurement model were RMSEA = 0.020, CFI = 0.988, and NFI = 0.940. Firstly, the root mean square error of approximation (RMSEA) is discussed. According to MacCallum et al. (1996), the RMSEA of between 0.08 to 0.10 provides a mediocre fit and below 0.08 shows a good fit. More recently, however, a stringent upper limit of 0.07 (Steiger, 2007) seems to be the consensus amongst authorities in this area. Therefore, RMSEA in this research telling us how well the model is acceptable. Secondly, regarding the Normed-fir index (NFI), Hu and Bentler (1999) recommended that values greater than 0.90 indicate a good fit. Like the NFI, the Comparative fit index (CFI) assumes that all latent variables are uncorrelated (null/independence model) and compares the sample covariance matrix with this null model. A value greater than 0.90 of this statistic is needed to ensure that mis-specified models are not accepted (Hu & Bentler, 1999). Hence, NFI and CFI in this research are good values.

The composite reliability (CR) value was above 0.6, showing the internal consistency of the construct indicators. The average variance extracted (AVE) was greater than 0.3, confirming the latent variables' explanatory power of the measured variables. Table 2 also shows the Cronbach's alpha values in evaluating the reliability of the multi-item scales, and they ranged between 0.675~ 0.917. All alpha coefficients were above the cut-off point of 0.6, indicating adequate reliability for each construct. Discriminant validity was confirmed by the comparison between the square root of AVE and correlations between constructs. The aforementioned indices confirmed that the theoretical model of this study could be used to analyse the observed data (Table 3) thoroughly.

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Table 2. Results of Confirmatory factor analysis							
Variables	Factor loading	C.R.	AVE				
Cognitive risk perception (a=.692)		0.692	0.362				
There is a high likelihood of acquiring COVID-19 in general.	0.537						
There is a high likelihood that I will acquire COVID-19 compared to other people.	0.432						
There is a high likelihood of acquiring COVID-19 compared to other diseases.	0.450						
There is a high likelihood of dying from COVID-19.	0.440						
Affective risk perception (a=.675)		0.677	0.346				
I am worried that I will contract COVID-19.	0.430						
I am worried about my family members who are living in my hometown contracting COVID-19.	0.508						
I am worried about COVID-19 occurring in the UK.	0.441						
I am worried about COVID-19 emerging as a health issue.	0.413						
Attitude (a=.748)		0.751	0.433				
Returning home for studying is useful.	0.521						
Returning home for studying is valuable.	0.429						
Returning home for studying is beneficial.	0.381						
Returning home for studying is attractive.	0.478						
Subjective norms (a=.722)		0.723	0.396				
Most people who are important to me think it is okay for me to return to my hometown for studying.	0.437						
Most people who are important to me support me to return to my hometown for studying.	0.421						
Most people who are important to me understand why I should return to my hometown for studying.	0.364						
Most people who are important to me agree with me about returning to my hometown for studying tourism.	0.412						
Perceived behavioural control (a=.731)		0.734	0.412				
Whether or not I return to my hometown for studying is completely up to me.	0.428						
I am capable of returning to my hometown for studying.	0.302						
I am confident that if I want to, I can return to my hometown for studying.	0.388						
I have enough resources, time, and opportunities to return to my hometown for studying.	0.338						
Behavioural intention ( $\alpha$ =.917)		0.918	0.738				
I intend to return to my hometown for studying soon.	0.490						
I am planning to return to my hometown for studying soon.	0.428						
I will make an effort to return to my hometown for studying soon.	0.486						
I will certainly invest time and money to return to my hometown for studying soon.	0.438						

		-	-			-
Measure	1	2	3	4	5	6
1. Cognitive risk perception	1.000	0.159	0.254	0.151	0.411	0.141
2. Affective risk perception		1.000	0.301	0.177	0.204	0.196
3. Behaviour Intention			1.000	0.323	0.252	0.309
4. Attitude				1.000	0.187	0.224
5. Subjective norm					1.000	0.184
6. Perceived behavioural control						1.000

Table 3. Intercorrelations of study measures

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Figure 2. Structural Equation Modelling

#### 5.3. Structural model

Further verification was conducted by using SEM (Figure 2). The goodness-of-fit indices for the structural model were RMSEA = 0.020, CFI = 0.988, and NFI = 0.940, demonstrating a good fit for the data.

Hypothesis 1 predicted that international students' attitude would be positively influenced by cognitive risk perception (H1a) and affective risk perception (H1b).

As shown in Figure 2, H1a ( $\beta = 0.479$ , p < 0.05) and H1b ( $\beta = 0.502$ , p < 0.05) were supported.

Hypothesis 2 predicted that international students' risk perception, including cognitive dimension (H2a) and affective dimension (H2b), exerted a significant positive influence on subjective norms. The results showed that H2a ( $\beta = 0.457$ , p < 0.05) and H2b ( $\beta = 0.547$ , p < 0.05) were supported.

However, in disagreement with the risk perceptionperceived behavioural control hypothesis, cognitive risk perception ( $\beta = 0.366$ , p < 0.05) and affective risk perception ( $\beta = 0.672$ , p < 0.05) performed a positive relationship with perceived behavioural control; therefore, H3a and H3b were supported.

Regarding hypothesis 4, cognitive risk perception ( $\beta = 0.339$ , p < 0.05) and affective risk perception ( $\beta = 0.387$ , p < 0.05) showed a significantly positive effect on behavioural intention, supporting H4a and H4b.

Besides, attitude had positive influences on behavioural intention ( $\beta = 0.496$ , p < 0.05), supporting H5; subjective norms did affect behavioural intention significantly ( $\beta = 0.527$ , p <0.05), accepting H6. Meanwhile, perceived behavioural control exhibited a significantly positive influence on behavioural intention ( $\beta = 0.565$ , p < 0.05), hence, H7 was supported.

#### 5.4. Mediation test

After the model was established, this study used bootstrapping to evaluate the mediating role of attitude and perceived behavioural control. Table 4 indicates that among the associations in affective risk perception, cognitive risk perception, attitude, subjective norms, perceived behavioural control, and behavioural intention, no zero existed between the lower and upper bounds of the total effect, direct effect, and an indirect effect. Additionally, estimates of the indirect effect were not zero. Therefore, attitude mediated the relationship between risk perception, including cognitive and affective dimension, and behavioural intention, supporting H8. In addition, subjective norms and perceived behavioural control also acted as significant mediator between risk perception (i.e., cognitive and affective dimension) and behavioural intention, confirming H9 and H10.

## 6.Discussion

This research aims to explore the influences of COVID-19 risk perception on international students' behavioural intention towards returning home for studying in times of a health-related crisis. The key results of this research are presented as follows.

Table 4. Bootstrapping effects for the ma	editational model
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Model pathways	Estimates	Bio-Corrected 95%CI	
		Lower	Upper
Total effects			
Affective risk perception $\rightarrow$ Intention	.161	.055	.268
Cognitive risk perception $\rightarrow$ Intention	.176	.075	.277
Indirect effects			
Affective risk perception $\rightarrow$ Attitude $\rightarrow$ Intention	.347	.230	.445
Cognitive risk perception $\rightarrow$ Attitude $\rightarrow$ Intention	.414	.319	.503
Affective risk perception $\rightarrow$ Subjective norms $\rightarrow$ Intention	.423	.327	.519
Cognitive risk perception $\rightarrow$ Subjective norms $\rightarrow$ Intention	.442	.347	.537
Affective risk perception $\rightarrow$ Perceived behavioural control $\rightarrow$ Intention	.476	.226	.423
Cognitive risk perception $\rightarrow$ Perceived behavioural control $\rightarrow$ Intention	.324	.382	.570
Direct effects			
Attitude $\rightarrow$ Intention	.299	.218	.379
Subjective norms $\rightarrow$ Intention	.283	.192	.375
Perceived behavioural control $\rightarrow$ Intention	.332	.287	.417

First, the findings indicated that cognitive and affective risk perception were significant antecedents of attitude towards returning home for studying, which is in line with the findings from Bashir and Madhavaiah (2005), Chew and Jahari (2014) and Quintal et al. (2010). In other words, international students' favourable attitude towards returning home for studying is not only developed based on threatening numbers about the disease but based on students' anxiety about safety concerns for themselves and their families.

Compared to local peers, international students face more problems keeping their minds healthy during and after the COVID-19 outbreak. The coronavirus brings double jeopardy to international students who, even in everyday situations, are more vulnerable to mental illness, such as depression, and feel difficult to familiarise with the local medical system and less motivated to look for psychological service than their domestic friends (Alharbi & Smith, 2018; Brunsting et al., 2018). The outbreak may even have forced them into a more isolated life abroad with little access to public resources and support because of numerous barriers such as money, information, language, or culture (Alharbi & Smith, 2018). Being the minority in the society, they have been ignored or neglected by their host countries even for their essential needs. Many schools' campuses, for instance, were shut without taking into account that many international students do not have a residence available outside, nor can they access a safe way to their hometowns because of closed borders, reduced number of international flights, and massive potential of exposure to COVID-19 during their trips (Crawford et al., 2020; Sahu, 2020). Besides, international students are struggling to fulfil their psychological needs of relatedness as they are physically away from their loved ones and are ineligible for social support in the local community. Moreover, they also suffer from psychosocial problems regarding society's responses to the pandemic (Mackolil and Mackolil, 2020; Tandon, 2020).

Second, subjective norms to returning home for studying were positively related to cognitive and affective risk perception. In terms of cognitive risk perception, when a student perceives risks from factual information about the disease, including severity and susceptibility, they are likely to believe that returning home for studying is supported by their family and friends. This supports the results of Murray and Schaller's report (2012), which highlights the impact of the perceived threat of infectious disease on conformity to social norms and regulations. Indeed, during the COVID-19 outbreak, the pressure from the community to require each individual to comply with social norms like following social distance may limit health-related risks in society. Besides, some governments have imposed nationwide social distancing and a lock-down order for some high-risk areas to make sure that local transmission of coronavirus is entirely under control (Nguyen, 2020a). Another solution to reduce the infection rate of the deadly virus is to utilise contact tracing that helps medical officials map the COVID-19 network and prevent the virus from spreading further (Nguyen, 2020b). Such sociocultural and regulatory consensus in those countries builds up the subjective norms for international students, and the influence of cognitive risk perception can explain those norms following the result of this study.

Third, risk perception, including the cognitive and affective dimension, exerted a significantly positive influence on perceived behavioural control. Several studies have confirmed this result (Bae and Chang, 2020), that is if international students' risk perception toward COVID-19 in a foreign country where they are studying increases, they find it more confident of returning home for studying.

Fourth, cognitive and affective risk perception showed a significant influence on behavioural intention, which means that not only the awareness of the danger of disease but also emotional worries and fear inhibit international students from staying in a foreign country during the pandemic. This finding complemented previous studies (Stefani et al., 2008; Floyd et al., 2004; Van den Berg, 2006), which confirms the influence of perceived risk on individuals' decision making.

Next, attitude, along with subjective norms and perceived behavioural control, is a significant mediator between risk perception and behavioural intention, which supports the findings of Choi et al. (2013) and Lee (2009). Specifically, international students who perceived more affective risk and cognitive risk

reported an increased positive attitude towards returning home for studying and thus had more behavioural intention. Currently, many Vietnamese students are heavily stressed due to the pandemic, which has lasted longer than anticipated. On the one hand, Vietnamese students living in the UK recognised that the probability of them being infected with COVID-19 stays high when the number of cases and deaths in this country keeps increasing. On the other hand, many universities in Vietnam began to have some policies that assist returning students who decided to retain their academic results and go back to Vietnam to avoid the pandemic and those who need to alter their study abroad plans due to COVID-19. Therefore, this may have contributed to international students' development of a positive attitude towards returning home for study.

Finally, attitude, subjective norms and perceived behavioural control positively affect behavioural intention, which is in line with many results of past TPB research (e.g., Huang et al., 2014; Lam & Hsu, 2006). To be more specific, the more international students are aware of the severity and susceptibility of COVID-19 and the more they are concerned about the possibility of the spread of COVID-19, the more they are likely to come back to their hometown for studying. In other words, international students rely on their thoughts and feelings. Similarly, the more international students get support and understanding from their family and friends, the more likely they are to return to their home country. Compared with Western people, Vietnamese people are affected by the traditional collectivism of education. Furthermore, social pressure has a substantial impact on people's intention to act. They are more willing to follow people who are important to them. The thoughts or opinions from friends and family are essential determinants of personal choice intentions. Moreover, international students' behavioural intention of returning home for their study is also influenced by how they feel confident in their capacity to study in their hometown.

#### 7. Conclusion

The current research aims to explore the influence of COVID-19 on behavioural changes among international students. To the best of the researchers'

knowledge, there was little evidence before this research attempt to measure international students' intention of their study in this unprecedented pandemic. By filling this gap, the study has several theoretical implications. First, it contributes to the extant literature on similar topics. The findings of this study will be regarded as a vital notebook for follow-up sectional and longitudinal studies to understand international students' behavioural changes during the pandemic crisis. Second, this study confirmed the theory of planned behaviour concerning risk perception. Besides, it indicated the mediating role of attitudes, subjective norms, and perceived behavioural control between risk perception and behavioural intention. Also, the study examined the moderating effect of gender and employment status in the hypothesized structural relationships. In general, this study will provide nuanced insights concerning international students' behaviours amid the pandemic COVID-19.

Apart from those two theoretical contributions, this research also makes critical practical contributions to the field of institutional management and the operation of higher education. The development of the COVID-19 pandemic has impacted international students' study plans. According to the research findings, international students tend to return to their hometown to minimize their perceived risks and complete their study, which enhances the chance of attracting more students to Vietnamese universities. Hence, this research enables higher education institutions and universities in Vietnam make sense of the rapidly changing picture. They are therefore able to develop suitable strategies and policies.

This study can be improved if its limitations are addressed and tackled. Firstly, this study is using crosssectional data. The behavioural intention during the pandemic is less likely to be the same after the pandemic. Researchers, therefore, would need to collect additional data during multiple periods for a longitudinal report. This improvement would also help explore the link between behavioural intention and actual behaviour. Secondly, the design of this study was only based on the population of Vietnamese international students studying in the UK, which does not fulfil the ideal purpose that the research model can be validated in various contexts.

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# ẢNH HƯỞNG CỦA NHẬN THÚC RỦI RO VỀ ĐẠI DỊCH COVID-19 ĐẾN Ý ĐỊNH HÀNH VI TRỞ VỀ NƯỚC ĐỂ HỌC TẬP CỦA SINH VIÊN

Bùi Huỳnh Nguyên, Phùng Nam Phương

Trường Đại học Kinh tế - Đại học Đà Nẵng, Việt Nam Tác giả liên hệ: Phùng Nam Phương - Email: phuongpn@due.udn.vn Ngày nhận bài: 23-5-2020; ngày nhận bài sửa: 15-6-2021; ngày duyệt đăng: 17-6-2021

Tóm tắt: Dưới tác động của đại dịch COVID-19, sinh viên quốc tế gặp phải nhiều khó khăn để hoàn thành việc học tập của mình tại nước ngoài. Tuy nhiên, những nghiên cứu liên quan đến vấn đề học tập của sinh viên quốc tế trong cơn khủng hoảng dịch bệnh vẫn còn hạn chế. Vì vậy, dựa trên nền tảng lý thuyết nhận thức rủi ro và lý thuyết hành vi hoạch định mở rộng, nghiên cứu này tập trung khai thác hành vi trở về quê nhà để tiếp tục học tập như một hành vi bảo vệ sức khoẻ bản thân xuất phát từ nhận thức rủi ro về COVID-19 của sinh viên quốc tế. Như vậy, ý định hành vi của sinh viên quốc tế được tìm hiểu thấu đáo thông qua lăng kính của nhận thức rủi ro.

Một cuộc khảo sát định lượng trực tuyến với phương pháp chọn mẫu ngẫu nhiên được thực hiện đối với du học sinh Việt Nam tại Vương quốc Anh vào tháng 2 và tháng 3 năm 2021. Tổng số 588 bảng trả lời được sử dụng để phân tích dữ liệu. Kết quả chỉ ra rằng nhận thức rủi ro, bao gồm nhận thức rủi ro cảm tính và nhận thức rủi ro lý tính, của sinh viên quốc tế có tác động tích cực đến thái độ, chuẩn mực chủ quan và nhận thức kiểm soát hành vi trở về quê hương để học tập. Bên cạnh đó, kết quả cũng cho thấy sự ảnh hưởng đáng kể của nhận thức rủi ro lên ý định hành vi. Ngoài ra, thái độ, chuẩn mực chủ quan và nhận thức kiểm soát hành vi trở về quê hương để nộc tập. Bên cạnh đó, kết quả cũng cho thấy sự ảnh hưởng đáng kể của nhận thức rủi ro lên ý định hành vi. Ngoài ra, thái độ, chuẩn mực chủ quan và nhận thức kiểm soát hành vi là

Từ khóa: nhận thức rủi ro cảm tính; nhận thức rủi ro lý tính; COVID-19; sinh viên quốc tế; lý thuyết hành vi hoạch định.