

To Return or Not to Return: A Dilemma of Two Overseas Vietnamese Students in the Netherlands Amidst the Coronavirus Outbreak

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ABSTRACT

Amidst the worldwide outbreak of the coronavirus, many overseas Vietnamese students have decided to return to Vietnam to seek protection from illness. However, the decision to return in such a risky context requires intensive thinking about the outcomes of each possible choice. The aim of this reflection paper is to explore the personal considerations and dilemmas during the decision-making process of two Vietnamese students in the Netherlands using the expected utility framework. The experience of applying a systematic approach to assess risky situations not only informs decisions more comprehensively but also provides an opportunity to look deeply at one's values and interests.

Keywords: academic mobility, coronavirus, expected utility theory, the Netherlands, risky decision-making, Vietnam

In a developing country like Vietnam, studying abroad can be seen as a prestigious opportunity for many. After several years of preparation, thanks to our incredible luck, we were given this special privilege to receive a quality education in the Netherlands. Studying at Radboud University, Nijmegen has been a life-changing opportunity for us as we have had the chance to deeply immerse ourselves in the majors that we are passionate about. However, with the global upsurge of the

COVID-19 pandemic, a new type of coronavirus first reported in Hubei, China (World Health Organization [WHO], 2020d), the dream of studying abroad quickly turned into a distressing dilemma for many international students, including us.

Maneuvering Between Two Borders: The Coronavirus Outbreak in the Netherlands and Vietnam

Besides the differences between the perception of risks, diseases, and uncertainties between the Vietnamese and Dutch cultures, the discrepancy between the approaches that the two governments took in initially responding to the virus is clear. In late January 2020, the transmission of COVID-19 went beyond Chinese borders and reached the European region (Spiteri et al., 2020). Following that, on February 27, 2020, the first case of COVID-19 in the Netherlands was confirmed (RIVM, 2020). On March 16, in the first address to the nation in 46 years, the Dutch Prime Minister Mark Rutte, given the 1,413 positive cases in the Netherlands, announced that the maximum control strategy would be adopted and aimed at protecting vulnerable people as well as developing group immunity (Rutte, 2020). By March 22, 3,631 patients tested positive—an increase of 2,218 cases in 6 days (RIVM, 2020).

Meanwhile, having an adjacent border to China, Vietnam reported its first confirmed case on January 23, 2020 (Coleman, 2020). In order to contain the spread of the virus, the Vietnamese government immediately took serious precautions such as closing down the schooling system, locking down the borders, and tracking and quarantining thousands of people in contact with the confirmed patients. These actions succeeded in limiting the number of positive cases for a time (WHO, 2020b). Up until March 21, there were only a total of 91 confirmed cases in Vietnam (WHO, 2020c). To control the number of imported cases, the Vietnamese government took one step further and established a 14-day concentration quarantine program for anyone coming back from foreign countries (Phung, 2020). Given the outbreak in Europe and the drastic measures by the Vietnamese government, many overseas Vietnamese students and workers decided to return to Vietnam with the hope of guarding themselves against the virus. However, some of them also inadvertently became the carrier of the disease.

A Model for Risky Decision-making: Theoretical Reflection During Crisis

The trade-off between the consideration to return to Vietnam or to stay in the Netherlands emerged with a distinctive sense of urgency and risk for many Vietnamese abroad. As students who firmly believe in science, we decided to take a look into the literature of decision-making with the hope to consciously reach a more informed judgment. As proposed by prospect theory (Tversky & Kahneman, 1992), a prominent approach in describing people's preferences in risky situations, humans are generally risk-averse and more sensitive to loss than gain. Furthermore, Vietnamese are generally even more risk-averse when compared with the Dutch (Hofstede Insight, 2020). Indeed, we realized that our internal

sensitivity to risk could cause us to make irrational decisions in the context of the pandemic. In order to overcome our subjective biases, we found the expected utility theory highly efficient in providing prescriptive rational decisions (for further details, see von Neumann et al., 1944). With personal decision-making, the model takes into account the beliefs about the probabilities of the outcomes that each possible decision might have and the personal utility assigned for each outcome. Figure 1 shows the expected utility model for a decision involving two choices, each with two outcomes.

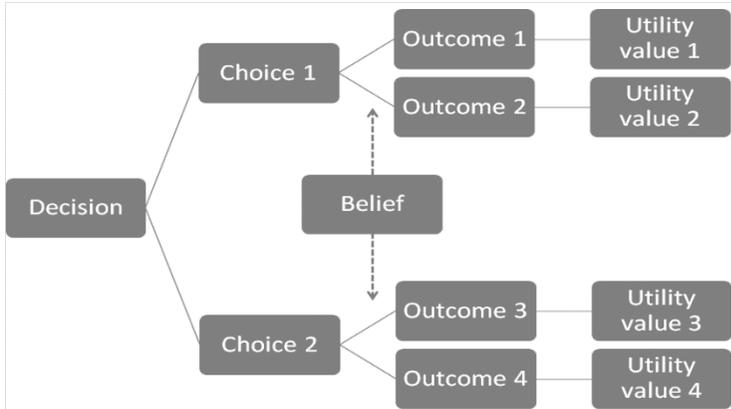


Figure 1: An Expected Utility Value Decision Tree

Beliefs about the chance of the outcomes are the foundation of the decision tree. The probability of each outcome is the weighting coefficient of the corresponding utility value. In this situation, the two possible outcomes for each of our choices were whether we would contract the disease or not. In order to form our own belief, we had to make an educated guess based on statistics of the number of patients and the rate of infection that we were aware of thus far. According to the Dutch Health Institute, around 60% of the country's residents must get COVID-19 for herd immunity (Pieters, 2020). Meanwhile, the risk of traveling back to Vietnam's airport and being quarantined for 14 days also heightened our risk of getting the disease despite the solutions that the government had taken. Admitting to our bounded rationality, we progressed by subjectively assigning the probability of getting the disease as 10% for returning to Vietnam and 30% for remaining in the Netherlands. Figure 2 shows a model of the choices with four outcomes and their respective probabilities.

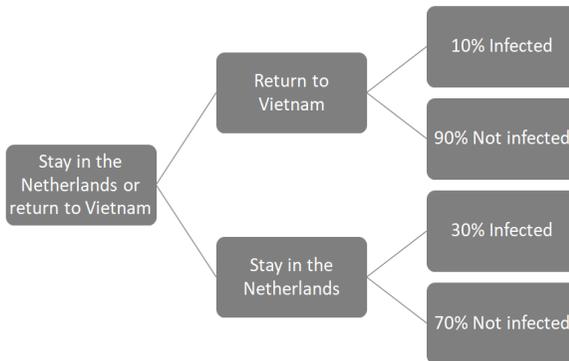


Figure 2: The Decision Tree Modeling Our Choices

The second component of the model is the expected utility that each outcome might have. Reflection was required in this step as we had to think deeply about what was really important to us and our decision. In order to validate the utility rating of each outcome, we defined four major personal values that greatly influenced our choice, including personal health, family, academic progress, and social responsibility. Table 1 provides a list of questions related to the four values that we asked ourselves. Each question was answered based on the parallel assessment between staying in the Netherlands or returning to Vietnam. By considering the questions with each outcome (i.e., getting infected or not) of the two choices, we asked ourselves each question four times. Subsequently, the total utility score for each outcome was calculated and multiplied with the respective probability coefficient. Thus, a total of 28 comparisons were completed in order to assess the utility of each outcome effectively. In the following sections, we will reflect on some of the dilemmas and considerations that we faced during the decision-making process. After providing our perspectives, we will present our models with utility values filled in to suggest how it could be used to inform decision-making.

Contemplation Amidst Chaos: Reflections on Personal Values

Personal Health

Amidst the coronavirus outbreak, we had to remain realistic since contracting the virus could considerably impact our physical and mental health. Even though the number of cases was increasing exponentially in the Netherlands, social distancing and frequent handwashing lessened the chance of infection (WHO, 2020a). On the other hand, the decision to return meant risking our physical health through exposure to public spaces such as airplanes or airports whose confined nature can provide an ideal environment for the virus to spread

Table 1: The Personal Value Questions and Ratings of Expected Utility for Each Decision

Outcomes	Personal Health		Family		Academic Progress	Social Responsibility		Total Utility Score	Expected Utility (EU)	Total EU of each decision
	How much impact does my decision have on my mental health?	How much impact does my decision have on my physical health?	How much impact does my decision have on my family's mental health?	How much impact does my decision have on my family's physical health?	How much impact does my decision have on my academic progress?	How much impact does my action have on Vietnamese society?	How much impact does my action have on Dutch society?			
Return to VN and get infected (10%)	3	2	2	1	1	1	2	12	12*0.10	23.7
Return to VN and not get infected (90%)	6	5	3	4	2	1	4	25	25*0.90	
Stay in the Netherlands and get infected (30%)	1	2	2	4	4	5	4	20	20*0.30	23.5
Stay in the Netherlands and not get infected (70%)	3	4	3	4	4	5	5	28	25*0.70	

Each question will be rated on a 7-point Likert scale, where 1 = Having a strong negative impact, 2= Having a moderate negative impact, 3 = Having a small negative impact, 4 = Having neutral impact, 5 = Having small positive impact, 6 = Having moderate positive impact and 7 = Having a strong positive impact. The total EU of the decision to return to Vietnam can be calculated as (Probability of getting infected) * (Total Utility infected) + (Probability of not getting infected) * (Total Utility not infected). The choice with higher utility will be the more rational choice.

The governmental plans of the two countries also played an important role in our consideration. While the Dutch government was reserving professional health care only for severe cases in the early stages of the pandemic, the Vietnamese government took a more circumspect approach, providing free testing and treatments for any suspected cases. Though the coronavirus had not shown any long-term effects or high mortality rate for young people like us when we were considering our decision, staying in the Netherlands constantly filled our anxious minds with the fear of uncertainty and longing for additional protective measures. In general, a long journey home would mean a short period of intense pressure of protecting ourselves from infection on the planes, yet receiving assurance afterwards. Meanwhile, the decision to stay would mean that the feeling of risks is spread out over a longer period of time.

Family

To us, the consideration for our family was another significant factor. Vietnamese people treat family values with great appreciation. The sense of intimacy in our families is expressed, not through words of love and kindness, but through actions. Home is where everyone is concerned closely with each other's problems. Our parents, like many others who have children abroad, were anxious to see us coming back to Vietnam, slightly due to the fear of the outbreak, yet mainly because of their feeling of helplessness. Our presence in Vietnam could offer them mental wellness since they could at least feel assured that they could physically be by our side. As the number of Vietnamese students who sought to return home began to accelerate dramatically, a sense of urgency grew within the

people staying abroad as we witnessed our parents' apprehension intensifying with each and every passing day. Since both of our parents are approaching retirement age, to make them watch their child fighting the crisis alone would further put a lot of strain on their mental health. Ironically, just like our parents, taking action, making the dangerous trip home, was the only way for us to express our love to them and relieve their sorrow. Nonetheless, coming back would not do them much good, either. Upon our arrival, it would be inevitable that our family would visit us, either at the airport or the quarantine camp. This would put them in environments with a high infection rate, which might adversely affect their own health. In other words, the consideration for the physical and mental health of our family further complicated the decision of whether we should stay or leave.

Academic Progress

We also had to consider the influence of the outbreak on academic progress, as our sole intention in the Netherlands is to receive an education. Although the Netherlands had shut down most applied science and research universities, Radboud University began implementing various approaches to ensure the continuation of education via online learning and examination. Meanwhile, going back to Vietnam required a tremendous effort to adjust to the entirely new life at the quarantine camp as well as the weather of the tropical climate. Jet lag would inevitably leave us in a fatigued state, and as a result, we would have little energy to be productive. As examinations were still taking place, such obstacles would do great harm to our results. The 6-hour difference in the two countries' time zones would require us to wake up in the middle of the night in Vietnam to attend an online lecture or examination. In short, despite the fact that online learning allowed education to continue from afar, the adaptation process still posed plenty of formidable obstacles to our academic progress.

Social Responsibility

Having a Vietnamese nationality and a deep admiration for the Netherlands and how the Dutch were pressing ahead during this challenging time, we were aware that our decision could have effects on both countries. For the time being, the Vietnamese healthcare system was seriously strained as thousands of Vietnamese returnees underwent the 14-day quarantine period. Free testing and quarantine measures on a national scale was quickly exhausting facilities and resources on a daily basis. As the shortage of medical personnel became more and more problematic, Ho Chi Minh City, the economic capital of Vietnam, was considering the plan to employ retired doctors and medical students for additional aid (Dong, 2020). Therefore, our decision to return would add more pressure to the already fragile economy and healthcare system in Vietnam when aid was needed for people with more critical conditions. Given the lower chance of mortality for young people, the fear of becoming a "super-spreader" (Boseley & Belam, 2020), transmitting the coronavirus to many others, was more relevant to

us. The decision to return required unwanted exposure and interactions in the public transport systems, which went against the social distancing precautions in both Vietnam and the Netherlands. If we stayed in the Netherlands, we could fully comply with both of the government’s advice and protect other citizens as well as ourselves. In such an unprecedented crisis, a citizen should closely consider the safety of society alongside their own personal values.



Figure 3: Our Decision Trees with Expected Utility

DISCUSSION AND CONCLUSION

In this paper, we illustrate the use of the model of expected utility to systematically convey our considerations on whether to return or not to return amidst the COVID-19 outbreak. As can be seen in Figure 3, which shows our decision trees, the model suggests that one of us should return to Vietnam. Since we were the only two remaining Vietnamese within our community, our decision has been strongly influenced by one another, which conclusively led one author to adjust their decision and stay. Indeed, in order to enact a risky decision, one must have more than just rationality and information (Soler et al., 2010). A sense of companionship has been also crucial for us to overcome the unexpected nature of this harsh time. Nevertheless, the expected utility model was still of great use by informing our decision-making in a systematic manner. However, this model also has two disadvantages. First, the model is fixed on the current inputs that we have. Therefore, updating our beliefs and values constantly is needed for future decision-making. For example, on March 20, 2020, President Mark Rutte renounced group immunity and decided to take on a more rigorous approach for the entire nation (DutchNews, 2020), which may have influenced many international students’ decision to return or not. Secondly, as unpredictable as life and our own intuition are, this model is limited to our own bounded rationality

and, therefore, is subjective. However, it has allowed us a chance to think deeply about our own values and intuition, which has provided a sense of rationality and agency in this current time. Furthermore, it is important that before everyone else, scientists should look into themselves to discover their biases and beliefs, and to counter them with a fierce attitude. Like a proverb that many Vietnamese mothers often say: “The battle between one and themselves is always the hardest.”

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