

## **THESIS COLLECTION**

**László Kökény**

Examining consumer risk perception in tourist travel  
buying in the shadow of the COVID-19 pandemic

for his Ph.D. thesis

**Thesis Supervisor:**

**Zsófia Kenesei, PhD**

Professor

Budapest, 2022

**Department of Tourism**

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# **1 Research background and reasoning behind the topic**

Consumers face a number of choices to meet their needs. They have to consider whether their choice will actually be the best one and whether something will go wrong in these situations. To do this, they need to evaluate different outcomes. In the economic conception of microeconomics, the homo economicus, the individual is perfectly informed and can choose the most rational alternative that is also the best for his needs (Zak, 2010). In reality, however, individuals are neither perfectly informed nor perfectly rational.

Consequently, they suffer from a lack of information and judge possible outcomes subjectively. Their lack of information may lead them to be uncertain about the outcomes. Moreover, the results of outcomes may be far from positive. Thus, in addition to uncertainty, there is also the issue of the probability of potential adverse outcomes. In the interpretation of marketing science, this combination leads to risk aversion (Cunningham, 1967).

This type of uncertainty increases in parallel with the desire to consume a good that is difficult to learn about or try out is more likely to be experiential or trusted. It is not purchased on a daily or weekly basis, or is even higher in value relative to the average

basket of goods. Goods that such criteria can describe are mainly services (Kenesei – Kolos, 2014). The purchase of tourist travel and holidays also meets these criteria. The purchase of a holiday per year is usually rare, for a higher price than the average expenditure. It is challenging to try out the service to be bought beforehand, even if elements of experience on one's journey or elements of trust through others can help judge it. The situation is not made easier because when buying or booking a holiday for leisure purposes, a number of services (usually at least two) have to be purchased and coordinated. Finally, holiday buying itself is now typically done without the need for a tour operator, via the internet, on one's own. Thus, in addition to the realisation outcomes of holiday buying, managing the risks and dangers inherent in the (online) buying process is an exciting challenge. The topic of risk perception and safety seeking in tourism is relevant, as has been reinforced by the terrorist acts of recent years. However, the COVID-19 pandemic in early 2020 has spotlighted this topic. Overall, questions about how the perception of risk determines the purchasing process can be very relevant to the holiday buying process.

## **1.1 The aim of the thesis**

The research aims to investigate consumers' risk perception and management behaviour concerning their holiday purchases for

tourism in the shadow of the COVID-19 pandemic. In the research, I sought to answer the questions of what risks are perceived by the subjects concerning holiday purchase and realisation, how they are interrelated and how they influence their travel intentions. I also looked at how risk reduction strategy is implemented, what strategy and tools are used and to what extent they depend on the individual or the external environment. Whether they can actually reduce or even increase the extent to which risks are perceived. Finally, I was interested to see how the perception of safety resulting from the combination of risk perception and risk reduction is related to the intention to travel and how subjective the perception of safety is in the risk-taking dimension. I examined this in the shadow of the coronavirus that has been present for the last two years.

I present my research questions concerning my objectives, complemented by the research methodology I intend to use. My risk perception objectives (the first, second and third) are intertwined in the three main areas (perceived risk of holiday buying, perceived risk of online space, and perceived risk of the COVID-19 pandemic). The types of perceived risk can be divided into two groups: those related to buying and those related to the use of technology. The combined analysis of these

two groups is still under-researched in the literature and lacks a deeper understanding of consumer behaviour (Sharma et al., 2021; Keller – Tóth-Kaszás, 2021; Csapó – Töröcsik, 2019; Cui et al., 2016). Finally, the emergence of the COVID-19 pandemic has further intensified the prominence of certain types of risk-taking or has determined it on its own, even making the entire buying process and the enjoyable holiday impossible (Taylor et al., 2020; Abraham et al., 2020; Sanchez-Canizares, 2021). My first three research objectives seek to address these issues. From the literature, it was clear (Stern et al., 1977; Czerwonka, 2019) that information acquisition is at the heart of risk reduction strategies, whether related to trusted brands, increasing a sense of control or overall attitude. However, it is not clear what risk reduction tool is part of mitigating the risks of a specific situation and what is a risk-mitigating element. However, it may be independent of the situation. Thus, my fourth objective concerns the resolution of this dilemma. The critical issue of my whole analysis revolves around risk perception and risk management. I explore these areas in detail in my previous four research objectives. However, the fundamental connection of the research to practice is through the measurement of travel intentions. I explore consumer behaviour in detail to see to what extent travel intentions can be increased by mitigating risk perceptions and negative approaches. Hence, my outcome

variable, my last entirely dependent variable, is the travel intention factor. My related objective is the last one.

1. Understand all aspects of the holiday buying and booking process in the shadow of the COVID-19 pandemic, focusing on risk perception.
2. To understand the correlations between the types of perceived risk associated with the online space during the holiday buying and booking process.
3. To explore and understand the risk perception factors associated with fears related to the COVID-19 pandemic.
4. To understand the impact of risk reduction tools on perceived travel risk.
5. To measure and understand the impact of perceived risks on travel intentions, considering individual differences.

I formulated the following five main research questions based on my research objectives.

- Q1 What risks does the consumer perceive when booking a trip?
- Q2 How are fears of the coronavirus linked to risk perception?
- Q3 How are the different types of perceived risks related to each other?



Q4 What risk reduction strategies does the consumer use when purchasing and booking a holiday?

Q5 How does the intention to travel depend on the perceived risks and their management?

## **1.2 Introduction to the concepts and scales used in the research**

The factors examined in the empirical part of my research are presented below. The sub-factors of traditional risk perception include performance, financial, social, physical, psychological and time-related risk perceptions (based on Stone – Gronhaug, 1993; Kim et al., 2009; Sharma et al., 2021). Performance risk involves the uncertainty that a purchased product or service will not perform as expected or even fail to perform. Financial risk occurs in the form of a monetary outlay spent on purchasing a product or service and its subsequent maintenance. This type of risk is the consumer's concern that their money will be wasted if the product or service they have purchased does not arrive or perform as expected. Social risk is based on the perception of a third party, be it a relative, friend, acquaintance or a member of society, of how the consumer thinks to judge the decision to buy the product or service. In the case of physical risk, the subject physically harms his or her person. Psychological risk refers to

the possibility that the product or service purchased may negatively affect the consumer's self-perception or peace of mind. Time risk (which I was finally only able to use in my qualitative research) refers to the risk of spending too much time buying a product or service, and taking too long to make different decisions in the buying process.

For the risks of the online space, the risk of fraud refers to the consumer's concerns about the reliability and credibility of the seller during the online buying process (Naiyi, 2004). The perceived privacy risk refers to the use and misuse of consumers' personal information that may violate the privacy of the individual (Sharma et al., 2021) The information risk (Naiyi, 2004, Filieri – McLeay, 2014) is a measure of how reliable and asymmetric the consumer perceives the information to be (i.e., from the seller and even from the consumer combined).

Perceived health risk for the COVID-19 pandemic refers to harm to the subject's health, particularly illness and other severe consequences due to the coronavirus (Taylor et al., 2020). Moreover, perceived risk of anxiety refers to the disruption of the subject's inner peace of mind due to thoughts and stress caused by the coronavirus (Taylor et al., 2020).

The brand name and reputation of the online seller are perceived as being recognized and well regarded concerning its market

share (Kim – Park, 2013). Perceived quality of information covers the reliability and sufficiency of the information about the company and the product or service offered for sale (Kim – Park, 2013; Kusumasondjaja, 2015). Perceived control means that a subject feels in control of the situation, in control of his/her decisions (Le et al., 2020; Bae – Chang, 2021). Reducing the likelihood of an unexpected event is mainly related to my qualitative findings – it is mainly an indirect theme in addiction research – but it is a situation where the subject tries to avoid the worst possible situation or anticipates it in a prepared way (Rhodes et al., 2003; Renn, 2004). The information gathering factor describes the extent to which the subject is immersed in information gathering and how intensively he or she processes information (Rejikumar – Asokan, 2017). EWOM, or online word of mouth, shows how the subject views and gives importance to online reviews and comments (Jalilvand et al., 2013; Abubakar – Ilkan, 2015). Moreover, the trust factor refers to general self-confidence, which shows how much confidence one has in the situation in general based on the surrounding conditions (Mou et al., 2017; Dryhurst et al., 2020).

The risk-taking intention (risk propensity) is the probability that an individual takes risks (Karl – Schmude, 2017). If its value approaches zero, it is easy to conclude that the subject is already

more risk-averse (Meertens – Lion, 2008; Kusumasondjaja, 2015). The direction of the destination was measured by a categorical variable, whether the subject intends to go domestic or abroad.

The value of travel intention, in turn, shows the willingness of the individual to travel for a holiday for tourism purposes or, more generally, as a purchase intention to buy a product or service (Bae – Chang, 2021).

## **2 Methodologies used**

I used an exploratory mixed methodology in my research. I first conducted a qualitative data collection and analysis, which I also quantified using a magnitude coding technique. Then, using a three-level coding (Corley – Gioia, 2004), I further narrowed the results from 26 first-order themes formed by 112 features to 14 second-order constructs, and finally, at the third level, I obtained six main dimensions. Following this analysis, I performed confirmatory factor analysis using a structural equations model (including the CB-SEM approach) (Hair et al., 2019). In this complex model, I measured the factors that directly, indirectly and moderating influence travel intention, which allowed me to test my hypotheses. I used 62 statements for modelling, from which I created 19 first-order variables, as detailed later, and four second-order variables from 14 of these.

The statements were asked on a Likert scale of 1 to 7, with 1 being the response option ‘not at all typical of me’/‘strongly disagree’ and 7 being the response option ‘absolutely typical of me’/‘strongly agree’. The qualitative data collection sample included subjects who travelled domestically or abroad for tourism purposes in the summer of 2020. They were interviewed in October 2020 as part of a structured in–depth interview with student support, using a pre–defined interview guide. The sample size was 111 people. For quantitative data collection, I surveyed those who planned to travel in the summer of 2021. They were interviewed in May 2021 using an online questionnaire with a random sample. The final sample was 539 people. The sample on which both surveys were based was evenly distributed along with demographic variables. The two groups included almost equal proportions of domestic and international travellers.

## **2.1 Presentation of research questions**

For the first research question, I will use a qualitative research methodology to explore what characterises consumers’ perceptions and the importance of risk. In doing so, I will also try to answer the question raised in the literature (Cui et al., 2016) – which may also be helpful for practical solutions – about

which risk perceptions are critical, when and how important they are in the holiday buying process.

Q1 What risks does the consumer perceive when booking a trip?

My second and third questions focus on the context, the effects, and the influencing factors. Consequently, I have used quantitative data collection and analysis tools for this part. This method helped me translate the links identified in the qualitative research into numerical correlations. I was greatly helped by the validated scales that I used as measurement tools in my research. I was then able to define hypotheses for the correlations based mainly on the literature review results. These questions were designed to address the second and third objectives.

Q2 How are fears of the coronavirus linked to risk perception?

Q3 How are the different types of perceived risks related to each other?

The fourth theme, related to my research objective, was explored through a question. I then examined the impact of risk reduction strategies and the basis of the risk reduction strategies factor. It was clear from the literature (Stern et al., 1977; Czerwonka, 2019) that information acquisition is at the heart of risk

reduction, whether it is related to a trusted brand, increasing a sense of control or overall orientation. I will try to analyse the connections and differences in my qualitative research, in the quantification of my qualitative research and finally in my quantitative research.

Q4 What risk reduction strategies does the consumer use when purchasing and booking a holiday?

The critical issue in my whole analysis is around the subject of risk perception and risk management. I have explored these areas in detail in the previous four research questions. However, the fundamental link of the research to practice is through the measurement of travel intention. My fifth research question thus concerns how and in what context the whole process itself, which is the result of risk perception and management, influences travel intention. Finally, I investigated two moderating factors related to individual circumstances that influence the overall framework. For one factor, I tried to cover personal characteristics. This was possible through risk-taking intention (risk propensity). This factor has also not been addressed in a model-integrated way (Meertens – Lion, 2008), especially not in a well-constructed moderating way (Kusumasondjajaja, 2015). The other moderating factor is related to an external element, the choice of destination in a

domestic–foreign context. I based this hypothesis on the research of Karl and Schmude (2017) and Csapó and Törőcsik (2019) and then on my qualitative results for the hypothesis construction. I thus draw on both my qualitative and quantitative research findings to answer this question.

Q5 How does the intention to travel depend on the perceived risks and their management?

## 2.2 Research hypotheses

In addition to the literature review, I used my qualitative research findings to formulate the hypotheses (Table 1).

**Table 1: Research hypotheses**

Related research question	Groups by type of relationship	Hypothesis
Q1., Q3.	<i>Hypotheses assuming direct effects</i>	H <sub>1a</sub> : Perceived risk of online space increases perceived risk of holiday buying.
Q1., Q2., Q3.		H <sub>1b</sub> : The perceived risk of COVID-19 increases the perceived risk of holiday buying.
Q4.		H <sub>2a</sub> : Using risk reduction strategies reduces the perceived risk of holiday buying.
Q4.		H <sub>2b</sub> : Using risk reduction strategies reduces the perceived risk in the online space.
Q4.		H <sub>2c</sub> : Using risk reduction strategies reduces the perceived risk of COVID-19.



Related research question	Groups by type of relationship	Hypothesis
Q4.		H <sub>3a</sub> : Information gathering increases the use of risk reduction strategies.
Q4.		H <sub>3b</sub> : EWOM increases the use of risk reduction strategies.
Q4.		H <sub>3c</sub> : Trust in the environment increases the use of risk mitigation strategies.
Q5.		H <sub>4</sub> : The perceived risk of holiday buying reduces the intention to travel.
Q1., Q5.	<i>Hypotheses assuming indirect effects</i>	H <sub>5a</sub> : The perceived risk of online space reduces travel intentions through the perceived risk of holiday buying.
Q1., Q5.		H <sub>5b</sub> : The perceived risk of COVID-19 reduces travel intentions through the perceived risk of holiday buying.
Q1., Q5.		H <sub>5c</sub> : Using risk reduction strategies increases travel intentions through the perceived risk of holiday buying.
Q5.	<i>Hypotheses assuming a moderating effect</i>	H <sub>6</sub> : The willingness to take risks moderates the effect of the perceived risk of holiday buying on reducing the intention to travel.
Q5.		H <sub>7a</sub> : Travellers with domestic destination, the use of risk reduction strategies reduces the perceived risk of holiday buying more than travellers with foreign destination.
Q5.		H <sub>7b</sub> : Travellers with domestic destination, the perceived risk of holiday buying has a more limited effect in reducing travel intentions than travellers with foreign destination.

### 3 Results and main conclusions of the thesis

In my research, I highlighted a total of five main objectives, which I explored through five research questions. I used

qualitative and quantitative data collection and analysis to answer my questions.

### **3.1 Qualitative research results and main conclusions**

The results of the qualitative research were the most detailed in exploring the dimensions of risk perception and risk reduction, which were the main focus of the research. In addition, a third central dimension, risk-taking intention, could also be presented in sufficient detail. These covered a more alternative range of issues. However, they are the real added value of qualitative research. These dimensions help to understand the whole holiday buying and implementation process from the perspective of risk perception and reduction strategies. The three additional dimensions are the dimension of elements that increase risk perception, the dimension of location selection and the dimension of the impact of risk perception on reducing the travel experience.

The dimension of risk reduction was the most easily found and recognisable dimension to analyse in the research. From this, it was possible to identify areas of risk perception directly in many places and indirectly in many cases. It was the relationship between the two main dimensions (risk perception and risk reduction) that led to the most critical area, the issue of creating a sense of safety, which the subjects made everything

subordinate to achieving. Moreover, the willingness to take risks seems to be linked to all the areas studied by creating a sense of safety. The main objective of the respondents was to have a safe, relaxed and enjoyable summer holiday. The intention to travel played a more crucial role in choosing a location, the extent of which varied between subjects. In addition, there was also a general intention to travel, which was generally positive for all. It could also be seen that the theme of trust was primarily separate from general risk reduction, but overall it was present in a risk-reducing role throughout all sub-themes. I also found three additional areas that further highlighted the depth of the research. These are described in the next paragraph. Suppose the pre-travel sense of safety was not sufficiently established. In that case, it could easily lead to stress or, on the contrary, to an (even conscious) lack of risk perception, thus impairing or enhancing the experience of relaxed leisure. However, if the sense of safety was compromised during the trip (unexpected event, risk perception), this also impaired the experience of relaxation. Elements unrelated to risk perception (lack of the joy of life) could sometimes cause a sense of lack of overall image for the subjects.

Among the six main dimensions I identified, I found three corresponded to the elements (risk perception, risk reduction,

risk-taking intention) examined in many previously presented literature studies. However, I also found three other major dimensions that defined the overall process under study in a new way. The interpretation of the meaning of the members of these last three dimensions can be grouped into three categories. On the one hand, one introduced a new element into the theoretical model of risk-taking, such as the effect of risk-taking in reducing the travel experience. In doing so, they pointed out that it is not possible to solve all risks or to perceive everything simultaneously and that this continuity can diminish the experience of the process. Thus, we can see that the theory of risk perception is closely related to the theoretical framework of experience perception and the theory of satisfaction through the perception of service performance or quality.

On the other hand, secondly, the interpretation could also be made by interpreting an existing potential outcome variable, such as travel intention, in a broader context, as both a precursor and an outcome of the choice of travel location. Namely, my sample's general intention to travel was present, but the choice of travel destination, especially in terms of destination, was not clear. The choice of location was often the result of choice as a means of risk reduction or even risk aversion (i.e. they could not sufficiently reduce the perceived risk but wanted to decide and

travel). It could also be a dimension that determined the risk-taking intention itself, or vice versa, as it is conceivable that the risk-taking intention ultimately determined the final decision, given some awareness of the interplay between risk-taking and risk reduction. This may resolve the research bias arising from the sampling – only people travelling on holiday were interviewed – that risk-taking was not fully minimised for subjects regardless of whether they wanted to travel, i.e. whether they had the intention to do so. According to the literature, the latter, i.e. the existence of the intention to travel, implies either a complete release of risk aversion or some level of risk-taking (although the latter's effect is less discussed). Indeed, we have seen that there have been cases where, after the decision has been made or during the trip, risk perception or anxiety about perceiving risk has been present throughout the trip, precisely because the individual has been unable or unwilling to mitigate or understand the risks.

Lastly, the third element presents a structural problem that was also touched on in the theoretical introduction but has been almost absent from the international literature, only indirectly and strongly observed in connection with the loss of a sense of control. We could call this the dimension that increases risk perception in its own right. On the one hand, it results from

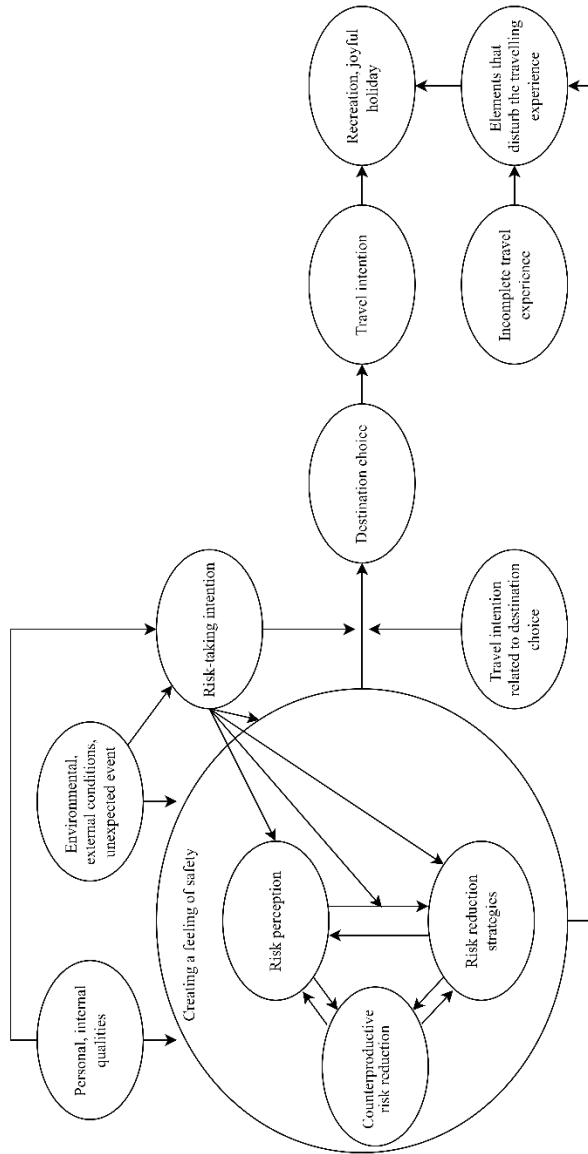
counterproductive risk reduction, which is a factor that increases risk-taking, mainly as a result of information gathering. That is when the means intended to reduce risk perception nevertheless increase the perception of risk, even making the subject more susceptible to risk perception (increasing the chance of accidental or self-willed risk perception). The other part of the risk perception-increasing dimension is the risk of variable adverse outcomes (occurrence of unexpected events). This also highlights that, on the one hand, we cannot treat the magnitude of the negative outcome as a specific constant in the coronavirus study, as the epidemic curve has evolved with different intensities over the last two years (although we have seen that it can be given a probability or severity in its cross-section so that its impact is easier to manage).

On the other hand, it also shows that some risk reduction tools may reduce the risk at a particular time. In contrast, they may increase the detection or the probability (susceptibility) of detection at other times. Furthermore, they may even have a positive effect on the final outcome, as the subject may have been able to detect risks that he/she had not been able to detect before, and thus be able to prepare for, take or live with them. So this third dimension influences the complete structure under study. The coronavirus influences it because of its changing

circumstances. It thus reveals dimensions of linkages not previously addressed in theory (counterproductive effect of risk mitigation tools on risk perception) and novel interpretative possibilities (variability of adverse outcomes, conscious or unconscious susceptibility to risk perception, variability of the effect of risk mitigation) that may also provide researchers with exciting perspectives and show the dynamics of each of these linkages through the sense of safety.

After qualitative analysis, I developed the following model (Figure 1).

**Figure 1: Model summarising the results of the qualitative research**





### **3.2 Quantitative research results and main conclusions**

In the quantitative research, I accepted most of the hypotheses. The hypotheses were mainly based on the literature on the associations with risk perception. However, risk reduction strategies have not been previously investigated as a separate factor in the literature in first and second-order dimensions, so in preparing the relevant hypotheses, I considered the results of qualitative research and the relevant literature findings. A similar approach was taken in modelling risk-taking intention and destination choice. The system of SEM equations generated satisfied all critical conditions and indicators, and the factor structure was valid. For the direct effects, among the standardized regression coefficient values, only the effect of risk reduction strategies on the perceived risk of holiday buying was insignificant ( $p$ -value was 0.056). I had one case with significant results at 5% (the effect of EWOM on risk reduction strategies), while the other seven relationships also showed significant results at 0.1%. Most of these relationships are of moderate strength (Sajtos – Mitev, 2007).

When looking at the direct results, three main findings are worth highlighting. One is that the more thematic risk perception types (online space and the COVID-19 pandemic) contribute to the increase in perceived risk associated with holiday buying, with

coefficient values of 0.386 and 0.433. This indicates that more general risk perceptions related to performance, financial threats, social concerns, and physical and psychological domains are determined by more thematic risk perception types. The means of the statements associated with these more specific risk perceptions were also slightly higher than the means of the statements for the first-order constructs associated with the general factor. It was easier for subjects to formulate these more specific risk perceptions. However, it cannot be said that measuring the general risk perception is not necessary since this factor was the most crucial determinant of travel intention.

It is just worthwhile to decompose its elements better (Sharma et al., 2021). It can also be argued that, similar to the aggregate risk perception introduced by Stone and Gronhaug (1993), the perceived risk of holiday buying became the aggregate risk perception. Another result worth highlighting is that the risk reduction strategies tended to identify more thematic types of risk perception (online space and the COVID-19 pandemic), with coefficients of  $-0.689$  and  $-0.403$ , respectively. This parallels the findings in the literature and the previously detailed result that subjects are more likely to anticipate and reduce more specific risk perceptions (Derbaix, 1983; Bruwer et al., 2013). This suggests that there are higher risk perceptions and lower

risk perceptions and that consumers will be able to reduce accordingly.

The third main result of direct effects was examining risk reduction tools that quasi-externally influenced the use of a risk reduction strategy. These effects were not as strong on average, and the effect of EWOM was only significant at 5% but had a reducing effect on the use of risk reduction strategies. The other two items increased the use of risk reduction strategies. Highlighting EWOM seems to have been a good idea, despite the positive effect I expected, as it hurts the use of risk reduction strategies. This factor can be a counterproductive risk reduction tool, as reported many times in qualitative research. It could also be that this factor increases susceptibility to risk perception through the theory of perceived deception (Park et al., 2019) or simply because, in the online space, sympathy for one brand can quickly come at the expense of another due to community association (Rather, 2021). It could also be that by using EWOM, subjects may already feel less need to use other risk reduction tools.

Furthermore, this latter approach could say two things. After using EWOM, the participants no longer wanted to use another risk reduction tool because the information gained was sufficient to reduce risk. However, the other could be that the effect is negative because subjects became confused and stopped using

EWOM. Information gathering and confidence in the environment have a medium power to increase the use of risk reduction strategies. This could also mean that those who gather information or trust their environment also use additional risk reduction tools. There could be two reasons for this. On the one hand, those who use these tools may prefer to be better prepared and thus use more tools to reduce their risks (and then this could even be a back and forth effect so that using more tools requires more information gathering and more trust in the environment). On the other hand, it is also possible that using these two tools is not sufficient in itself and that they feel the need to use additional tools to reduce their risks. This could, in turn, reverse the thinking of a few sentences ago, i.e. it was precisely the collection of information and the perception of trust that increased uncertainty and thus the need for further risk reduction, hence the positive direct link.

The indirect effects study complemented my previous results. I then obtained three cases of fully mediated effects, two of which were related to the factor trust in the environment concerning perceived risk associated with holiday buying and two related to the perceived risk in the online space, both through risk reduction strategy. This risk reduction tool, mainly through the total risk reduction factor, has a risk moderating effect on these

two risk perceptions. This, in turn, may explain the phenomenon of specific and general self-confidence (Siegrist, 2021).

The third fully mediating effect was related to the dimension of risk perception. Namely, the risk perception of the COVID-19 pandemic had a significant indirect effect on travel intention only through the perceived risk of holiday buying. This implies that, although this factor strongly affects aggregate risk aversion, it may directly influence travel intention in combination with other factors. In other words, the perceived risk of the COVID-19 pandemic, formed by the health and coronavirus anxiety factors, is an essential element for risk perception of holiday buying. However, other risk perceptions are also important, or even more important, in shaping travel intention, as seen in Yu et al. (2021) (financial, performance). The effect of online perceived risk is partially mediated, with a negative direction but weak relationships. Overall, it is correct to suggest that the more thematic risk perception types influence the overall aggregate level of risk perception associated with holiday buying rather than travel intention.

The factor of risk reduction strategies deserves a separate summary. The factor has no significant effect on the perceived risk of holiday buying but significantly affects the other two thematic risk perceptions. Consequently, I found it helpful to

look at the mediating effects through the two thematic risk perceptions on the perceived risk of holiday buying. The direct effect became just significant, but the indirect effect, primarily through the perceived risk of the online space, became more significant ( $-0.280$ ). Thus, we can speak of partially mediated effects in these cases. The result confirms the model's finding that the central risk perception is the perceived risk of holiday buying. This is significantly influenced by more specific, thematic types of risk perception. Risk reduction strategies can reduce the perceived risk of holiday buying through these factors rather than directly.

I also looked at the moderating effect of a continuous variable (risk-taking intention) and a categorical variable (destination choice was domestic or foreign). However, I did not find significant differences when examining the effects, so it cannot be said that those who were more risk-averse had a milder negative effect on risk perception. Nor is there a significant difference in this effect for those who choose to travel domestically or abroad. For the latter factor, I also looked at whether the effect of risk reduction strategies is amplified by travelling domestically. However, I did not find significant differences between the groups, even though the literature

suggests this could be the case for a Hungarian sample (Csapó – Törőcsik, 2019).

Table 2 summarises the final results of the hypotheses.

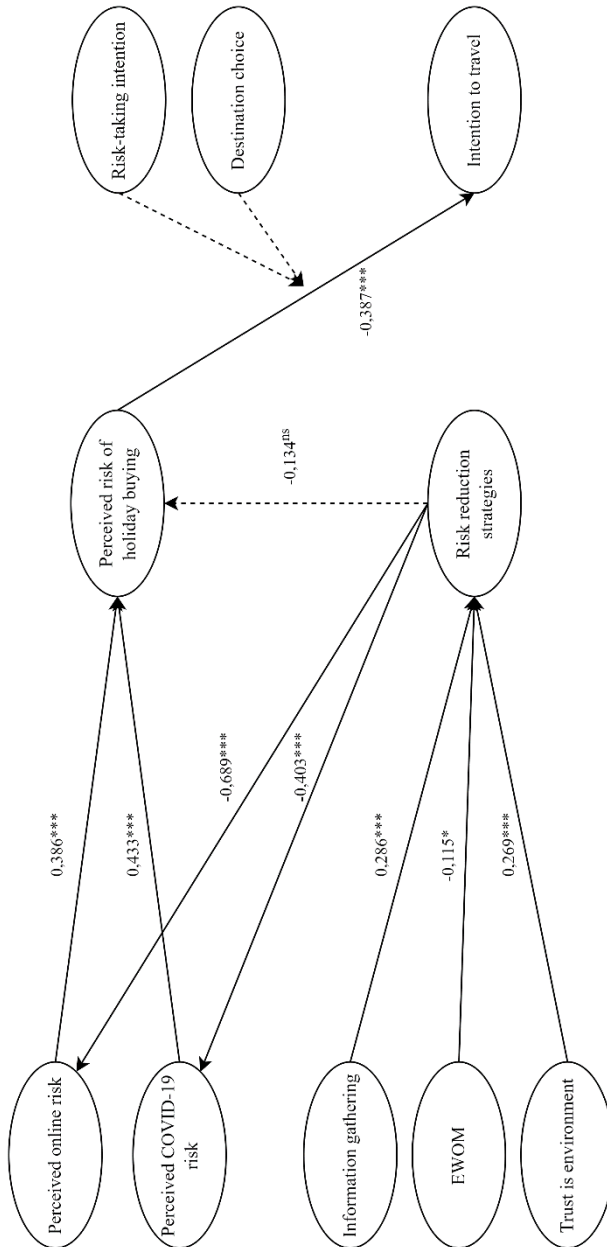
**Table 2: Outcome of hypotheses**

<b>Hypothesis</b>	<b>Accepted/Rejected</b>
H <sub>1a</sub> : Perceived risk of online space increases perceived risk of holiday buying.	<b>Accepted</b>
H <sub>1b</sub> : The perceived risk of COVID-19 increases the perceived risk of holiday buying.	<b>Accepted</b>
H <sub>2a</sub> : Using risk reduction strategies reduces the perceived risk of holiday buying.	Rejected
H <sub>2b</sub> : Using risk reduction strategies reduces the perceived risk in the online space.	<b>Accepted</b>
H <sub>2c</sub> : Using risk reduction strategies reduces the perceived risk of COVID-19.	<b>Accepted</b>
H <sub>3a</sub> : Information gathering increases the use of risk reduction strategies.	<b>Accepted</b>
H <sub>3b</sub> : EWOM increases the use of risk reduction strategies.	Rejected
H <sub>3c</sub> : Trust in the environment increases the use of risk mitigation strategies.	<b>Accepted</b>
H <sub>4</sub> : The perceived risk of holiday buying reduces the intention to travel.	<b>Accepted</b>
H <sub>5a</sub> : The perceived risk of online space reduces travel intentions through the perceived risk of holiday buying.	Partially accepted
H <sub>5b</sub> : The perceived risk of COVID-19 reduces travel intentions through the perceived risk of holiday buying.	<b>Accepted</b>
H <sub>5c</sub> : Using risk reduction strategies increases travel intentions through the perceived risk of holiday buying.	Partially accepted
H <sub>6</sub> : The willingness to take risks moderates the effect of the perceived risk of holiday buying on reducing the intention to travel.	Rejected
H <sub>7a</sub> : Travellers with domestic destination, the use of risk reduction strategies reduces the perceived risk of holiday buying more than travellers with foreign destination.	Partially accepted
H <sub>7b</sub> : Travellers with domestic destination, the perceived risk of holiday buying has a more limited effect in reducing travel intentions than travellers with foreign destination.	Rejected



Finally, on the next page, I present the results of the SEM model without the hypothesized mediating effects (Figure 2). Notes on the model: \*:p<0.05; \*\*:p<0.01; \*\*\*:p<0.001; ns: not significant. Dashed lines indicate non-significant effects. All factor weights are significant at 0.1%, not marked separately. Coefficients are standardized regression coefficients. The bootstrap procedure generated 2000 subsamples.

**Figure 2: Structural model results**



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