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COVID-19 AND PERCEIVED TRAVEL RISKS:

THE DEVELOPMENT OF A RISK EVALUATION INDEX USING DELPHI-BASED AND MCDA APPLICATIONS

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MASTERS IN MANAGEMENT

DISSERTATION MADE UNDER THE SUPERVISION OF:

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2022

WORK TITLE

I declare to be the author of this work, which is unique and unprecedented. Authors and works consulted are properly cited in the text and are included in the listing of references.

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SUMMARY

ENGLISH

This work addresses the problem of changing travel risk perceptions of travellers following the aftermath of the COVID-19 pandemic. Following the unprecedented and global health crisis of COVID-19, without a doubt, there has been a tremendous impact on global tourism for two reasons; 1) the imposed travel restrictions discouraging people to travel; and 2) the increased anxieties of travellers in terms of responding to the new travel landscape. The main goal of this study was to identify and weight the important travel risks that are emerging and to create a risk evaluation index in which destinations and strategic interventions' performance can be measured. The secondary objectives to this study include to contribute to a better understanding of risk perceptions held by travellers in a pandemic situation and apply a multimethodology to the concept of tourist perceived risk that has, to the knowledge of the author, never been carried out before. Empiric investigation analysed a sample of South African travellers' travel risk perceptions through the use of the Delphi Technique and Multicriteria Decision Analysis (MCDA). The results equip the tourism industry, practitioners and managers with the information needed to evaluate tourist risk perception following a global pandemic, but can also be further applied to other contexts. This allows for the implementation of response strategies to encourage travel and contribute to the recuperation of the tourism sector following the COVID-19 pandemic. The findings from the Delphi-based survey indicate that tourist perceived risks are multidimensional, with first-level dimensions being categories of Financial, Performance, Planning and Regulation risks, which can be further sub-divided into categories that include additional expenses, exchange rates, refunds-related, destination performance, transportation performance, researching-related, psychological, lockdowns, testing-related and comfort-related criteria. MCDA applications, using MACBETH approaches, found that the risk criteria that are considered to be of highest importance to overall travel risk perception include additional expenses, exchange rates and refunds-related factors – with weightings of 20.60, 16.80 and 12.47 respectively. The risk evaluation index that was constructed as a result of this study was applied to five tourist destinations to evaluate their performance with regards to the perceived travel risks identified. Results suggested that the United Kingdom performs better (i.e., is 'safer') in terms of this particular South African traveller sample's risk perceptions. This kind of research contributes to the literature in two ways: methodologically, by applying MCDA

and Delphi techniques to the context of tourist risk perceptions, and by the development of a risk evaluation index.

Keywords: Multicriteria Decision Analysis (MCDA); Delphi Technique, Tourist Perceived Risk, COVID-19; Risk; Tourist Behaviour

RESUMO

Este trabalho aborda o problema das mudanças de perceção de risco de viagem dos turistas durante e após a pandemia de COVID-19. Após a crise de saúde pública global e sem precedentes de COVID-19, houve, sem dúvida, um tremendo impacto no turismo global por dois motivos; 1) as restrições de viagem impostas que desencorajam as pessoas a viajar; e 2) o aumento da ansiedade dos viajantes em responder ao novo cenário de viagens.

Desde 2000, o turismo tem enfrentado uma variedade de doenças infeciosas (a título de exemplo, gripe suína, SARS, gripe aviária, Ébola), em que os efeitos negativos foram isolados em países ou regiões específicos. No entanto, desde o surto de COVID-19 enquanto novo coronavírus em Wuhan, China, no início de janeiro de 2020, a disseminação atingiu todos o planeta, fazendo com que a Organização Mundial da Saúde o declarasse uma pandemia a 11 de março de 2020. Por conseguinte, a decisão de viajar envolve riscos, mais do que anteriormente. Mesmo que a doença seja contida, as perceções de risco e a falta de segurança podem persistir e impedir que as pessoas viajem no futuro próximo.

De particular interesse para os investigadores de turismo no atual clima de pandemia é a influência da crise de saúde pública do COVID-19 nas perceções de risco dos consumidores de viagens e como essas perceções de risco potencialmente influenciarão o comportamento de viagem no período pós-crise. Considera-se imperativo prever a trajetória de mudança no comportamento do turista, a fim de ajudar os gestores de turismo a responder de forma ideal à situação.

O risco percebido como tema de pesquisa tem recebido atenção considerável ao longo das décadas. Normalmente, os estudiosos dividem os tipos de riscos percebidos com a compra de produtos ou serviços gerais como financeiro, físico, desempenho, social, psicológico e tempo/conveniência. Na literatura relacionada com viagens e turismo, o risco tem sido frequentemente examinado usando praticamente o mesmo sistema de classificação. Essa tipologia e classificação na literatura de turismo, baseada em riscos em geral e não riscos relevantes para viajar, pode ser muito ampla e, portanto, impede respostas adequadas de gestão. Caso contrário, resta apenas uma tipologia genérica e ampla de fatores que compreendem cada categoria de riscos que podem afetar significativamente as intenções de viagem, tornando difícil para os gestores de viagens desenvolver estratégias apropriadas para acalmar as preocupações dos viajantes em perspetiva. Isso é especialmente importante desde o surto da pandemia de COVID-19, pois a literatura anterior sugeriu que as crises de saúde têm impactos consideráveis nas perceções de risco dos turistas.

Portanto, a pesquisa como a que se apresenta nesta dissertação é particularmente relevante para o clima atual em que o setor de turismo opera, pois a necessidade de reavaliar e explorar as diferentes dimensões de risco que podem estar atuando para inibir o desejo de viajar para os turistas é importante agora mais do que nunca.

O principal objetivo deste estudo foi identificar e ponderar os importantes riscos de viagem que estão a surgir e criar um índice de avaliação de risco no qual o desempenho dos destinos e das intervenções estratégicas possa ser medido. Os objetivos deste estudo incluem: 1)

contribuir para uma melhor compreensão das perceções de risco dos viajantes em situação de pandemia; 2) desenvolver uma ferramenta pela qual os destinos e futuras intervenções para abordar as perceções de risco possam ser medidos, através da ponderação de diferentes critérios de risco usando MCDA; e 3) a aplicação de uma metodologia combinando procedimentos baseados em Delphi e modelos multicritério (MCDA), utilizando abordagens MACBETH ao tema do risco apercebido em viagens, contribuindo para a investigação de forma inovadora.

O MCDA tem sido criticado por ser tecnicamente complicado. Portanto, é necessário o desenvolvimento de uma ferramenta para apoiar os formuladores de políticas locais na seleção de critérios e na classificação do desempenho das intervenções nesses critérios. A ferramenta de classificação é composta por critérios, definições de critérios, pesos de critérios e escalas de classificação para medir o impacto geral das intervenções de risco apercebido e apoiar os objetivos de definição de prioridades. Tal ferramenta poderia ser usada num processo de definição de prioridades mais amplo, baseado em MCDA, para desenvolver estratégias de controlo de risco num ambiente local.

O desenvolvimento de tal índice de risco fornece uma ferramenta abrangente ao: 1) permitir a medição e monitorização das perceções gerais de risco dos turistas; 2) dar conta da natureza multidimensional das perceções de risco; 3) prever e discutir o impacto das políticas de turismo multinível que podem abordar as perceções de risco do turista; e 4) fornecer uma base para o diálogo político multinível sobre a indústria do turismo e questões de mercado.

A investigação empírica analisou uma amostra de perceções de risco de viagem de turistas sul-africanos através do uso da Técnica Delphi e Análise de Decisão Multicritério (MCDA). Os resultados fornecem à indústria do turismo, profissionais e gestores as informações necessárias para avaliar a perceção de risco do turista após uma pandemia global, mas também podem ser aplicados a outros contextos. Isto permite a implementação de estratégias de resposta para incentivar as viagens e contribuir para a recuperação do setor de turismo após a pandemia de COVID-19. Os resultados da investigação baseada em Delphi indicam que os riscos apercebidos pelos turistas são multidimensional, com as dimensões de primeiro nível sendo categorias de riscos Financeiros, de Desempenho, Planeamento e Regulação, que podem ser subdivididas em categorias que incluem despesas adicionais, taxas de câmbio, relacionadas com reembolsos, desempenho de destino, desempenho de transporte, relacionados com pesquisa, critérios psicológicos, bloqueios, relacionados com testes e relacionados com conforto.

As aplicações MCDA, usando abordagens MACBETH, determinaram que os critérios de risco considerados de maior importância para a perceção geral do risco de viagem incluem despesas adicionais, taxas de câmbio e fatores relacionados com reembolsos - com ponderações de 20,60, 16,80 e 12,47, respetivamente. O índice de avaliação de risco que foi construído como resultado deste estudo foi aplicado a cinco destinos turísticos para avaliar seu desempenho em relação aos riscos percebidos de viagem identificados. Os resultados sugeriram que o Reino Unido tem um desempenho melhor (ou seja, é “mais seguro”) em termos das perceções de risco dessa amostra de viajantes sul-africanos em particular. Esse tipo de pesquisa contribui para a literatura de duas maneiras: metodologicamente, aplicando

as técnicas MCDA e Delphi ao contexto das perceções de risco do turista, e pelo desenvolvimento de um índice de avaliação de risco.

Palavras-chave: Análise de Decisão Multicritério (MCDA); Técnica Delphi, Risco apercebido pelo Turista, COVID-19; Risco; Comportamento do Turista

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CHAPTER ONE: INTRODUCTION

1.1 Background

Since 2000, tourism has been faced with a variety of infectious diseases (e.g., Swine flu, SARS, Avian flu, Ebola) whereby the negative effects where isolated to specific countries or regions, however, since the outbreak of the COVID-19 strain of the novel coronavirus in Wuhan, China in early January 2020, the spread reached all corners of the globe, causing the World Health Organization to declare it a pandemic on the 11th of March, 2020. This virus has had devasting, and possibly long-lasting effects on travel and tourism (Li et al., 2021). Due to the lack of an effective vaccine at the beginning of the outbreak, countries were forced to implement numerous restrictive measures in an attempt to slow down the spread of the virus – including things like lockdown, social distancing, closure of schools and universities and non-essential businesses, implementing bans on the gatherings of people as well as cancelling or postponing national and global events (i.e. conferences, trade shows, concerts and festivals and sporting events) (Gossling et al., 2020; Arndt et al., 2020).

However, most relevant to this research paper is the effect of international, regional and local travel restrictions which has drastically affected local and national economies – and one in particular, that of the tourism industry. International air travel slowed down rapidly as many countries decided to impose travel bans, close their borders and introduce quarantine periods causing international travel to decline at a phenomenal rate (Gossling et al., 2020; Arndt et al., 2020). Essentially all parts of the hospitality industry value chain were left at a stand-still with the cancelling of events, the closure of accommodation and the shutdown of many tourism attractions – which in turn affected all other parts of the supply chain (Gossling et al., 2020; Wen et al., 2020). The unprecedented outbreak of COVID-19 has been a painful reminder of how susceptible tourism is to various risks and threats.

The United Nations World Tourism Organisation (UNWTO) (2021) note that COVID-19 caused over 70% decrease in tourist traffic in 2020, compared to the previous year, 2019. Furthermore, the World Travel and Tourism Council (WTTC) predicts that the pandemic will result in $22 billion worth of economic damage to the global tourism market (Bratic et al., 2021). This makes clear that there will be a need for a rapid adjustment of the tourism industry – both structurally and functionally – as tourism providers will need to change their usual way of doing business and provide information to assist tourists in planning and taking

trips in 2022 and the future. This includes specific information related to holiday planning in times of the pandemic and the provision of up-to-date information on destination behaviour (Bratic et al., 2021).

Due to this global pandemic, the decision to travel involves risks, more so than previously. This is not only because of the uncertainty revolving the conditions that will be encountered by the tourist at the destination, but also because of the possibility of negative consequences related to decisions taken. Even if the disease is contained, the perceptions of risk and lack of feeling safe may persist and deter people from travelling in the near future (Li & Ito, 2021).

Therefore, in order to ensure recovery of the tourism industry and have an effective response, crisis management is vital (Chebli & Foued, 2020). According to Ritchie (2004), effective crisis management involves three stages: 1) preparation before crisis; 2) management as the crisis occurs; and 3) the final resolution once the crisis has passed. This study is part of the second stage. Roberts et al. (2007; cited in Chebli & Foued, 2020:197) define crisis as "a low-probability, high-frequency event that develops very rapidly and involves ambiguous situations with unknown causes and effects". In the aftermath of the crisis, the tourism industry faces many new challenges to recovery and understanding consumer behaviour in response to catastrophic events is one of them (Mair et al., 2016).

Crisis management refers to the handling of the negative impact of crises, in which this impact is reduced and recovery supported. It must address the immediate challenge in terms of ensuring the safety of tourists and communities as well as sustaining and rebuilding the sector. Destination recovery is highly related to risk perception, making it an important area to understand and investigate in terms of what is considered important by tourists in relation to personal safety and security (Reisinger & Mavondo, 2005; Williams & Balaz, 2013; Lepp & Gibson, 2003).

1.2 Problem Statement

Thus, a question arises: when travel resumes, what will the new trends look like? What new potential tourism behaviours, specifically, tourist perceived risks, could emerge? As previously seen in other cases, after a crisis occurs, new tourist concerns, apprehensions and demands shape the tourism market. Of particular interest to tourism researchers in the current pandemic climate is the influence of the public health crisis of COVID-19 on the risk perceptions of travel consumers, and how these risk perceptions will potentially influence post-crisis travel behaviour. It is considered imperative to predict the trajectory of change in

tourist behaviour in order to help tourism managers ideally respond to the situation. This research aims to provide a means of reflection by identifying and weighting risk factors involved in the South African tourists' risk perception when it comes to travelling internationally in a pandemic situation.

Perceived risk as a research topic has been given considerable attention over the decades. Typically, scholars have divided the types of perceived risks with buying general products or services as financial, physical, performance, social, psychological and time/convenience (Conchar et al., 2004). In travel and tourism literatures, risk has often been examined using virtually the same classification system (Simposon & Siguaw, 2008). This typology and classification in the tourism literature, based on risks in general and not risks relevant to travelling, may be overly broad and therefore prevents appropriate managerial responses. For example, assessing the case of 'psychological risk' from prior literature, it's meaning could range from 'a disappointing travel experience' (Sonmez & Graefe, 1998) to 'a vacation will not reflect my personality or self-image' (Roehl & Fesenmaier, 1992) – both meanings could require separate tourism management responses. This denotes a limitation to using risk categories that are borrowed from non-travel-related literature was commented on by Dolnicar (2005), who suggested that using standard risk inventories might not be a good foundation for studies of perceived risk in the tourism context, and that more market-driven knowledge and insight is required into the nature of tourists' fears and the components there-in. If not, there remains only a generic and broad typology of factors comprising each category of risks that may affect travel intentions significantly – making it difficult for travel managers to develop appropriate strategies to calm concerns of perspective travellers. This is especially considerable since the outbreak of the COVID-19 pandemic as prior literature has suggested that health crises have considerable impacts on the risk perceptions of tourists (Novelli et al., 2018).

Therefore, research as what is presented in this paper is particularly relevant to the current climate in which the tourism sector operates, as the need to reassess and explore the different risk dimensions that may be acting to inhibit the desire to travel for tourists is important now more than ever.

1.3 Motivations:

i *Perceived risk:*

Bauer (1960) notes that consumer behaviour involves risk in that the actions of the consumer will produce outcomes which he/she cannot approximate with any certainty, some of which at least may be unpleasant. Thus, introducing the notion of perceived risk and uncertainty into the concept of buying behaviour. The perception of risk is of paramount importance in the tourism decision-making process (Sonmez & Graefe, 1998; Floyd et al., 2004). The travel consumer anticipates a number of disadvantages that could arise from their choice of products and consumption process and so a strategy to choose a low-risk alternative is developed (Chebli & Foued, 2020). When consumers make a decision, they will also perceive the risks associated with the purchase of the tourism product as the perception of risk impacts consumer behaviour which in turn influences purchase choice (Bauer, 1960; Moutinho, 2000).

Tourists are sensitive to crises and an increase in fear, tension and confusion is common. Tourist behaviour can be understood as a combination of internal factors (motivations, attitudes, beliefs, etc.) and external factors (economic environment, socio-cultural environment, security, etc.). Tourist behaviour results from the processing of stimuli that are evaluated according to internal characteristics and personal preferences and external variables mediate perceptions and decisions (Chebli & Foued, 2020). Tourists are high involvement customers due to the fact that tourism offerings are expensive and risky and there is a general lack of knowledge for making rational decisions, therefore it is understandable that tourist's associate travel with various types of risks, engaging in information-searching as a way to minimise these risks and improve decision making (Lehto et al., 2007).

The presence of risks, whether real or perceived, has an influence on tourism travel plans and travel behaviour. Perceived risks play an important role in consumer behaviour, generally (Bauer, 1960) and in the context of tourism (Moutinho, 2000). It can be influenced by personal characteristics of the individual (Roehl & Fesenmair, 1992; Sonmez & Graefe, 1998), previous travel experience (Sonmez & Graefe, 1998; Lepp & Gibson, 2003), gender (Pizam et al., 2004), educational level (Sonmez & Graefe, 1998), nationality (Pizam et al., 2004) and cultural differences (Kozak et al., 2007). This considered, tourism risk perception is generally understood as the subjective assessment of risks associated to travelling.

Perceived risk is often defined as "the individual's perceptions of the uncertainty and negative consequences of buying a product (or service)" (Reisinger & Mavondo, 2005:212). Described in the tourism context, it can be understood as the tourists' perception of

uncertainty and possible adverse consequences resulting from the consumption of tourism offerings (Moutinho, 2000). Perceptions of uncertainty and negative consequences have previously been divided into eight distinct categories: namely; health, psychological, physical, equipment, financial, satisfaction, time and social risk (Fuchs & Reichel, 2011; Qi et al., 2009; Reisinger & Mavondo, 2005; Cui et al., 2016; Hasson et al., 2017). Perceived risk may exacerbate anxiety and the tourist's negative evaluations of travelling, thus affecting their intentions to travel negatively. This, along with avoiding destinations that tourists consider to be risky may lower tourist's intention to travel. This avoidance of specific tourism products may be explained by Cognitive Dissonance which arises from the tourist's attempts to negotiate between their intrinsic travel motives and their desire to mitigate the adverse effect of their consumptive behaviours, implementing risk reduction processes in order to place the risk factors within an acceptable threshold to alleviate the Cognitive Dissonance (Cui et al., 2016). This potentially resulting in tourists postponing their travel plans, re-evaluating their destination choice and attempting to find alternatives that alleviate the perceived risk, or cancel their trip altogether – thus having a discernible impact on the choices made by tourists (Matiza, 2020).

Risk has been established as a multi-dimensional construct (Cui et al., 2016). For example, Fuchs & Reichel (2011) found that food safety, socio-psychological, weather, financial and service quality risks to have the biggest influence on tourist decision-making. While Kim et al. (2021) found that personal safety, cultural, violence and socio-psychological risks were associated with travel to China for the Olympic Games in 2008. Reisinger & Mavondo (2005), on the other hand, found that perceptions of financial and health risk have a significant influence on perceived level of safety. Other previous studies have explored the causal effects that health and psycho-social risk have on the decision-making processes of tourists (Liu et al., 2013; Kim et al., 2021), thus making it an antecedent to consumptive decision-making that is sensitive to intrinsic and extrinsic forces, such as the COVID-19 pandemic. It is therefore evident from the literature that perceived risk is a multi-dimensional and idiosyncratic construct (Matiza, 2020; Cui et al., 2016). The different dimensions and constructs making up this perceived risk is useful to investigate.

ii *COVID-19 and Perceived risk:*

Concerning the global tourism industry is the residual effects of the pandemic on travel and tourism in the form of perceived risks associated with travelling, post-pandemic. Post-health

crisis and touristic behaviour is relatively under-researched, according to Matiza (2020), so there is a lack of empirical evidence that can model the behaviours of tourists after destructive events such as the COVID-19 pandemic. Prior research has, however, suggested that traveller's concerns about risks pertaining to their health or with regards to being infected by a disease have been influencing their behaviour and choice of tourist destination (Chinazzi et al., 2020; Lee et al., 2012). COVID-19 is seen as a disruptive factor that has an impact on the way that travellers perceive the safety of tourism (Bratic et al., 2021).

One of the most important factors related to COVID-19 holiday planning and decision-making is the increased travel anxiety due to COVID-19 pandemic risk (Bratic et al., 2021). Travel anxiety increases when travel risks are present and in high-risk situations, tourists tend to adjust their behaviours and vacation plans (Roehl & Fesenmaier, 1992). In the face of the perception of external danger, new consumer practices are adopted by the traveller. Infectious diseases in particular have direct impacts on peoples travel behaviours and decisions (Bratic et al., 2021). This can be seen in previous cases of infectious diseases and their impacts on the tourism industry. In 2004, during the outbreak of the SARS (Severe Acute Respiratory Syndrome) virus, the fear of travel was evident as there was a sharp decline in tourist arrivals (by 65%) to South and South East Asia (Mao et al., 2010). The 2009 swine flu outbreak decreased hotel occupancy in Cancun and Mexico by up to 55% (Staff, 2009). Novelli et al. (2018) note how the Ebola outbreak in West Africa in 2014 had negative impacts on tourism in Africa in general – prior to the outbreak, Africa was experiencing average increases in tourist arrivals of 5% in 2012 and 2013, but this number decreased by 2% in 2014, and by a further 5% in 2015. The magnitude of the COVID-19 outbreak is sure to cause major changes in tourist behaviour for the near future to come.

The scale of impact of the COVID-19 pandemic has yet to be fully experienced, but in the meantime, it is important to begin designing a practical recovery plan, which will need to involve mitigating the perceived risks and their influence on travel behaviour. This involves a multi-faceted challenge, in terms of both tourism demand (perceived risks) and supply (financial deficits, job losses, liquidation, human capital depletion) (Matiza, 2020). Therefore, it will require multi-stakeholder concerted efforts to identify and manage both objective and subjective perceived risk factors for tourism suppliers to actively assist the travel consumer by providing offerings that achieve a suitable threshold to alleviate cognitive dissonance.

iii Crisis and Risk Management:

It would be appropriate to assume that the COVID-19 pandemic may create a heightened estimation of perceived risk for the global tourism industry, post-pandemic; further impeding the recovery of tourism in general (Matiza, 2020). The effects of crises on the tourism industry may have the direct consequence of negative or weakened images of travel as periods of disasters and crises tend to have a large impact on the psyche of tourists and their behaviour towards travel systems (Lehto et al., 2007). Travellers are more likely to give attention to issues that impact their personal safety and security, especially during the travel decision-making process.

Managing the negative impacts of crises can be achieved through crisis management, whereby the impact of a crisis is reduced and recovery supported (Novelli et al., 2018). Santana (2004) defines crisis management as "an ongoing integrated and comprehensive effort that organisations effectively put into place in an attempt to first and foremost understand and prevent crisis, and to effectively manage those that occur, taking into account in each and every step of their planning and training activities, the interest of their stakeholders" (p.308). Integral to this in tourism, is to gain an understanding and recognise how tourists are reacting to the crisis situation. Recovery of tourism from crises is highly dependent on the perception of risk, a field that is central to understanding what is important for tourists in relation to personal safety and security (Lepp & Gibson, 2003; Reisinger & Mavondo, 2005; Williams & Balaz, 2013).

Part of crisis management is risk analysis, as well as the collaboration of stakeholders (Ritchie, 2004). Risk management can be understood as a process of identifying potential risk events and then quantifying them in terms of likelihood of occurrence and the impact of the risk occurring (Shaw, 2010). This information can then be used to decide on the strategy that will be utilized to either eliminate the risk or minimise the adverse effects of it. Common to most risk management models (Burke, 2000; Gray & Larson, 2018) is the step of identifying risks, so that they may be analysed and pro-active or re-active efforts can be implemented to address these risks. This research paper contributes to this stage of the crisis management process.

Marketing recovery techniques play a critical role for economic recovery and changing potential traveller's misconceptions. These strategies however need to be formulated on the basis of the psychology of the consumer towards the disaster, more importantly their

attitudinal and affective responses (Lehto et al., 2007) – such as their perceived risks. The response to crises may not always involve a return to normalcy, but rather a change in parts of the tourism system. Risk threatens not only the safety and security of the traveller, but create a ripple effect that impacts the livelihood of communities that are highly dependent on the income generated from tourism activities. It is therefore crucial to begin the process of identifying these risks and thereby gaining the ability to manage risk perceptions of travellers, post-pandemic.

This study therefore aims to begin identifying the risks that South African travellers perceive when making decisions about travelling internationally, in the current pandemic context. Designing intelligent responses, protocols or processes to decrease the adverse effects of COVID-19 on the tourism industry is not feasible if one does not first determine where and why travel consumers may have feelings of uncertainty and risk when it comes to travelling. It is urgent to develop a list of potential risk factors that may be getting in the way of travellers pursuing international leisure travel in order to give tourism suppliers and organisations the knowledge to cater to these risk perceptions. Being equipped with the results of this MCDA and Delphi multimethodology may be a step towards identifying which aspects of the travellers' sentiments need to be addressed in order to get tourism up and running again. The model that is built as a result of this enquiry will allow different destinations' and risk interventions' effectiveness and performance to be measured in terms of the perceived travel risks of a sample of South African travellers. That is why such research may be useful, relevant and a good contribution to the current pandemic climate.

1.4 Research Objectives

1.4.1 Primary Objective:

Develop a weighted multi-criteria risk evaluation model regarding different risk factors that represent perceived risks of South African travellers, in terms of international travel during the current pandemic situation.

1.4.2 Secondary objectives:

1. Contribute to a better understanding of the current risk perceptions held by travellers in the current pandemic situation using a Delphi survey.

2. Develop a tool by which destinations and future interventions to address risk perceptions can be measured against, through the weighting of different risk criteria using MCDA.
3. The application of a multimethodology combining Delphi-based procedures and MCDA applications, using MACBETH approaches to the theme of perceived travel risk, contributing to the research in an innovative way.

MCDA has been criticised for being technically complicated, therefore, the development of a tool to support local policy makers in selecting criteria and rating performances of interventions on these criteria is required (Venhorst et al., 2014). The objective of this study, therefore, is to develop a rating tool against which destinations, as well as strategies and interventions addressing tourist perceived risk, can be assessed. The rating tool will be composed of criteria, criteria definitions, criteria weights and rating scales in order to measure the overall impact of perceived risk interventions and support priority setting objectives. Such a tool would be able to be used in a broader, MCDA based, priority setting process to develop risk control strategies in a local setting.

The development of such a risk index provides a comprehensive tool by: 1) allowing for the measuring and monitoring of the overall risk perceptions of tourists; 2) accounting for the multi-dimensional nature of risk perceptions; 3) foreseeing and discussing the impact of multi-level tourism policies that can address tourist risk perceptions and 4) providing a basis for multi-level policy dialogue on tourism industry and market matters.

1.5 Limitations of this research

There are several limitations in this study. This study was not intended to provide a final answer but rather to produce initial insights. It can be viewed as the first step in the attempt to characterise and structure risk perceptions and should be extended further in future studies – qualitative or quantitative.

The first limitation exists in the explorative nature of the study and therefore impacts on the ability to be generalised to a larger population. Further to this, the sample size that this research was conducted with was smaller than what would possibly be more preferred in terms of being able to generalise to the population of South African travel consumers.

Secondly, the results obtained from this research pertains to the values and preferences of the sample of panellists, but it is of course likely that a different group of stakeholders may have

reached a different view on perceived travel risks. Furthermore, the study focuses on those South Africans that had travelled internationally in the last five years, and this may have limited the findings as it does not include the views of other players within the tourism industry. Also worth noting is the fact that the majority of the sample of panellists were between the ages of 46 and 60 and reported low travel frequencies which may result in the findings being biased to this demographic characteristic.

The subjective judgement of the researcher in the preliminary and Delphi process may also be considered a limitation of this study. It may have impacted the evaluation and classification of responses and the categorisation process. Due to the nature of the work, there was no ability to cross-check these processes with other researchers as this is a Masters dissertation what was completed by one student.

Another limitation that exists is the inherent limitations that exist with the use of a web-Delphi method. This includes the inability of participants to elaborate further on their views and ideas and may result in misunderstandings existing throughout the process. Delphi surveys can also be rather time-consuming and response fatigue may have resulted in panellists dropping out between rounds. Finally, the Delphi technique focuses on consensus and majority agreement, which may have resulted in minority views being neglected, even though possibly very relevant to other travellers.

The overlapping of criteria in the final perceived risk typology and criteria list may also be considered a limitation to this study. It cannot be guaranteed that criteria are exhaustive and mutually independent which presents a conflict with one of the core assumptions of MCDA. Even though special attention was paid to this, it may be that some criteria result in similar outcomes.

The final limitation worth noting is the timing of when this research took place. The first round took place when the Omicron variant was particularly rife in South Africa and concluded once the situation has considerably cooled down. This could have resulted in perceived travel risks having altered in the process of the Delphi rounds. The limitations of this research are discussed in more detail at the end of this research paper, in Chapter 8.

1.6 Outline of this dissertation

This dissertation is broken down into 8 chapters, excluding appendices. Chapters two to five breaks down the literature review for this research into different components: Consumer

behaviour theories, risk and risk management, COVID-19 and crisis management and Tourist perceived risk. Chapter six describes the methodology used in this research, followed by chapter seven which presents the findings and discussions of the research. Chapter eight, the conclusion, comments on limitations and presents the contributions of the research to the tourism field.

The chapter following this one (Chapter two) discusses different consumer behaviour theories that contribute to the reader's understanding of the buying process and how risk perceptions may influence this. Once the general consumer's decision-making is described, this chapter focuses on the tourist decision-making processes and thus places the tourist in the context of a consumer, creating a good theoretical foundation on which to build the rest of the information in this dissertation.

Chapter three then defines and describes risk, risk management, risk management strategies and different risk management models. This has been included in this paper as the findings of such research could be understood as the beginning process of risk management, that of identifying and weighting risk factors, from the perspective of the consumer. It positions the paper within the risk analysis field and justifies the value in conducting such research.

Chapter four includes information regarding COVID-19 and crisis management. This has been deemed important for this paper as it describes the context in which the research was undertaken and provides further justification for the necessity of such research. It provides a theoretical foundation for this kind of research and highlights previous epidemics as sources of crises for the tourism sector.

Chapter five is a chapter that explores previous literature on tourist perceived risk, a highly studied concept in the tourism field. It explores the previous categories that have been used to divide different dimensions of perceived risk for tourists and is included as an important section that informs the methodology and created context for this research. Is also makes reference to two models that explains risk perceptions as antecedents to behavioural intention, highlighting the importance of an enquiry into tourist perceived risk as it has been shown to directly impact their behavioural intentions, thereby being of importance to the tourism industry.

Chapter six defines and describes concisely the methodology used in this research, enabling the reader to understand and interpret the results as well as informs the reproduction of the study in the future under different contexts. It includes an explanation of the adopted multi-

methodology (i.e., Delphi Technique and MCDA) and is in chronological sequence in which it was carried out.

Chapter seven describes the data analysis, its interpretation and presents the findings of the research. Furthermore, it highlights the most important findings and facts of the research, discussing the theoretical and practical implications of the work. Finally, Chapter eight concludes the work and analyses the results in light of the introduction, further discussing the limitations and contributions of the research.

CHAPTER TWO: CONSUMER BEHAVIOUR THEORIES

2.1 Introduction

Moutinho (2000) describes the term "consumer behaviour" as a process that involves the acquisition and organisation of information in the direction of a purchase decision and the use and evaluation of products and services. The process involves stages of searching for, purchasing, using and evaluating and disposing of products and services.

It is important to study the decision-making process of consumers as it offers an explanation to why and when consumers buy products. In terms of the consumers' perspective, there are five reasons as to why the consumer would make a purchase decision. Firstly, there are a variety of products available and consumers have to make decisions between different products that possess similar functions; second, customers require the product as it brings some kind of benefit to them; third, the product sparks interest in the consumer even if it is not useful; fourth, the product comes from a popular brand that embodies the consumers' lifestyle and social status; and fifth, there are external influential factors that lead the consumer to a particular choice (Moutinho, 2000). Assael (1995) notes that these factors will lead to a complex decision-making process. It is of interest to marketers to understand the different aspects involved in the consumer purchasing decision process, from the first point of learning about a product, to making the decision to buy it, use it and then dispose of it. This describes how consumers make decisions.

During the decision-making process, the consumers are also influenced by internal and external factors, which play important roles in consumer evaluation of alternatives in the process of making their final decision. This section explores existing decision-making process models of general consumers and describes the influential factors that impact on this process.

2.2 Consumer Decision-Making Theories

With specific focus on the decision-making process, this section explores the general consumers' behaviour. A decision is a result of a mental process whereby one action is chosen from a set of available alternatives (Moutinho, 2000). Decision-process models show how information is acquired and used in order to make a decision. Most models deal with five different steps in the decision process: problem identification, information search, evaluation of alternatives, choice and post-choice processes. Three theories are introduced

from the consumers' perspective: Complex Decision-making Theory (Assael, 1995), Consumer Decision Process (CDP) model (Blackwell et al., 2001) and the Means-end Approach (Reynolds & Olsen, 2001).

2.2.1 Complex Decision Model

Assael (1985) posits that there are five phases involved in the decision-making process: (1) problem recognition, (2) the search for information, (3) the evaluation of alternatives, (4) the choice, and (5) the outcome of the choice. These steps are translated into steps that are described within the consumers' complex decision-making context: (1) need arousal, (2) consumer information processing, (3) brand evaluation, (4) the purchase, and (5) post-purchase evaluation. Figure 2.1 depicts this process graphically.

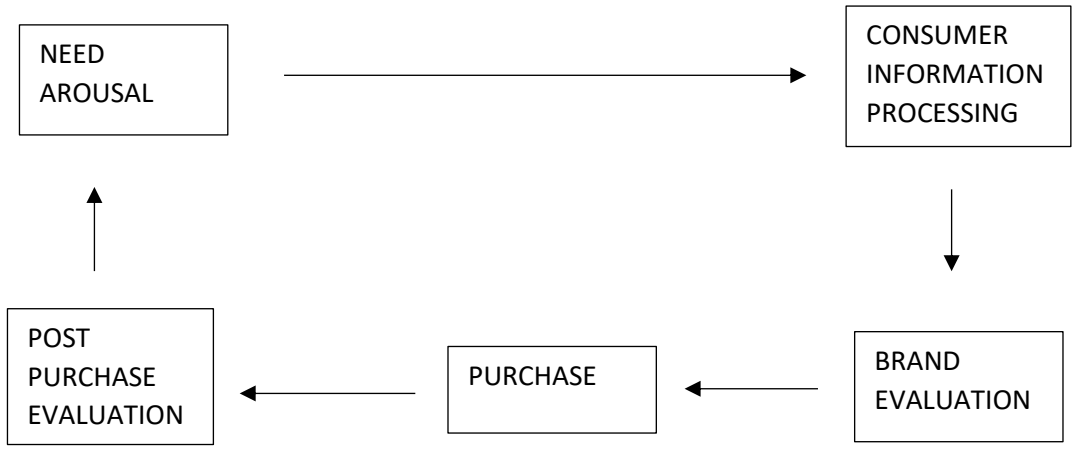


Fig 2.1 Complex Decision Model (Source: Assael, 1995)

The process begins with need arousal, whereby consumers enter the process with particular perceptions and attitudes towards the brands of the alternatives. Secondly, the consumer gathers information about the alternative products available as an immediate result of need arousal. The consumer then goes through a process of brand evaluation, a result of information processing, followed by purchase and then post-purchase evaluation

2.2.2 Consumer Decision Process Model

Blackwell et al. (2001) introduced the Consumer Decision Process (CDP) model which includes seven stages in making decisions: (1) need recognition, (2) search for information, (3) pre-purchase evaluation of alternatives, (4) purchase, (5) consumption, (6) post-consumption evaluation, and (7) divestment. Figure 2.2 depicts this model graphically.

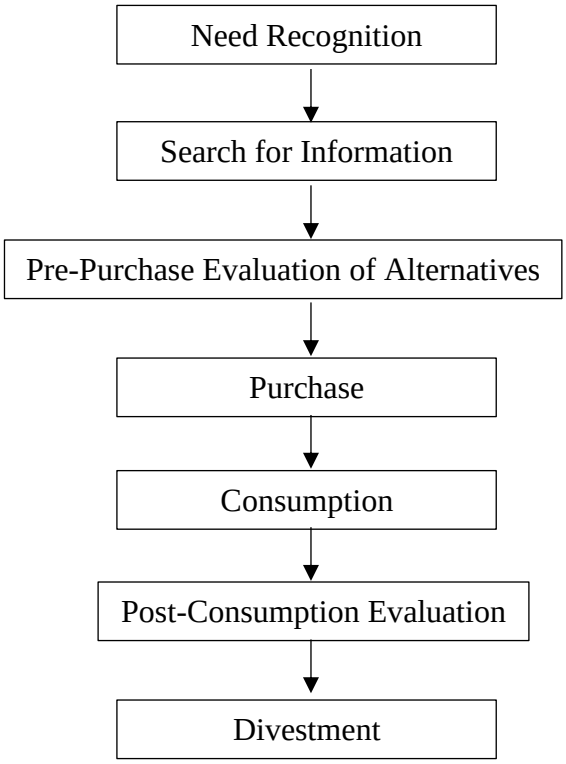


Fig 2.2 Consumer Decision Process Model (Source: Blackwell et al., 2001)

The model depicts the activities that take place when decisions are made and make reference to the various internal and external forces that interact and influence how consumers think, evaluate and act (Blackwell et al., 2001). Need recognition takes place when the consumer senses a difference between the perceived ideal situation versus what the reality is. This is followed by the search for information in order to discover a solution that will satisfy the recognised need. According to the consumers' perceived evaluative criteria, they evaluate the alternative options of products in the pre-purchase evaluation phase. The fourth stage is purchase, which refers to the decision of buying the product and then consumption occurs when the consumer uses the product (stage 5). Stage six, post-consumption evaluation, is about the consumer evaluating whether they feel satisfied or dissatisfied with their purchase choice. The final stage, divestment, refers to what the consumer does with the purchase after consumption, such as disposal, recycling or remarketing (Blackwell et al., 2001).

The main difference between the Complex Decision model (Assael, 1995) and the CDP (Blackwell et al., 2001) is that the latter has the addition of two extra stages: consumption and divestment, as post-purchase evaluation cannot be carried out if there is no purchase made. Divestment methods are important to consider in terms of environmental protection. Ultimately, the CDP model depicts a more detailed image of the decision-making process.

2.2.3 The Means-End Approach

The means-end approach takes a different stance to consumer decision-making. It is based on the assumption that consumers make decisions on which products and services to buy based on the anticipated consequences (experienced outcomes, need satisfaction, goal/value achievement) associated with the alternatives available (Reynolds & Olsen, 2001). This approach suggests that the most relevant choice criteria in a decision are the anticipated experiences and outcomes associated with the various alternate options. In other words, the consequences of purchasing a certain product are the focal concern of the consumer, not the attributes of the alternative products.

This approach further recognises that consumers take into account both positive and negative experiences (benefits sought or risks to be avoided) when making a purchasing decision. In this sense they evaluate the alternatives in terms of the negative and positive outcomes they will produce, which are personal to the individual. The approach posits that, generally, consumers are likely to make the purchase decision based on the alternative that will maximise the positive outcomes and minimize the negative outcomes (Reynolds & Olsen, 2001). The general means-end continuum is based on consumers having three levels of product-related knowledge: the product, the consequences/outcomes of the use of that product, and the broad values of the consumer that will be satisfied by the use of that product. These three levels combine to produce a simple, hierarchal chain of association:

Attributes ⟶ Consequences ⟶ Values

This is the simplest means-end chain model and is based on the assumption that consumers see the product and its attributes as a means to an end. The ideal outcome involves the satisfaction of individually relevant consequences and values. The linkages within this chain have a hierarchy due to the fact of connecting concrete meaning concepts (product attributes) to more abstract concepts (values) (Reynolds & Olsen, 2001).

Some researchers have extended this chain to incorporate more detailed consequence perspectives. A four-level model has been developed and has become the most commonly used means-end chain (Reynolds & Olsen, 2001).

Attributes → Functional consequences → Psychosocial consequences → Values/Goals

Central to the means-end approach is the importance of understanding consequence (Reynolds & Olsen, 2001). Product attributes produce immediate and tangible effects experienced by consumers during consumption, these outcomes are called "functional consequences". These outcomes can have two further consequences – psychological and social. Combined, they are psychosocial consequences. The means-end approach asserts that consumer decision-making is essentially controlled by the consumers desire to solve problems and obtain desired consequences (Reynolds & Olsen, 2001). Therefore, when making decisions between alternative products, the consumer focuses on the functional and psychosocial consequences of those alternatives, not necessarily the attributes of those products. Their attention lies in likely solutions to their problems when making purchasing decisions and attributes are not inherently important to consumers (Reynolds & Olsen, 2001).

2.3 Influences on Consumer Behaviour Model

Consumer behaviour is impacted by influences that are both internal and external to the individual. Fahy & Jobber (2019) integrated this view into one comprehensive model. Figure 2.3 below depicts this model.

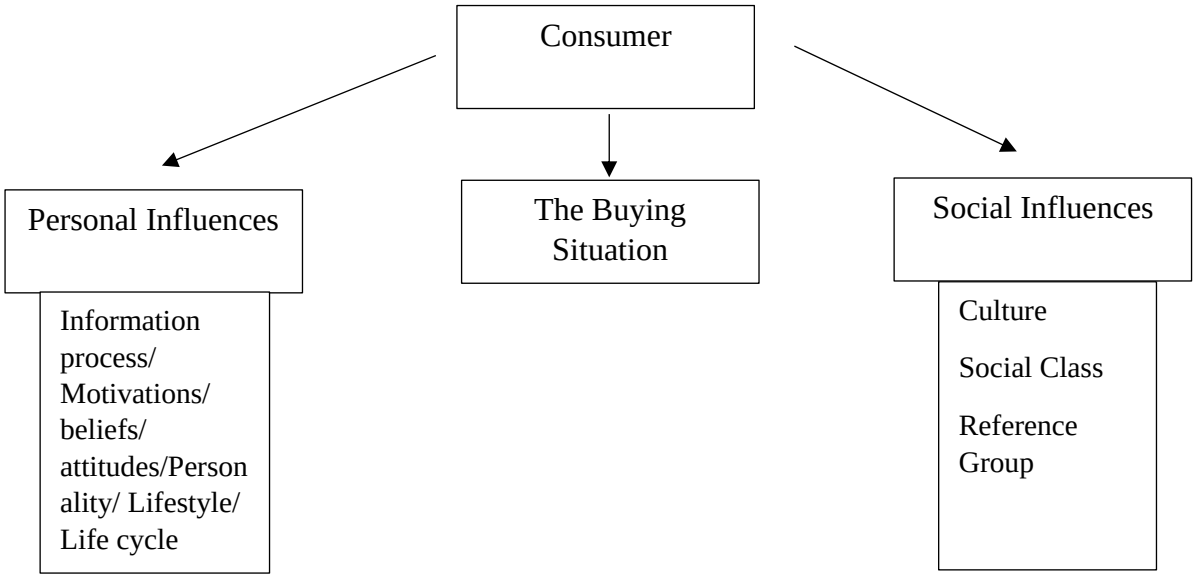


Fig 2.3 Influences on Consumer Behaviour Model (Source: Fahy & Jobber, 2019)

Fahy & Jobber (2019) combined both the internal and external factors that influence consumer behaviour together in this model. The personal influences are concerned with the

consumer as an individual – their knowledge, self-actualisation, self-concept, psychological characteristics and personality. The external factors include buying situation and the individual's social influences – their referent groups such as friends and family. The model suggests that when these three aspects become harmonized, the consumer will make the final decision to buy the product.

Fahy & Jobber (2019) asserts that environmental/social factors also have an impact on consumer behaviour and grouped them into three separate factors: culture, face-to-face groups and situational determinants. They explain that culture can be understood as a set of socially acquired values that is accepted by society as a whole and that is transmitted to members within the society through language and symbols and that these are likely to influence a member's purchasing decisions (Fahy & Jobber, 2019). The consumer's behaviour is directed through the establishment of cultural norms which set standards of behaviour in terms of social relations, eating habits, means of ensuring safety and so on. The second social factor that Fahy & Jobber (2019) identify is face-to-face groups, making reference to influential groups such as friends and family. These referent groups act as reference points for the individual on which he/she will learn information from about his beliefs, attitudes and behaviour. Certain groups tend to share common norms, values, beliefs and interests and this can directly influence the consumer's needs and behaviour. Finally, situational determinants are defined by Fahy & Jobber (2019) as conditions or settings that occur in an environment temporarily at a specific time and place and independently from the consumer or the products. An example would be buying a Christmas gift for someone. In this concept, the consumer is being influenced by two external forces: the situation and the product. The interaction between the product, situation and consumer all integrate to result in a process of choice leading to the purchasing behaviour.

Fahy & Jobber (2019) suggest key variables that can be considered as the internal process of influence. When talking about consumer understanding of financial risk, there is variation among consumers' attitude to financial risk which comes about as a result of these variables: personality, circumstances and level of financial knowledge/experience.

Personality will have some effects on the individual's perception towards risk-taking. Personality can be further divided into education, socio-economic class, ambitions and life goals and past, present and future orientation (Fahy & Jobber, 2019). These all impact the individual's stance towards rationalising risk and interpreting it. The consumer's

circumstances (i.e., level of disposable income, life stage and commitments, security of job) will also influence their idea of financial risk – for example, those with a stable job and belonging to the middle or upper class will have a higher level of disposable capital and will therefore approach financial risk differently than those consumers from a lower socio-economic class. And finally, personal past experience also contributes to the consumer's internal processes when making a purchasing decision. This past experience may change attitudes towards financial risk, whereby good and successful experiences may lead to confidence, whereas bad and unsuccessful experiences in the past may lead to cautious behaviour (Fahy & Jobber, 2019).

2.4 The Tourist Decision-making Process

The term 'Consumer Behaviour' refers to a process that involves the acquisition and organisation of information in the direction of a purchase decision and of the use and evaluation of products and services (Moutinho, 2000). The process involves stages of searching for, purchasing, using and evaluating and disposing of products and services. In the tourism context, there is a certain degree of risk involved for the tourist when facing a purchasing situation. The 'perceived risk' of the tourist can be described as a function of uncertainty and consequences. This could include: 1) uncertainty inherent in the product; 2) uncertainty in place and mode of purchase; 3) degree of financial and psycho-social consequences; and 4) the subjective uncertainty experienced by the tourist (Moutinho, 2000). Furthermore, situations demanding decision-making involve two aspects of risk: uncertainty about the outcome and uncertainty about the consequences of these outcomes. Uncertainty regarding these outcomes can be confronted and reduced by acquiring and handling information, and uncertainty regarding consequences can be addressed through attempts to reduce the amount at stake or by putting off the choice (Taylor, 1974).

Sirakaya & Woodside (2005) make several propositions regarding the touristic decision-making process, particularly in terms of destination choice. Firstly; it is described as a funnel-like procedure undertaken by consumers to narrow down the choices among alternatives. Choice of destinations are influenced by psychological/internal variables and non-psychological/external variables. Secondly; destination choice decisions are sequential in nature and comprise sets. Choice sets decrease in number over time leading to the final choice being made. Internal and external factors vary in degree of influence during this reduction stage. Thirdly; tourist decision-making processes follow the characteristics of

services: intangibility, inseparability, heterogeneity and perishability. Tourists engage in a number of personal sources when making a decision to create a set of alternatives. During this process, in order to reduce perceived risk, extensive information search is conducted regarding their initial set of alternatives. Fourthly; prior experience reduces the need for intense and extensive information search and finally, the level of involvement of the consumer guides the decision rules used to arrive at the ultimate choice (Sirakaya & Woodside, 2004).

This section describes the aspects involved in tourist decision-making. It begins by describing the Travel Decision Model by Moutinho (2000). As a response to the risks that are involved in the travel decision-making process, risk-reduction strategies such as information search is described, which is influenced by both the involvement construct and past travel experience.

2.4.1 The Travel Decision Model:

The tourist buying process has some unique stages in that the investment shows no tangible rate of return and is often planned and prepared through savings made over a considerable period of time (Moutinho, 2000). In other words, the tourist invests his or her money with no expectation of material and economic return on the purchase of an intangible satisfaction. Furthermore, because services are intangible in that they are not physical products but rather experiences and performances, values offered cannot be easily communicated by the tourism service provider, making it difficult to evaluate and assess its potential to fulfil identified needs of potential travellers (Sirakaya & Woodside, 2004).

According to Moutinho (2000), the travel decision model focuses on the motivations, needs and desires of the individual as well as the expectations he/she has when facing travel decisions. Furthermore, depending on the level of overall travel desire, he or she will be more or less attracted to travel stimuli such as advertising and promotions. The travel decision process will be influenced by social and personal determinants of travel behaviour such as personality, socioeconomic status, attitudes and values, references groups and so on (Moutinho, 2000). The travel assessment of the alternatives available includes the analysis of many factors such as cost/value relationships, attraction and amenities available at the destination, travel opportunity and the quality and quantity of available information on travel (Moutinho, 2000). Other external variables are also important determinants in the travel decision model, including the overall image of the alternative destinations and services, the previous travelling experience of the tourist, travel constraints (time, cost, etc.) and the

degree of perceived risks (Moutinho, 2000). Figure 2.4 below is a graphical representation of the Travel Decision Model.

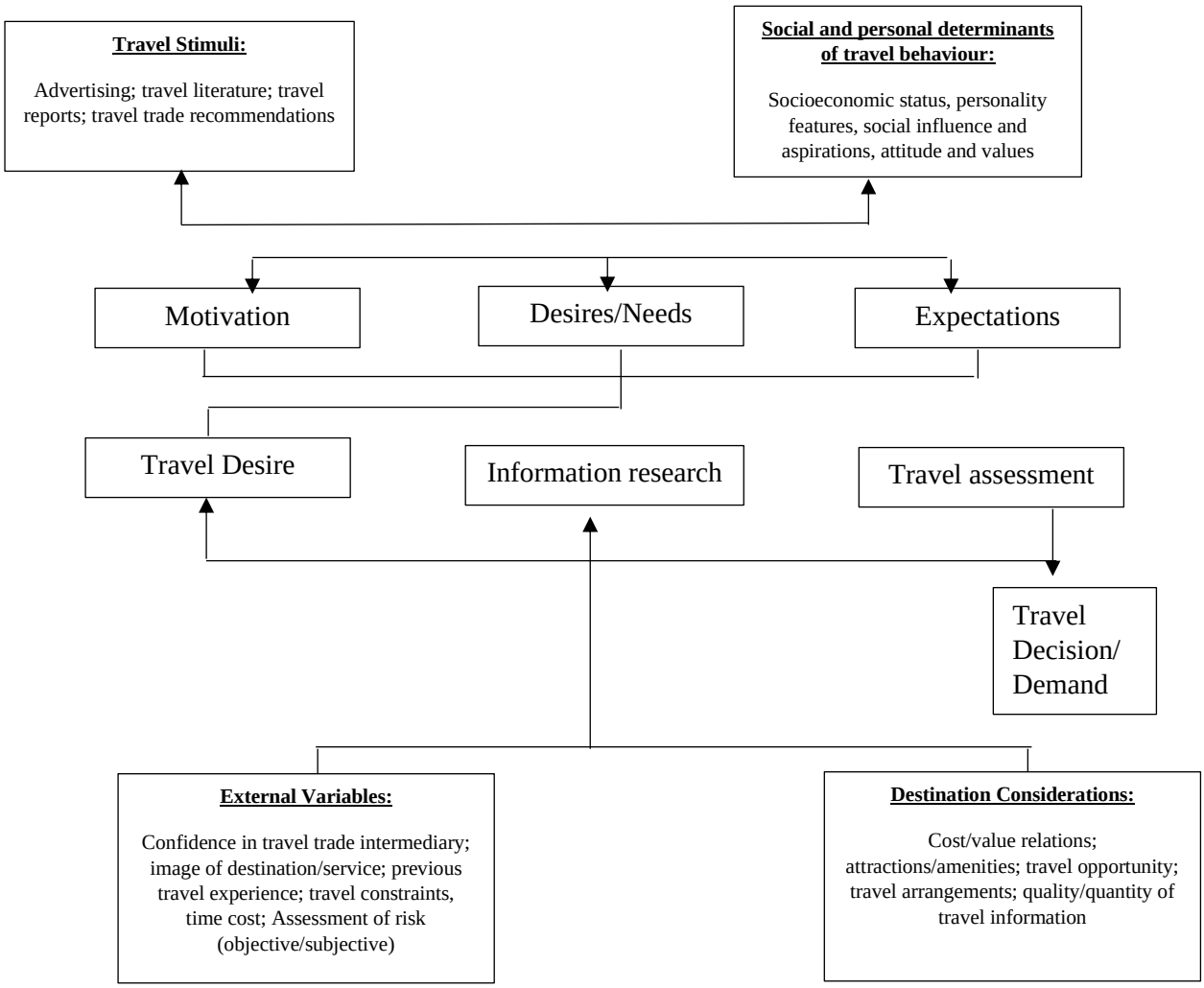


Fig 2.4 The Travel Decision Model (Source: Moutinho, 2000)

Travel consumer decision making theories all hold common that the decision-making process is approached as a functional process that is influenced by a variety of psychological and non-psychological variables (Sirakaya & Woodside, 2004). In order to gain an understanding of purchasing behaviour, one needs to examine the complex interaction of many elements present at different stages. Travel decisions are very much affected by forces outside of the individual and in order to analyse consumer behaviour, the consideration of different processes internal and external to the individual is needed (Moutinho, 2000). When a travel consumer passes through the stages of the buying process (interests, to considerations, to making the decision), risk perception is an example of one of the influencing factors that

affects the individual's considerations. Therefore, the tourists' perceived risk is integral to their decision-making process (Roehl & Feisenmaier, 1992; Sirakaya & Woodside, 2004; Sonmez & Graefe, 1998). For example, in terms of destination choice, when the risk that exists at a certain destination is more than the acceptable level to the individual travel consumer, travel plans may be adapted or alternative destinations chosen (Karl, 2018). After the final decision has been made, other strategies may be employed such as purchasing travel insurance, bringing extra cash or searching for up-to-date information about the destination (Lo, Cheung & Law, 2011).

Moutinho (2000) notes that integral to understanding tourist travel behaviour are the major types of perceived risks, namely: functional risks, physical risks, financial risks, social risks and psychological risks. In order to assist tourists, the various types of risk they perceive need to be considered by operators in the tourism industry. Sources of perceived risks in buying situations could include uncertain buying goals, uncertain purchase rewards, lack of purchasing experience, the prediction of negative or positive outcomes and financial considerations (Moutinho, 2000). Moutinho (2000) suggests that the tourist considers several risk-reduction strategies, such as: expecting less from the product/service; regularly purchasing the same product; acquiring touristic information; purchasing the most expensive product; relying on travel reports; and relying on tourist guarantees.

2.4.2 Risk Reduction: Information Search, Involvement & Past Travel Experience

Risk perception originates in the uncertainty of the balance between self-image and product-image. Risk reduction methods are undertaken until it reaches a level which is tolerable to the individual and consistent with the purchase goals (Cui et al., 2016; Moutinho, 2000). Taylor (1974) explains that in situations of choice, there is an involvement of uncertainty which leads to some level of anxiety. Since this feeling is uncomfortable, consumers attempt to develop strategies to reduce the risk associated with the choice and thereby reduce inherent anxiety. The characteristic of each risk type perceived determines the types of risk-reducing strategies that the consumer employs. Travel-related decisions are risky in their inherent nature of tourism services and therefore require comprehensive risk reduction strategies such as extensive information search strategies (Sirakaya & Woodside, 2004).

Tourism is often defined as an interrelated system of service providers, instead of an industry. The credence of the quality of services and goods play the biggest role in travel decision making as there is no ability of the tourist to define or evaluate the output of travel

services/products before the consumption of them (Maser & Weiermair, 1998). After the decision to take a holiday is made, an individual is faced with a plethora of decisions that need to be made, such as: choice of destination and resort, timing, type of travel, mode of transportation, length of stay, travel organisations, accommodation, financing, insurance and tourism activities. This process involves simultaneous and interrelated decisions about a multitude of individual products and leisure services that have values and uncertainties surrounding their consumption – thus resulting in information sought, which can be considered as an input in the process of travel decision-making (Maser & Weiermair, 1998). It is an attempt of the tourist to enhance the quality of their trip by decreasing the levels of uncertainty that exist through information search (Fodness & Murray, 1997).

Information is possibly, if not definitely, the most important factor that influences and defines consumer behaviour (Maser & Weiermair, 1998). This is because "consumer awareness, selection, and choice of tourism and hospitality products depends on the information available to and used by the tourist" (Fodness & Murray, 1997:503). Due to travellers not receiving a tangible return on investment when purchasing a tourism service, this results in a perception of risk which leads to tourists becoming highly involved in information search to reduce the uncertainty involved in the purchase (Sirakaya & Woodside, 2004). Additionally, Kozak et al. (2007) suggests that risk perception results in increased information search to minimise the risks associated with travel, which is a huge influencing factor on the intention to travel. Information search for tourists has been conceptualised as the result of a dynamic process in which individuals use various amounts and types of information sources as a response to internal and external processes in order to facilitate travel planning (Fodness & Murray, 1997).

Characteristic of destination choice is that travel consumers are not able to anticipate or predict the situation at the destination before travelling there and therefore rely on different information sources such as media, friends and family or travel organisations (Karl, 2018). Maser & Weiermair (1998) categorised travel-related risks into different groups including natural disasters, hygiene and diseases, and crime and accidents. The results of their study with 228 Austrians showed that the higher the perceived risk of travellers, the more the tourist engaged in information search and the more rational the decision-making process becomes.

Another important and used variable to explain and predict information search and decision-making is the involvement construct, which is defined as an unobservable state of motivation, arousal or interest that has been created by a particular situation – resulting in types of searches, information processing and decision-making whereby high involvement implies a high intensity in search processes (Maser & Weiermair, 1998). Tourists are high involvement consumers due to the fact that tourism experiences are expensive and risky, and due to the average consumers' lack of knowledge in making good decisions relating to the tourism industry; they perceive various types of risks that result in them searching for information as a way to reduce risk and improve decision-making (Maser & Weiermair, 1998). A study conducted by Fodness & Murray (1997) provided empirical evidence that information search can be a strong tool in the analysis of leisure tourist behaviour. The amount of time devoted to search and the number of information sources utilised appear to be allocated to accommodate changing trip circumstances and to meet problem solving demands.

Past travel experience has been found to influence risk perceptions in previous studies (Fuchs & Reichel, 2011; Rittichainuwat & Chakraborty, 2009; Sonmez & Graefe, 1998; Lo, Cheung & Law, 2011). Not all tourists apply the same risk-reduction strategies, such that more experienced travellers search for information in different ways and from different sources than less experienced travellers. Furthermore, an increase in travel experience tends to show a lowered level of risk perception, leading to the engagement of other destinations that have higher risks which in turn increases travel experience even further (Karl, 2018).

2.5 Summary and Conclusions

In this section we examined different consumer behaviour theories in the purchasing decision. This is relevant to this research paper as it indicates the many processes that are involved when deciding to purchase. This is an integral part to the tourism process as well, and tourists go through similar processes that are influenced by both internal and external forces when engaging in the tourism decision-making process.

Assael (1995) suggests that there are five phases in decision-making processes of consumers: problem recognition, search for information, evaluation of alternatives, choice, outcome of choice. Blackwell et al. (2001) on the other hand suggests that this process should be extended and added two more phases: consumption and divestment, calling this model the Consumer Decision Process Model.

The means-end approach (Reynolds & Olsen, 2001) approaches consumer decision-making from a different direction and claim that the most important choice criteria in a decision is the consequences or anticipated experiences of the purchase decision between alternatives. Consumers are likely to select the option that will minimise the negative outcomes and maximise the positive ones (Reynolds & Olsen, 2001). From this approach, consumers are looking to solve a problem by analysing the outcomes instead of focusing on only product attributes. This approach is particularly interesting in this research topic when examining the perceived risks that tourists feel when travelling internationally in the current pandemic situation as these perceived risks may play a role in consumers analysing the consequences of travelling more negatively.

The consumer behaviour model (Fahy & Jobber, 2019) integrates the concept of environmental influences and the concept of the key variables of influence on consumer's internal processes. This is relevant to this paper as the tourism literature suggests that travel consumers undergo a process much the same and that risks perceived by tourists are inherent to their environmental situations and intrinsic natures (Hasan et al., 2017).

Finally, this section described the tourist decision-making process. The Travel Decision Model (Moutinho, 2000) was presented and described. It is clear that there are many internal and external factors influencing travel decisions and the tourist considers the analysis of the cost/benefit equilibrium relationship against the price paid. In order to address risks in the decision-making process of the tourist, information search (which is influenced by the involvement construct and past travel experience) is a way of mitigating the perception of risk.

The tourist has an expectation about the product and this is an important variable in the decisions they make. Therefore, it is highly valuable to the tourism industry to begin enquiries into the factors that make up touristic decision-making process (including perceived risks of travelling internationally during the current pandemic situation) in order to provide a service that is truly valuable to the travel consumer.

In conclusion, all the theories discussed in this section create a foundation for the understanding of the consumer process when making purchasing decisions and the factors influencing it. This foundation is beneficial to creating a holistic view of tourist perceived risks.

CHAPTER THREE: RISK AND RISK MANAGEMENT

3.1 Introduction

Risk perception in terms of a theoretical concept in cognitive psychology has been extensively used in consumer behaviour and tourism studies, particularly those related to risk management, to understand the psychological and behavioural responses of individuals (Zhan et al., 2020). Prior studies on destination choice and risk management have consistently identified risk factors that include infectious disease, terrorist attacks and natural disasters (Law, 2006). Risk management can be understood as a prepared and devised plan that is made in order to identify the possible weak points in a system. This information is useful in terms of developing strategies to address these risks and minimise their impact and to identify opportunities that can be utilised and maximised.

This section defines the concepts of risk and risk management. It will also describe different strategies for managing risk in the project management field. It will then explore two different kinds of risk management models described in project management – Burke (2000)'s model and the Gray & Larson (2018) model. Risk management theoretical foundations and literature exist for various disciplines and industries, with some of the most comprehensive models covering the entire scope of risk management being referenced within the project management field (Shaw, 2010), therefore, the models described here are originating from the project management field.

This section is important for this paper in order to allow the reader a foundational understanding of risk management and the processes involved therein. The scope of this study is to identify the risks perceived by South African travel consumers and in order to justify why this would be necessary, risk management concepts provide a good theoretical basis. In order to manage risk perceptions, they need to be identified – and this is described through the processes of risk management.

3.2 Defining Risk and Risk Management

To offer a more in-depth understanding of the concepts of risk and risk management, the definitions will be described and expanded. It is necessary to establish the relationship between risk elements that are relevant to tourists' decision-making processes when deciding to travel. Once these risks have been identified, tourism organisations need to engage in risk management processes in order to address these perceived risks.

3.21. Risk

Rising risk and the increasing volatility is a common theme in the modern world. Every industry is subjected to elements of risk, including the tourism industry. This creates a necessity for the examination and investigation of what is meant by risk in terms of being a destabilising factor within the tourism industry (Shaw, 2010). Uncertainty causes risk, and risk is defined as a situation involving the exposure to danger (Oxford dictionary, 2021) or the possibility of loss or injury (Merriam-Webster, 2021). It is measured in terms of the probability of such a loss occurring and the cost of such results if the anticipated risk occurs. Kuratko & Welsch (2001; as cited in Shaw, 2010) define risk as "the degree of uncertainty and the potential loss that can be associated with the outcomes from a given behaviour or the set thereof".

Tourists and potential tourists face a variety of risks that could be in the form of physical danger, natural disasters, financial, political, health and others. Fletcher et al. (2018) note that individual perceptions of physical, economic, performance, psychological and health risks will differ among the population due to factors such as age, income and experience differences. Edwards & Bowen (2005; as cited in Shaw, 2010) state that risk is pervasive, a universal experience and something that cannot be escaped. Some individuals are more prone to accept risk (to the extent of actually seeking it out) whereas others are more averse to it and are constantly worried about it. The success of all businesses, including those in tourism, depends on the choices made in the decision-making process. These choices may be well-informed decisions, however there is always the risk of making the wrong choice. A risky choice is a decision that has a threat of a poor outcome (Kuratko & Welsch, 2001; as cited in Shaw, 2010).

Risk in the tourism industry can thus be defined as the possible occurrence of a known or unknown event that may result in negative consequences. Prior studies have suggested that tourist perceived risk impacts on intention to travel and revisit intention (Roehl & Fesenmair, 1992; Fuchs & Reichel, 2006; Quintal et al., 2010; Sanchez-Canizares et al., 2020; Floyd et al., 2004; Cetinsoz & Ege, 2013; Chew & Jahari, 2014; Liu et al., 2013) and travel customer satisfaction (An et al., 2010; Casidy & Wymer, 2016; Jin et al., 2015). Therefore, it is important for tourism businesses and organisations to become aware of these risks as it may influence their intentions to visit and revisit and their satisfaction of the travel experience. However, not every risk demands action to be taken. Depending on the frequency of

occurrence and impact of occurrence, the decision-maker (tourism suppliers) must have the relevant information in order to decide whether to take action to mitigate the risk or decide to take no action, thereby accepting the risk. Risks that have a medium to high magnitude will require action in order to decrease the adverse impacts, whereas risks that have impacts that are negligible may be accepted.

It is therefore significant to investigate whether the outcome of the risk has a significant impact or not, as well as whether it will result in positive of negative effects. Having this knowledge leads to the ability to make a decision as how to best manage the risk. Here, the concept of risk management becomes relevant.

3.2.2 Risk Management

Risk management is described by Shaw (2010) as a process that involves continuous risk identification, analysis and the development of responses to risk factors. Risk management includes a process in which challenges to expected outcomes is prepared for in advance and hence can be managed with confidence. In the context of the current paper, it regards the identification and management of tourist perceived risks.

Kerzner (2001) defines risk management as the art and practice of dealing with risk. This includes identifying, assessing and analysing risk issues and includes planning for the occurrence of risks as well as developing a system to manage risk. This should be designed in a way that allows risks to be monitored to determine how they change. Effective risk management, techniques and methods can help to improve business performance and thus mitigate the potential danger of any possible risks or perceived risks. Risk management can be a tedious process; however, it gives the ability to manage events that could change experiences (Shaw, 2010). Risk management is a way of avoiding danger and at the same time it offers an opportunity to better the outcomes of events, therefore making it worthy of attention. This includes addressing and mitigating any perceived risks that tourists may face.

When concerned with risk and crisis management, Mansfeld & Pizam (2006) determine that past experiences have shown that destinations that think ahead and are concerned with security incidents, have been able to confront situations in one of two ways: 1) pro-actively, before the incident takes place in the form of contingency plans; and 2) as the incident occurs, confronting some sort of tourism incident by putting crisis management plans into action. Therefore, a well-prepared destination becomes more effective in its response to crisis situations. Risk-free travel is the desire of every tourist and it is in the destinations best

interests to ensure a safe and incident-free experience for every traveller (Mansfeld & Pizam, 2006). In the current COVID-19 times, tourists face a multitude of perceived risks (Matiza, 2020) and it would serve tourism suppliers well to have a plan of action to address these perceptions, as perceptions of risk can often be more influencing than risks that exist in reality (Sonmez & Graefe, 1998).

The management of risks cannot be understood as a process that is linear, rather it involves "the balancing of a number of interwoven elements which interact with each other and which have to be in balance with each other if risk management is to be effective" (HM Treasury, 2004; p.13). The risks cannot be evaluated in isolation, as the management of one risk may have the impact on another and it would be ideal to have management actions that deals with more than one risk simultaneously (Shaw, 2010).

Risk management can therefore be understood as a process of identifying potential risk events and then quantifying them in terms of likelihood of occurrence and the impact of the risk on the decision-maker. This information can then be used to decide in the strategy that will be utilized to address the specific risk to either eliminate it or minimise the adverse effects of it (HM Treasury, 2004). Risk management also allows the opportunity to identify risks elsewhere that could be exploited to the benefit of the tourism industry. The process therefore not only involves risk identification, but also risk assessment, risk response development and risk strategy.

3.3 Risk Management Strategies

"Strategy" is defined in order to create an understanding of the concept. Then, a discussion of the various risk management strategies ensues that would enable tourism operators to make the best decision when facing uncertainty or risk. As tourist perceived risk acts as a risk in itself for tourism organisations and they will need to engage in certain strategies of dealing with these risks. These are better described in the section to follow.

3.3.1 Defining Strategy

Strategy is understood as a mindset and thinking concept (Goldman & Nieuwenhuizen, 2006; as cited in Shaw, 2010). Integral to the understanding of how people think and accept a specific mindset is the acknowledgement of various mind patterns. To think strategically, an awareness of changing patterns and the ability to response to the environment and to see the opportunities as they appear and become available is important.

Lynch (2006) notes three main strategy areas: 1) organisations internal resources; 2) the external environment within which the organisation operates; 3) the organisation's ability to provide value to its offerings. Strategy is therefore the linkage between the organisations management and its external relationship with suppliers, consumers and competitors whilst taking into account the economic and social environment in which it operates. In the current times, the COVID-19 pandemic and its effects are very much a part of the environment in which tourism businesses find themselves. Most decisions made by management involve "operational decisions"; which are considered as short term, whereas strategic decisions have long term consequences that affect many people (Smith, 2006; as cited in Shaw, 2010). Chatterjee (2005) suggests that risks originate from not having the capabilities to respond to demands or threats. He suggests that to reduce risk, clarity is necessary in terms of where the risks are and how to best tackle them.

3.3.2 Strategies to Manage Risks

Different authors define different strategies to manage risks in different ways, however, they all have similar objectives in terms of the choices available. The common classification for these is: Accepting risk, mitigating risk, avoiding risk, transferring risk and sharing risk (Shaw, 2010).

Accepting risk

Some situations would warrant the strategy of accepting the risk and this is normally adopted when the potential for loss is minimal or if the probability of occurrence is low. Should it occur, it is addressed with contingency plans to confront the adverse impact (Gray & Larson, 2018; HM Treasury, 2004). Nieman et al (2003; as cited in Shaw, 2010) suggest that some risks be retained because either they cannot be identified or because how to handle them is unknown – the following should be present when this is the form of strategy: no practical means of avoidance; unknown risk; no serious consequences; consequences of avoiding the risks aren't acceptable or is the risk is actively desired.

Mitigating risk

Risks can be treated by reducing the likelihood that the risk will occur or by reducing the adverse impacts that the risk will have (Gray & Larson, 2018). The cost of mitigation should be appropriate and relative to the probability of the risk occurring and to the adverse

consequences it may create (Gray & Larson, 2018). Mitigation may result in a new action plan completely.

Avoiding risk

Risk is integral to any decision, and the principle of risk and return is well-known. However, if upon analysis the chances of loss are high, then avoiding the risk may be the best strategy. Gray & Larson (2018) note that risk can be avoided by changing plans in order to eliminate the situation creating potential risk. Risks that are treatable to the point of the acceptable limit should be terminated (HM Treasury, 2004).

Transferring risk

This involves the conventional method of insurance, or paying a third party to take the risk (Gray & Larson, 2018). Not all risks are transferrable, for example, reputation risks.

Sharing the risk

In this strategy, portions of the risk are allocated to different parties, differing from risk transfer in that some risks are retained (Shaw, 2010).

These strategies are relevant as they describe the different strategies that tourism organisations can adopt in order to handle and deal with tourist perceived risks. Once these perceived risks are identified, tourism suppliers will need to decide how to confront and manage them, and these risk strategies offer various ways in which they could do this.

3.4 Risk Management Models

Successful decisions combine well-constructed processes that utilise situation analysis and sufficient planning. Success is dependent on a systematic, organised approach to identify the problems and of developing and choosing the most appropriate alternative to solve the problem. Pros and cons of the alternative options are assessed and compared. The solutions should incorporate feasibility, cost, quality, access, acceptability and safety (Nieman & Bennett, 2002; as cited in Shaw, 2010). This is known as the rational decision-making model, an all-inclusive process. When all the elements affecting tourism are regarded (such as perceived risks and expectations), along with the effects that risks can have on the industry and economy as a whole, the significance of the risks need to be considered.

It is important that risks associated with tourism be identified so that appropriate management of these risks can be undertaken (Shaw, 2010). Issues have assumed new dimensions and old

remedies may no longer be appropriate, especially since the outbreak of COVID-19. Systems have evolved and a new set of risks have presented themselves. Priorities are changing and efforts need to be made to develop the capability to reduce risks, capture opportunities and navigate complicated systematic changes.

Models are often referred to as processes and processes are defined by Lynch (2006) as the way in which actions interact with one another as the strategy unfolds in the environment. This is graphically depicted in a model. Risk management models are representations of the processes that can be undertaken to manage risks. Most models originate from the field of project management. They are not developed for use in any specific business sector and appear to be adaptable and can be changed to suite different contexts.

3.4.1 Burke's model

Burke's model depicts the logical sequence of the process of risk management, commenting on the interaction of the processes and how each part integrates with the whole (Burke, 2000). Burke (2000; p.242) defines risk as "any event that prevents or limits the achievement of your objectives as defined at the outset of the project, and these objectives may be revised and changed as the project progresses through the project life-cycle". It sub-divides the risk management process into different headings: Define Objectives, Identify Risk, Quantify Risk, Develop Response, Documentation and Risk Control. Figure 3.1 below graphically depicts Burke (2000)'s model of risk assessment.

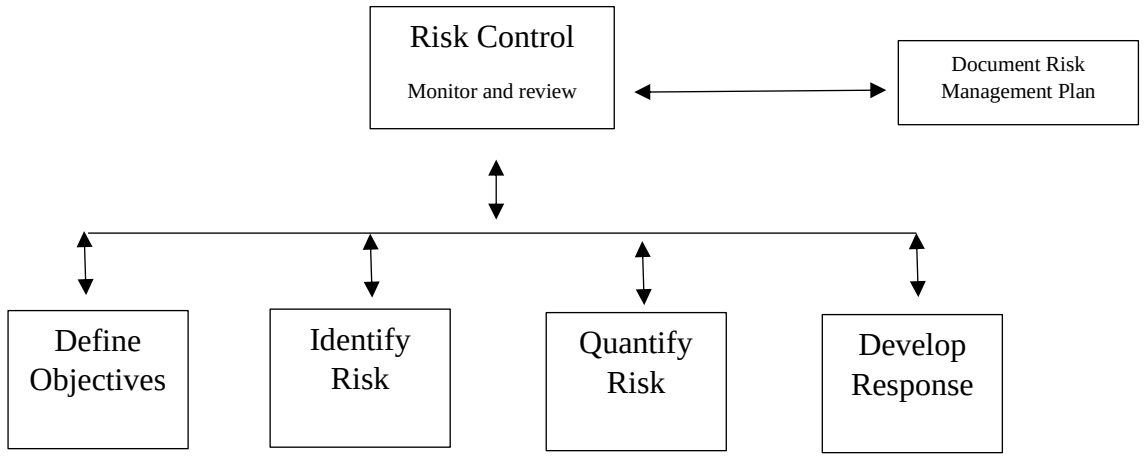


Fig 3.1 Burke's Risk Management Model (Source: Burke, 2000)

"Define objectives" refers to the act of defining the context of work and planning for success. This process defines what is needed to be achieved to attain success and establishes a basis

for dealing with risk and decisions in the future. “Identify risk” means to identify areas of risk or uncertainty which may act to limit or prevent the achieving of objectives. “Quantify risk” is the process of evaluating and prioritising the level of risk and uncertainty and quantifying the frequency of occurrence and impact. “Develop response” is defining how different identified risks are going to be responded to – that is, what strategy will be used – eliminate, mitigate, deflect or accept. “Document” makes reference to the risk management plan that documents how the risk will be tackled, and finally, “Risk control” implements the risk management plan. This could possibly require training and communication. Due to risk continually changing, it is important to monitor and review the levels of risk and the effectiveness of the response (Burke, 2000).

3.4.2 The Gray & Larson Model

Similar to Burke (2000)’s model, Gray & Larson (2018) define the steps differently. Gray & Larson (2018) describe the risk management process as an attempt to pre-empt, recognise and manage potential and unforeseen troubles that may occur. It is a process that identifies as many risk events as possible, minimises the impact, manages responses to those events if they occur and provides contingency plans should the risks become a reality. It is a proactive approach instead of reactive and is a preventative process that is designed to reduce surprises and minimise negative consequences associated with undesirable events (Gray & Larson, 2018; p.209). Figure 3.2 below is a graphical representation of the Gray & Larson (2018) Risk management model.

An element missing from this model that is available in the Burke (2000) model is the step of defining objectives. What is to be achieved by risk management is an important area of concern. Another difference is that Burke (2000)’s model begins with risk control whereas the Gray & Larson (2018) model includes this as port of the risk response implementation, the last step. The Gray & Larson (2018) model describes the actions that occur at each step of the process.

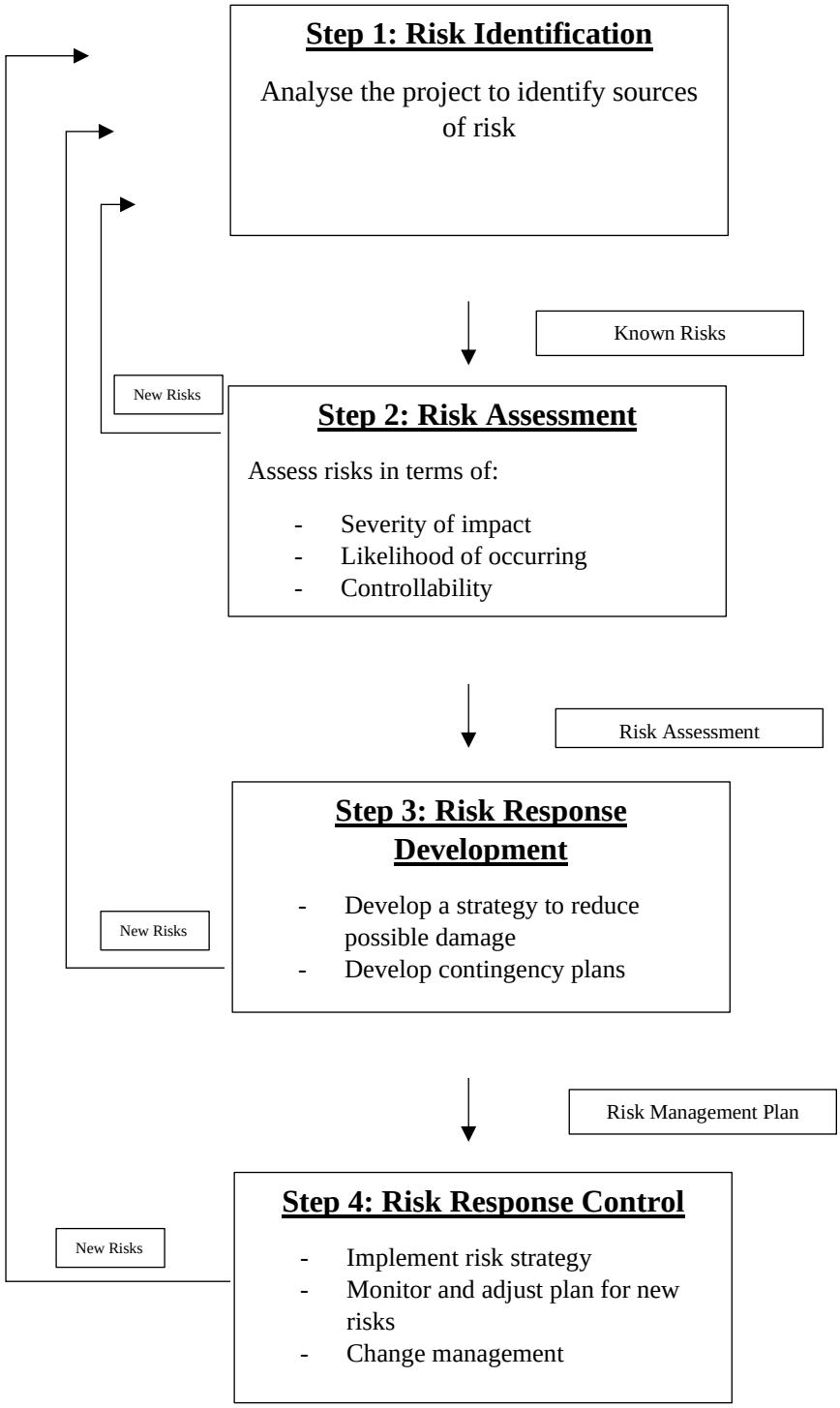


Fig 3.2 The Gray & Larson Risk Management Model (Source: Gray & Larson, 2018)

Step one is Risk identification and this is an important part of the process. It includes identifying areas of risk or uncertainty that may threaten your ability to achieve certain objectives. Risk cannot be managed if it is not identified as such (Gray & Larson, 2018). This step is carried out by generating a list of all the known possible risks. The process usually

involves a risk management team with members and stakeholders as research has shown that groups make more accurate judgements about risks than individuals do (Gray & Larson, 2018). This team will engage in brainstorming, or other problem identifying techniques (for example, the Delphi method) to identify potential problems, with an open mind. As many risks as can be thought of should be added to this list as the team has an opportunity to analyse and filter out any unreasonable risks later on in the process (Gray & Larson, 2018).

The second step in the Gray & Larson (2018) model is that of risk assessment. The first step has resulted in a list of potential risks, some of which do not deserve attention. This step includes sifting through the list and eliminating inconsequential or redundant ones and stratifying worthy ones in terms of importance and need for attention (Gray & Larson, 2018). Scenario analysis is the most common technique used for analysing risks. The significance of each risk is assessed in terms of 1) probability of the event, and 2) impact of the event. Through this, the risks are evaluated in terms of the likelihood of the event occurring and the impact or consequences of its occurrence (Gray & Larson, 2018). This may involve quantitative or qualitative methods or mixed design analysis. Qualitative risk analysis assesses the impact and probability that the identified risk may occur through ranking the potential risk according to potential impact (PMBOK, 2000) - quantitatively, the probability is calculated from past occurrences or by the use of simulation techniques. Techniques include sensitivity analysis, decision trees and simulations.

The third step of the model is Risk Response Development. This includes the development of techniques, procedures, actions and plans to enhance opportunities and minimise threats (Gray & Larson, 2018). The identified risks should be thoroughly addressed to ensure the adverse impacts are minimised or completely eliminated (PMBOK, 2000). The final step of the model includes Risk Response Control. In this phase, the risk responses are put into action, monitored and evaluated to note if they were successful or not. New risks are continually being identified and managed by the process involved. This may result in the development of new strategies, the creation and implementation of contingency plans and taking different and new kinds of preventative action (PMBOK, 2000).

This risk management plan is constructed from the beginning and is often updated as new information becomes available and as the processes are implemented. It is the documentation of identified risks, their assessments, the developed responses and is a record of implementation (PMBOK, 2000; Burke, 2000; Gray & Larson, 2018).

The exploration of these prior risk management models was important for this paper as it creates a foundation of understanding in terms of managing risks. The scope of this study involves the first and second steps in the risk management model by Gray & Larson (2018). In order to develop a typology of perceived risks that South African travellers have, the risks they perceive are identified (step one) and then assessed (step two) with the use of the Delphi technique (qualitative risk analysis) and MCDA applications. The importance of empirical based studies to identify and assess relevant information in environments that are uncertain in order to discover appropriate strategies is very appropriate in the current pandemic times. Previous studies have asserted the potential value of using the Delphi technique to analyse risks in a future setting (Markmann et al., 2013). Risk analysis is subjective in nature and varies according to the risk perception of the assessor; making it difficult to determine the "right" perception of risk or to accurately weight different risks. Therefore, multiple perspectives should be surveyed and integrated, as done in the Delphi technique. Weighting of the different risk perceptions can be soundly achieved through MCDA applications.

3.5 Summary and Conclusions

This section began by defining the concepts of risk and risk management. Tourism businesses, just like any other business in different industries, is susceptible to risks which may impact their prosperity in the industry. Perceived risks of travel consumers present as a risk to tourism businesses, justifying the need to identify and assess the risks they may perceive.

In the process of addressing these perceived risks, tourism businesses need to adopt a strategy of managing the risks. Strategy is defined and different strategies of confronting risk are described. These include accepting risk, mitigating risk, transferring risk, sharing risk and avoiding risk.

Finally, this section explores two models of risk management in the project management field: Burke's risk management model and Gray & Larson's risk management model. These models describe the different steps involved in risk management and is relevant as this paper is a part of the first two steps of risk management: identification and assessment. This section aimed to create a holistic view of the risk management process that tourism businesses must engage in, in order to confront perceived risks of travel consumers.

CHAPTER FOUR: COVID-19 AND CRISIS MANAGEMENT

4.1 Introduction

Tourism studies have previously shown that crises such as epidemics, terrorism and natural disasters can exert an exaggerated impact on the tourism industry due to the social fear they elicit, instead of the crisis itself (Chew & Jahari, 2014). Risk theory notes that crises tend to elevate public awareness of risks associated with destinations (Santana, 2004). Perceived risks tend to create negative images for tourists and ultimately impact their overall psychology and behaviour (Kozak et al., 2007). Therefore, gaining an understanding of how tourists perceive COVID-19 risks allow valuable insight into methods on how to ease these fears when the pandemic passes.

This section begins by exploring crises and disasters in the tourism context. It emphasizes the importance of disaster and crisis management in tourism and its impacts on tourist behavioural intentions and perceptions of risk and safety. It describes the tourism crisis and disaster management framework put forth by Ritchie (2004). This will provide a basis of justification for why such a study is relevant in the current times as it begins the discussion of addressing the current risk perceptions of tourists due to the pandemic.

This section will then comment on previous epidemics as sources of tourism crises, providing statistics and information on previous SARS and Ebola outbreaks that show how demand is impacted by health-related outbreaks. This provides past evidence that a global pandemic such as COVID-19 will have long-lasting effects on the tourism industry to come and notes the importance of the research presented in this paper.

COVID-19 is then described in terms of a global health pandemic and its impacts on the tourism sector, hindering the operations of tourism industries, organisations and destinations. It presents a theoretical conceptual model for future research agendas which confirms that the topic in this study is relevant and justified.

Finally, this section describes the Inclusive Holiday system and dissects it in terms of the impact of COVID-19 on the differing sub-systems and how these all interconnect with one another.

4.2 Crisis and Disaster

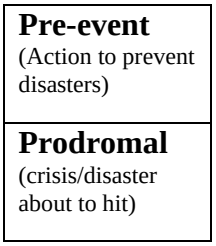
Tourism is an industry that plays a key role in the shaping of and potential reducing of disaster risks. Tourism risk can be induced by either man-made or natural disasters (Sonmez & Graefe, 1998), but its consequences differ according to disaster type and the characteristics of the destination (Rittichainuwat & Chakraborty, 2009). Tourism-related risk perception is understood as a multi-dimensional construct that extends further than temporal effects and threat stimuli (Korstanje, 2009). Man-made tourism risks often increase the strength of natural disasters, resulting in a bigger impact on the tourism industry and destination (Ritchie, 2004). As it can be assumed that rational travellers do not engage in travel for the sake of taking risks, the tourism industry is particularly vulnerable to direct or indirect events – known as crises – that may pose a threat to the safety of visitors (Maser & Weiermair, 1998; Sonmez & Graefe, 1998; Law, 2006).

Risk identification and disaster preparedness, parts of the disaster management process, have a significant connection with sustainable tourism development (Ritchie, 2004). In tourism research, travel risk perception from the perspective of the individual is a subjective assessment of the likelihood of negative consequences of an event or choice made during travel planning processes (Karl, 2018); and many studies have shown this to be a stronger determinant of destination selection in travel decision-making than those risks that exist in reality. The collective perception of travel experience is affected by the presence of and changing in perceived tourist risk, and so is the behavioural intentions related to tourist's post-disaster travel decision-making (Williams & Balaz, 2013).

Managing the negative impacts of crises and disasters can be achieved through crisis management (Ritchie, 2004). Santana (2004; p. 308) defines crisis management as "an ongoing integrated and comprehensive effort that organisations effectively put into place in an attempt to first and foremost understand and prevent crisis, and to effectively manage those that occur, taking into account in each and every step of their planning and training activities, the interests of their stakeholders". Ritchie (2004) notes that crisis management must address the immediate challenge by ensuring the safety and security of tourists and the local community and rebuilding the tourism sector. In order to do this, destinations need to engage in immediate and long-term planning, recognising how tourists typically react to crisis situations (Ritchie, 2004).

During the unfolding of a crisis, the situation perspective changes based on the context and will be influenced by culture, organisation and politics (Novelli et al., 2018). Strategies to handling crises vary according to time pressures, degree of control and scale of event (Ritchie, 2004). The decisions made during the recovery from a crisis is important in terms of the overall long-term recovery of the destination and involves the engagement of the media and government, focusing on domestic tourism and the development of niche tourism products as well as cost-cutting measures in the sector (Novelli et al., 2018).

General crisis and disaster management theories, models and frameworks have been developed in order to create understanding of crises and disasters (Novelli et al., 2018). Within the tourism sector, a number of models and conceptual frameworks have been developed with the overall purpose of assisting destinations and tourism businesses in managing crises at different stages. Ritchie (2004) created one such framework in which he combines the lifecycle of crises and disasters with strategic management frameworks. The three main stages it identifies is: 1) pre-crisis planning; 2) crisis response and recovery; and 3) resolution and future learning. Figure 4.1 below is a graphic representation of Ritchie (2004)'s tourism crisis and disaster management framework (CDMF).



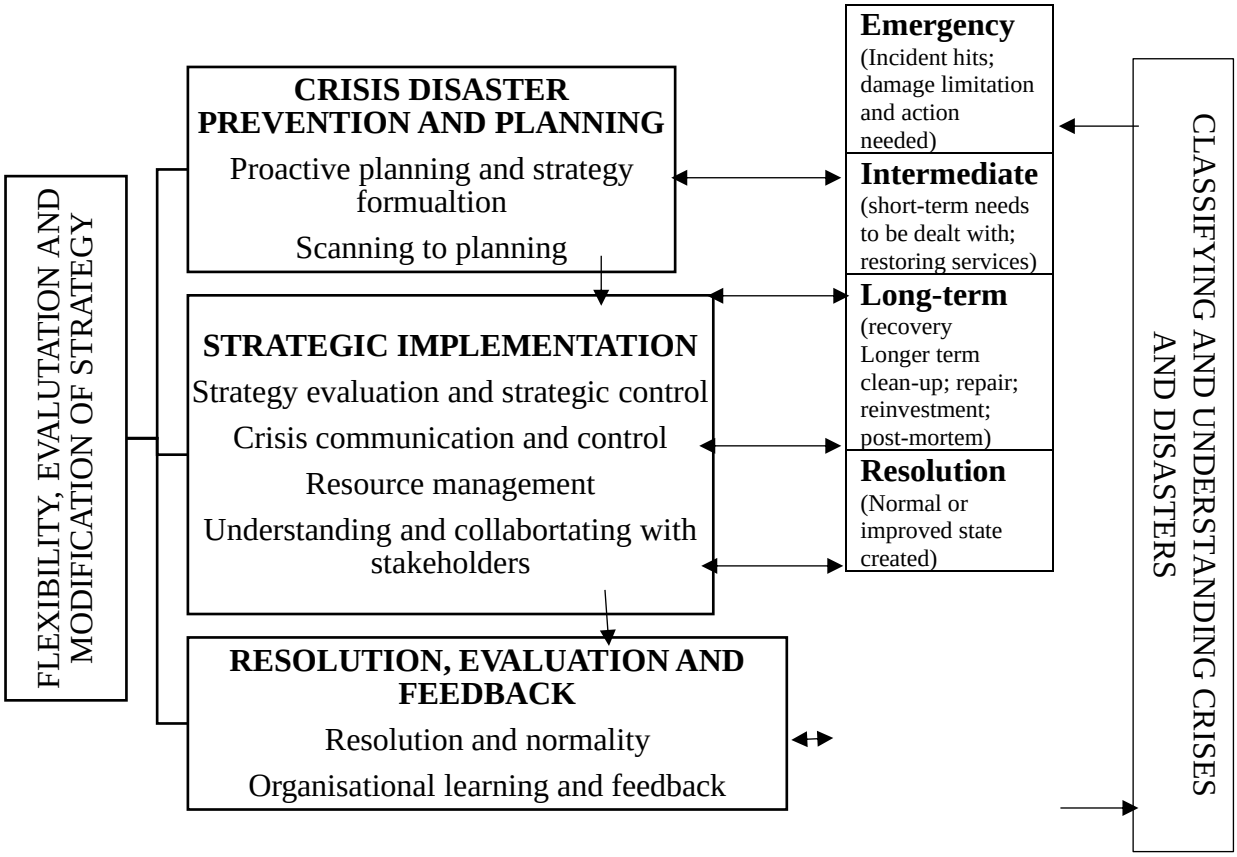


Fig 4.1 Tourism crisis and disaster management framework (Source: Ritchie, 2004; p.674)

The pre-event and prodromal stage of a crisis involves the activities of public and private sectors to develop strategies and plans to stop or limit the impacts of a crisis or disaster (Ritchie, 2004). Preventing a crisis from occurring is difficult, but the recognition and timely response of coping strategies can limit their damage. Decisions undertaken before a crisis usually enables more effective management of the crisis instead of organisations being managed by the crisis through ineffective and hasty decisions (Ritchie, 2004). Proactive, strategic planning will contribute towards reducing risk, wasting time and poor resource management. A number of techniques have been identified to assist in proactive planning and problem recognition through the use of environmental scanning and data collection on the political, economic, social and technological environment which acts as sources of information on possible impacts and trends. Other techniques include strategic forecasting (making predictions based on potential crisis situations which could include opinion-based quantification, simulation and cause and effect methods); contingency planning (alternative plans which could be implemented quickly should a crisis occur); issue analysis (alerting managers to evolving trends in the external environment which can be utilised in developing strategies to take advantage of these trends); and scenario analysis (detailed attempts at

providing a description of the potential end state if certain decisions are made, eliciting discussion over possible decisions which can be evolved into contingency plans). Furthermore, risk analysis, hazard mapping and integrated emergency planning are all techniques that require managers and planners to gather information on potential issues or problems and what strategies could be implemented as a response to crises or disasters (Ritchie, 2004).

In the next stage, strategic implementation, the issue develops into a crisis or disaster, and those managers that have done effective proactive scanning can implement strategies to stop a crisis or limit its impacts on business and society (Ritchie, 2004). However, this stage of implementation can be complex and chaotic and requires flexibility and constant monitoring regarding: the evaluation, selection and implementation of strategies that are appropriate; the implementation of effective crisis communication and control strategy; the control and reallocation of resources to deal effectively with such incidents; and identifying and collaborating with key stakeholders in the tourism industry, as well as other industries (Ritchie, 2004).

The final stage of managing crises and disasters strategically is evaluation and feedback (Ritchie, 2004). This occurs as a destination or organisation begins to recover from a crisis or disaster and there is a movement towards normality. Here, the main goal is to control the crisis and reduce its severity (Ritchie, 2004). However, this is often a complex situation that can make long lasting changes to systems, positively or negatively. Some crises/disasters may result in an improved state due to the ability of an organisation or destination to learn from the events and make policy changes and adapt and modify strategies (Ritchie, 2004). The resolution stage, therefore, is a feedback loop to proactive planning so that prevention is possible (Ritchie, 2004). Organisations should create crisis and disaster management teams that reassess and manage the effectiveness of strategies and responses. This may also include a repositioning in terms of their offerings that are in line with the new situation, post-crisis. The current global health crises of COVID-19 may cause many challenges for the tourism industry and controlling the crisis and reducing its negative impacts is an important obstacle facing the industry at the moment. This is, however, an opportunity to strategically implement responses and procedures to make the tourism industry more resilient to such a global pandemic crisis, should it happen again in the future. It is an opportunity to learn and prepare while at the same time confronting the current disaster and its impacts, part of which is the perceived risks tourists associate with travelling in the current situation.

This framework provides flexibility and feedback loops, giving recognition to diverse approaches that are needed for the management of crises as each crisis differs in terms of impact, management strategy and recovery period (Novelli et al., 2018). Ritchie (2004)'s model can be applied to both crises and disasters. The model can be used to understand the response of destinations across the crisis lifecycle as well as what strategies are used. It was included in this paper because this study can be considered as contributing to both the proactive planning phase as well as the feedback stage as tourists' perceived risks as a result of the COVID-19 crisis will impact on tourist organisations' strategies and policies in terms of responding to the crisis and attempting to recover tourism. The change in the perceived risks and therefore the behavioural intention of tourists can in themselves be regarded as a crisis to the tourism industry. How it responds, learns and adapts is important now, more than ever.

4.3 Epidemics as a source of disaster in tourism

The tourism is known to be sensitive to changes in internal and external environments (Chew & Jahari, 2014; Lehto et al., 2008; Ritchie, 2004; Roehl & Fesenmaier, 1992). This makes the industry extremely vulnerable to safety and health-related risks, such as terrorism, diseases and natural disasters (Ritchie, 2004). A drastic decrease in tourism demand can be caused by increased risk assessments, which is directly linked to perceptions of danger and acts to weaken an individual's motivation to travel (Reisinger & Mavondo, 2005). Health epidemics tend to be infrequent, yet are characterised by spreading rapidly across geographical borders, therefore, they can exert more negative pressure on tourism demand than terrorism (Novelli et al., 2018). The risk of disease outbreaks is on the increase and the impact on the demand for international travel has increased, making the tourism industry highly vulnerable to various crises, including disease outbreaks, creating the necessity for systematic measures against such crises (Sonmez & Graefe, 1998). This is because during an epidemic; fear, loss of confidence in institutions, unpredictability and pervasive loss of safety may emerge (Rittichainuwat & Chakraborty, 2009).

As travel and tourism can facilitate the spread of infectious diseases, leading to epidemics, global parties such as the World Health Organisation and the UN World Tourism Organisation are increasingly interested in understanding the theme in terms of the cause, evolution and risk of infection (Novelli et al, 2018). Previous disease outbreaks – such as avian flu, severe acute respiratory syndrome (SARS) in South-East Asia, Middle East

respiratory syndrome (MERS), the Foot and Mouth Disease in the UK and influenza in Mexico are examples of health-related disasters affecting tourism (Novelli et al., 2019). These, along with the current COVID-19 pandemic, have resulted in huge economic impacts on the global tourism industry and the socio-political situations in many countries. These cases of epidemics and the accompanying tourist risk perceptions have resulted in reductions in tourist arrivals and market demand, as well as changes in tourist behaviour and destination selection (Chien et al., 2017; Mao et al., 2010). These risk perceptions are intensified due to the growth in international tourist flows and movement of a large number of travellers (Rittichainuwat & Chakraborty, 2009), which is relevant to gaps in socio-economic characteristics, sanitation standards and cultural differences between countries.

Severe acute respiratory syndrome (SARS) is an example of a disease outbreak that impacted tourism significantly. It exemplified the link between travel, tourism and infectious disease (Novelli et al., 2018). SARS outbreaks took place mainly in China, Hong Kong, Taiwan and Singapore, reaching 8096 infections and resulting in 774 deaths on 27 countries since March 2003 (Kuo et al., 2008; as cited in Lee et al., 2021). The result of this outbreak, in which the World Health Organization (WHO) declared travel warnings, saw Hong Kong's tourism gross domestic product (GDP) falling 41 percent and left 27,000 tourism workers unemployed (World Travel and Tourism council, 2003; as cited in Lee et al., 2021). Singapore's GDP fell 43 percent and 17,500 jobs were lost and Vietnam experiences a GDP drop of 15 percent and 62,000 jobs lost. These economic results of disease outbreaks are not caused by the disease itself, but rather by restrictions on movements and cancellations of international events to prevent spreading (Pine & McKercher, 2004).

Furthermore, the Ebola outbreak in West Africa had a similar impact as SARS. Novelli et al (2018) not that due to its scale and media attention, misrepresentations and public misconception about the geographical location of affected countries resulted in a negative influence on international tourist arrivals to the entire African continent. Prior to the outbreak, Africa experienced tourist arrival average increases of 5 percent per year in 2012 and 2013, but numbers decreased to 2% in 2014, and further reduced by 5% in 2015 (Novelli et al., 2018). This suggests that recovery through safety and security improvements is an urgent action in order to get travel and tourism back to normal levels. Prior research has recognised risk perceptions as being a critical factor affecting tourist behavioural intention collectively (Mao et al., 2010; Reisinger & Mavondo, 2005). The research conducted in the

tourism field only composes a small section of disaster-related research, and several areas of knowledge gaps can be observed.

The World Health Organization (WHO, 2021) estimate that billions of people are to be at a public health risk, which may be extended to include other risks for the travel and tourism industry. Through the observation of the prior decades in terms of global health and epidemics, it is likely that global epidemics and crises become more frequent, impactful, unpredictable and difficult to manage, impacting economic sectors worldwide (Chan, 2021). Rosello et al. (2017) investigated the economic impacts of eradicating Ebola, Malaria and Yellow Fever and suggest that economic benefits of health policies should be considered in future development plans in the tourism sector.

In terms of the individual tourist, risk perceptions from epidemics influences tourist behaviour, most notably in their destination selection (Rittichainuwat & Chakraborty, 2009), mediated by concerns and uncertainties around public health and transformed destination images (Kozak et al., 2007). There is an important need for a higher level of crisis preparedness and strategies for disaster management, therefore making it essential to understand tourists' perceptions of disasters, such as perceived risks, experiences and travel behaviour (Mair et al., 2016), especially because of hesitation to travel after an epidemic (Wong & Yeh, 2009).

4.4 COVID-19

The first case of the Coronavirus diseases 19 (COVID-19) was reported in Wuhan, China in December 2019, the virus has spread rapidly worldwide, including to all parts of Asia, the Americas and Europe (WHO, 2021). As of October 2021, the global situation shows a total number of 241,411,380 confirmed cases and 4,912,112 deaths (WHO, 2021). WHO declared COVID-19 a pandemic on the 11th of March 2020, the highest level of infectious disease alert. The United Nations World Tourism Organization (UNWTO, 2021) predicted that tourism would decline over 70% in 2020, indicating levels of 30 years ago. They note that travel and tourism is among the most severely affected sectors with a huge fall in international travel demand amid travel restrictions and border closures. The decline in the first ten months of 2020 resulted in 900 million fewer international tourist arrivals compared to the same period in 2019, translating to a loss of $935 billion in export revenues from international tourism (UNWTO, 2021). This plunge in international tourism could result in an estimated economic loss of more than $2 trillion in global GDP (UNWTO, 2021). A return to

2019 levels of international arrivals is estimated to take 2.5 to 4 years (UNWTO, 2021). These impacts are a direct result of COVID-19's impact on the demand for tourism. The crisis caused by the disease is incredibly damaging to the tourism industry, therefore, making it important to take effective measures to address the impacts of the disease crisis.

The recent COVID-19 pandemic has drastically hindered the operation of tourism industries, destinations and countries (Gossling et al., 2020) as across all economic sectors, tourism has been the most impacted by the pandemic. This leads to the socio-economic propensity and sustainability of many countries as tourist destinations being at risk. The United Nations World Tourism Organization (UNWTO, 2021) has suggested strategies for dealing with these hardships by standing in solidarity with those countries that are affected and by emphasizing tourisms' proven resilience and standing ready to support recovery. In order for this to be effective, the provision of up-to-date information that is reliable and retrieved from different sources is critical.

There have been many studies investigating the influence of COVID-19 on travel behaviour. Nazneen et al. (2020) reported that Chinese travel decisions were negatively affected by tourists' risk perceptions due to COVID-19, particularly the number of vacations and travel to major cities. Neuburger & Egger (2020) found that the COVID-19 outbreak significantly impacted travel risk perceptions and willingness to change or cancel plans in Germany, Austria and Switzerland. Chebli & Foued (2020) found that COVID-19 influences travel habits, specifically; people will avoid travelling in groups; will choose a less known destination; will avoid travelling without travel insurance; are more concerned with issues of hygiene and health and are cautious of their spending. Bae & Chang (2020) conducted a study that showed that COVID-19 risk perceptions increased travel intentions for non-contact vacations in terms of health protective behaviours for South Koreans. Li & Ito (2021) found that risk perception of COVID-19 had a negative effect on peoples travel intentions in Sapporo, Japan. However, no literature could be found in regards to examining the risk factors and dimensions involved in the making up of overall risk perception of South African travellers in the current pandemic situation.

Tourism involves a chain of various stakeholders, resources and activities between inter-connected industries and destination environments. The COVID-19 pandemic has an impact on all these operations with varying levels of suspension, economic loss and crisis (Chan, 2021). Tourism stakeholders are all relevant to the process of disaster risk reduction and the

mitigation and minimalization of impacts. In terms of disaster management processes, the COVID-19 pandemic represents the break-down of public health systems and disaster management systems in many countries (Chan, 2021), which requires that more policies and practices be implemented to provide assistance to international tourists who have changing safety concerns and perceived risks. It is extremely important to mitigate the perceived risks of tourists and to maintain the emotional solidarity through efficient policy responses to public concerns. Prior research has suggested that traveller's concerns about risks pertaining to their health or with regards to being infected by a disease have been influencing their behaviour and choice of tourist destination (Sanchez-Canizares et al., 2021; Lee et al., 2012). Research has not touched much on the decision-making process and intention to travel in a pandemic situation. However, according to Statista (2020), a survey carried out during lockdown revealed that 23% of respondents would not engage in booking a hotel until there is a vaccine available, 36% would not go to an airport until then. 70% of respondents stated that they would be willing to pay more to travel if it gave them flexibility when it came to making changes or cancellations (Statista, 2020). These make suggestions as to how changing safety concerns may be impacting tourist intentions, thus making it important to investigate changing risk perceptions.

Post-disaster studies have endeavoured to understand risk perception and risk-reduction strategies (Fuchs & Reichel, 2011; Law 2006; Mair et al., 2016). Man-made and natural disasters carry different attributes, in terms of physical characteristics, historical backgrounds and contemporary circumstances, which may lead to different risk perceptions and changes each time they occur. Some researchers have previously studied the risks caused by natural and man-made disasters to tourist destinations (Floyd et al., 2004; Schroeder & Pennington-Gray, 2014; Rittichainuwat & Chakraborty, 2009; Ritchie, 2004; Lepp & Gibson, 2003; Chan, 2021), however there is a gap in the knowledge regarding those circumstances after a global-scale event such as COVID-19. Li et al (2020) highlighted prior studies focusing on potential personal impacts that arise from disease outbreak and the pandemic, and therefore applied construal level theory in an attempt to develop a theoretical foundation for future research on the relationship between psychological distance, perceived risk and tourism crises. According to Li et al. (2020), health risks and psychological risks are the fundamental starting point for restoring the confidence of potential tourists to travel.

According to the conceptual model put forth by Chan (2021), tourism risks are divided into risks related to natural disasters and man-made disasters. Infectious disease outbreaks can be

understood as a form of both natural disaster (i.e., biological issue and virus mutation) and man-made disaster (travel-related infections, failure of disease control measures, environmental contamination). The connection between risk perception and travel decision-making may be mediated by attributes of perceived travel experience (Quintal et al., 2010). This mediation effect can be functioning between these two constructs and can be verified in the postulated model. Health risks influence the well-being and travel intention of many stakeholders of tourism and local economies of the destination (Quintal et al., 2010; Lepp & Gibson, 2003; Chien et al., 2017). Psychological risks are also important to address to mitigate public fear, anxiety and mental discomfort (Smith, 2006). Figure 4.2 below graphically depicts the model by Chan (2021).

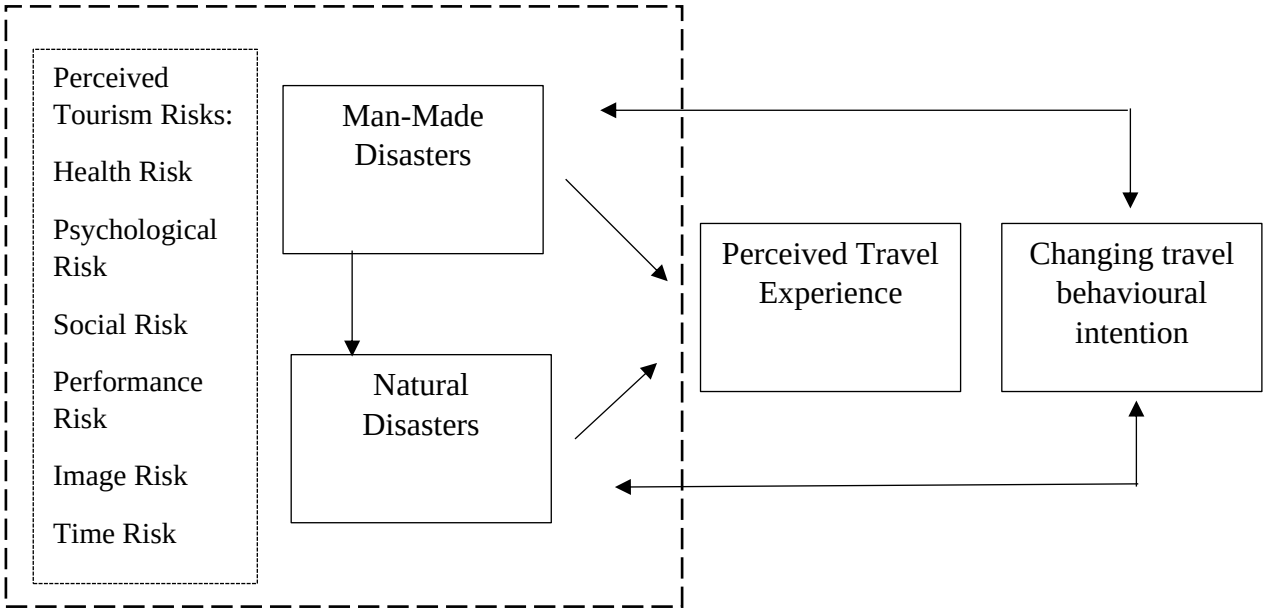


Fig 4.2 Conceptual model of the relationship between perceived tourism risks, perceived travel experience and changing behavioural intention (Source: Chan, 2021)

This model postulates the intermediation of tourist risk perceptions of natural and man-made disasters and their possible travel behaviour changes (Chan, 2021). The model is based on a critical review of the emerging research agendas addressing the impacts of the current COVID-19 pandemic (Chan, 2021). It provides various theoretical insights and practical implications.

Firstly, the perceived tourism risks and safety may directly impact subsequent decision-making and travel behaviour, or a hesitation towards these decisions (Chan, 2021, Sonmez & Graefe, 1998; Kozak et al., 2007). Different tourists may evaluate, interpret and understand

these different tourism risks differently, especially during a disaster (Mair et al., 2016). Lee et al. (2021) produced a study with the aim to identify Korean tourists' psychological perceived risk profiles regarding COVID-19 using a Q-methodology – an exploratory research method. Their results divided the types of tourist constraints caused by COVID-19 into four categories: "worrying about health" (their risk assessments of getting infected by COVID-19 was high); "worrying about potential problems" (concerned with infection, whether their destinations had a discriminatory atmosphere and whether the destinations had poor-quality medical systems); "worrying about tourism itself" (concerned about unexpected situations at tourism destinations and poor quality in tourism services); and "worrying about issues" (individuals who were more concerned about the situation in Korea than getting infected). Furthermore, according to Chan (2021), tourism risk perception should be understood as more than merely a single indication of reported value, but rather a series of risk dimensions.

Secondly, information dissemination across various channels has a complex influence on risk perceptions and changing safety concerns. Social media is understood to easily disseminate positive and negative messages that often exacerbate image issues to their users (Pennington-Gray & Schroeder, 2013). The COVID-19 pandemic and the subsequent recovery stages all hold a certain degree of uncertainty that is more severe than other epidemics, which may result in irrational or unethical risk perceptions and attitudes (Wen et al., 2020). This suggests the need for further research addressing how post-disaster information is transmitted among stakeholders and potential tourists, and how the accuracy of such information can be used to contribute to the recovery of tourism. Thirdly, a change in destination image is a possibility and is regarded as an attribute of expected travel experience and which may eventually affect travel destination selection or travel intention hesitation (Chew & Jahari, 2014; Wong & Yeh, 2009). During the COVID-19 pandemic period, destination image is dynamic in terms of geography as the changing transmission and influence across countries may be different according to recovery statistics and specific lockdown and social distancing policies (Chan, 2021). Li et al. (2020) suggest that image risk is one of the risk dimensions that may emerge to influence destination choice and evaluation, which is often impacted by media. It is therefore important to address how anti-pandemic policies and projected images by governments and media of different territories are impacting the perceived destination image of potential tourists.

Wong & Yeh (2009) confirm that tourist risk perception positively influences travel decision-making but that tourist knowledge may moderate this relationship. The model may extend

further with three changes: 1) consideration of perceived risks induced by natural and man-made disasters, 2) replacement of the knowledge dimension by expected or perceived travel experience due to the pandemic, and 3) detection of some change in travel behaviour. This highlights the importance of the study in this paper as in order to understand changing behavioural intentions of travellers, their perceived risks relevant to the current climate after a global pandemic needs to be reassessed and investigated in order to understand the effects that they may produce on their travelling intentions and in order to create and implement necessary policies and procedures to address possible inhibitors to travel.

Ultimately, there is a substantial body of research related to tourist feelings towards risk, evaluations of those risks and their associated behaviours, along with risk communication strategies and DMO interventions. There is however still considerable scope for further research, particularly in terms of COVID-19, given its growing magnitude and on-going nature. The risks caused by the pandemic can be assumed to be accompanied by greater uncertainty due to the fact that it is a new experience for everyone – the unpredictable risks from COVID-19 could cause traveller perceptions to be more diverse. This study's findings may help identify the risk profiles of tourists, providing a basic, useful reference tool to help shorten the downturn of the tourism industry due to the COVID-19 crisis.

4.5 The Inclusive Holiday System

Risks and decisions associated with risks involved in travel and holidays makes reference to the demand-side perspective, discussing the risks that tourists face. The Travel Decision Model (Chapter one) and the Holiday System present these views. Rational decision-making in the face of threats associated with risks identified in the tourism industry illustrates the need for risk management models, and as discussed in chapter two, risk management begins with the identification of risk factors. The next section explores the Inclusive Holiday system (Lubbe, 2000) and how the different variables in the model may contribute to differing risk perceptions and how the system may be impacted and changed by the pandemic crisis.

Lubbe (2000; as cited in Shaw, 2010) notes that the holiday system approach can describe the independence of various elements that, combined, make up the holiday experience. Any changes in policies or operational procedures are a result of the way the system functions and due to the environment in which the industry operates (Lubbe, 2000). The COVID-19 pandemic has definitely altered the environment in which the tourism industry operates.

Lubbe (2000; as cited in Shaw, 2010) refers to the following sub-systems in terms of the tourism industry. Natural/primary destination attractions: this includes the climate and natural attractions; secondary features, such as transport, accommodation and leisure infrastructure; destination inputs such as tourist expectation, destination managerial and technical skills and capital investments– all including resources that are used to plan, manage and co-ordinate the primary and secondary features; system outputs, for example the impact of changes in inputs and primary and secondary features on the community, economy and environment as well as the impact on stakeholders (tour operators, travel agents, tourists, residents and destination services); and finally, influences of the external environment on the system such as changes in technology and transport, legislation, market demographics and policies on competition. Further to this final sub-system would be that of the COVID-19 pandemic which it can be assumed has influenced the operation of the system. The entire system is impacted by any changes to the different sub-systems (Lubbe, 2000; as cited in Shaw, 2010). Figure 4.3 below is the "Inclusive Holiday System", also known as TOMM (Tourism Optimisation Management Model) (Shaw, 2010).

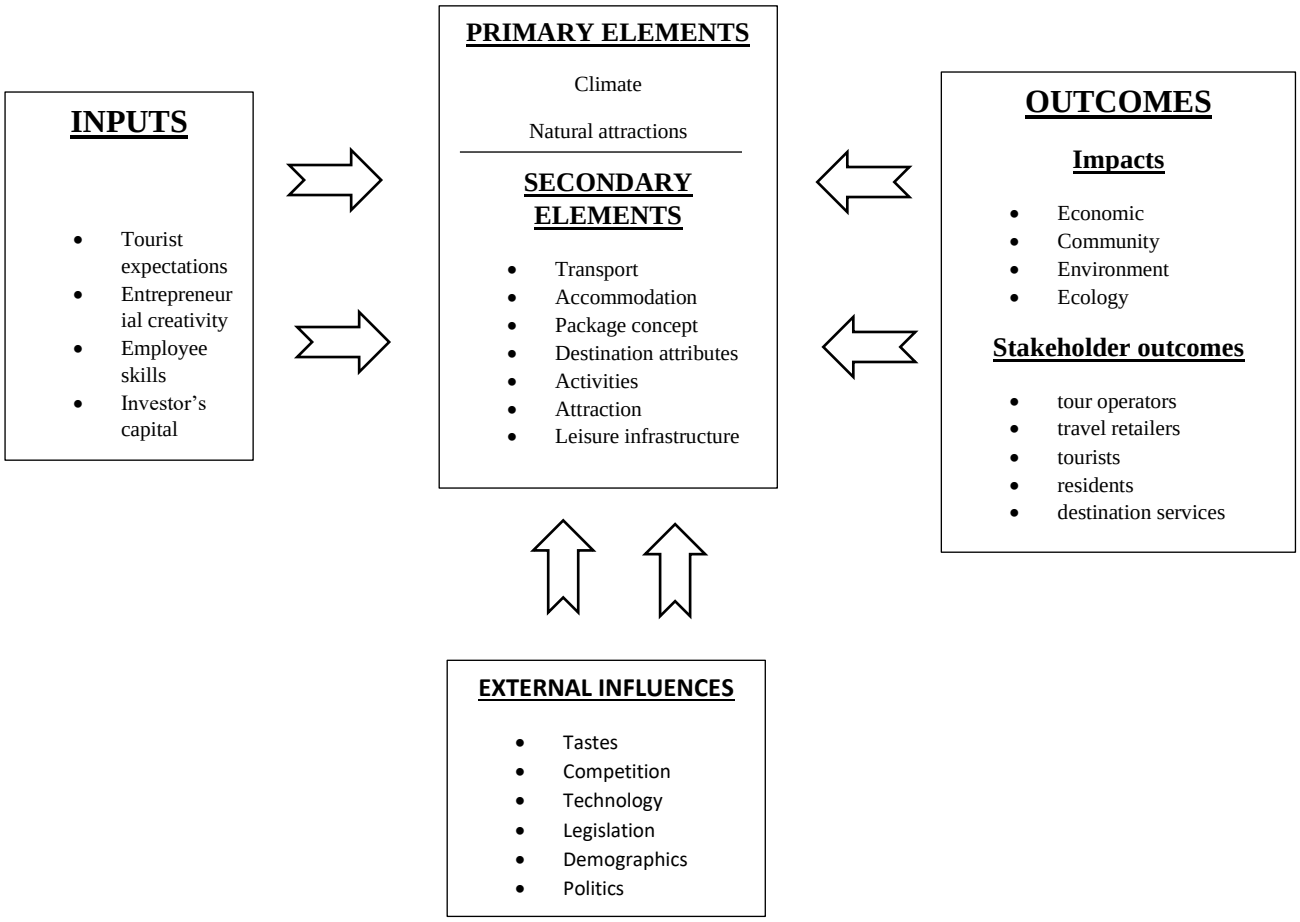


Fig 4.3 The Inclusive Holiday System (Source: Shaw, 2010).

This model shows the risks present in the tourism industry when analysed in conjunction with the impact they have on the needs, expectations and desires of the travel consumer. The model does not specifically mention any risks, but a closer look reveals the risks that are components of many sub-systems. The pandemic of COVID-19 exerts influence on many elements within the sub-systems of the Inclusive Holiday System model. The following section will present contextual examples of how the sub-systems may be impacted by the virus.

i. Inputs

- Tourist expectations:

What are they, are they explicitly set out and do tourism suppliers understand them? If these are not answered, the travel consumer will return unsatisfied and the travel agents' reputation may be at risk. Chebli & Foued (2020) note that as experience has shown in previous crises, after a crisis, new tourist concerns and demands emerge which results in changes in their expectations and consumption behaviours. For example, in the context of the virus, the tourists' expectations in terms of hygiene standards and medical facilities may have changed. Expectations to ensure the traveller feels safe in their travel experience may have altered. This requires a re-examining if tourism organisations are to provide an experience tourists find valuable.

- Entrepreneurial creativity:

However, technical and managerial skills at the destinations may become reactive to this change in expectation and create different response policies and strategies. Chebli & Foued (2020) suggest that the economic crisis from COVID-19 will result in consumers adopting several new attitudes, such as changing travel planning strategies and consumer practices – and that such a change could present an opportunity to tourism organisations to revitalise tourism and build customer loyalty. Should the entrepreneur fail to provide expertise and knowledge to the product, the consumer's experience may not be satisfactory.

- Employee skill

Should there be a lack of qualified employees possessing the necessary skills and training, this may result in failure or problems in touristic experiences. Human error presents a

considerable risk to tourism businesses, particularly in times of a pandemic in which there are new regulations and procedures that tourism businesses have to be informed about and responsive to. Particularly in times of COVID-19, adequate employee skill may go a long way to providing an overall satisfactory experience for tourists.

- Investor's capital

Ventures usually begin through obtaining investors with the objective of making profits. If the business is not managed and run well, the investor is at risk. Additionally, should the investor not produce funding, the venture is in financial trouble. Either way, if the investment fails or is delayed, the consumer is at risk. During the pandemic situation of COVID-19, the tourism economy is suffering income and profit shortages due to the various travel restrictions and stay-at-home orders decreasing overall tourism (Gossling et al., 2020). Poor market performance can be seen in many of the world's major financial markets (i.e., China and the USA) and this may be expected to continue (Bush, 2020). This raises fears that the pandemic may cause multi-year recessions to follow as investors retract their money out of markets to protect themselves against market volatility (Bush, 2020). This may result in a lack of financial manoeuvring power which may impact on the overall touristic experience. Furthermore, as suggested by Chebli & Foued (2020), the pandemic has resulted in a decrease in the amount of tourist income allocated to vacations due to the economic crisis linked with COVID-19. This may result in tourists attempting to reduce their travel expenses, which further decreases the amount of capital flowing through the tourism sector.

ii. Primary Elements

- Climate

Tourists often make decisions based on escaping the climate in their home regions or to engage in the climate that some destinations offer. Unseasonal changes and climate change both pose risks for the travel consumer. Chebli & Foued (2020; p. 203) note that "after a health crisis, people's sensitivity to ecotourism, and support for outdoor activities, is growing". The pandemic may result in travel consumers seeking out warmer climates as social distancing becomes a considered concern, therefore, climates that offer the opportunity to be outside and spatially distant may interest tourists more during this time in order to avoid being kept inside and close to others due to cold weather.

- Environment

These relate to any activities that harm the environment and that exposes responsible organisations to liabilities such as bodily harm, property damage, cost of repair or punitive damages. In terms of COVID-19, Chebli & Foued (2020) note that the regained transparency of the Venice canals in Italy is an emblematic image disseminated by the media that shows the impact of the tourism industry on the environment, resulting in tourists becoming more environmentally conscious. The pandemic highlighted the effect of open travel on the environment and many travel consumers are considerably more aware of the impact of their travel decisions on the well-being of the environment, which may to some extent impact on their decisions.

- Natural attractions

Major destinations often offer certain attractions – such as the Great Barrier Reef in Australia and the Grand Canyon in the USA. Tourists are lured to these destinations for the mystery and adventure they offer. However, there are risks pertinent to these attractions such as shark attacks, hiking incidences or insect bites and infections that are intrinsic to the natural attraction. Furthermore, these natural attractions may be popular touristic attractions that attract large groups of tourists. As noted by Chebli & Foued (2020; p.201), it is expected that tourists opt for lesser-known destinations and that this choice is "a combination of internal motivations, such as anxiety and fear, fear of being contaminated, or of catching a disease by finding oneself in a crowd, surrounded by strangers whose state of health is unknown". Travel consumers may decide to avoid such overly crowded destinations in times of the pandemic in order to ensure social distancing (Bae & Chang, 2021). This may, however, give rise to the opportunity for the emergence of new destinations, where this can be used to promote an original and atypical destination image – for example, rural tourism may show an increased interest (Chebli & Foued, 2020).

iii. Secondary Elements

- Transport

This consists of the volume and the mode of transport. The pandemic prevailing at present could result in the cancellation of flights, rail and bus services which could cause frustration for the traveller. People who bought travel prior to the pandemic without travel insurance found themselves losing considerable amounts of money due to cancellations and flight changes (Chebli & Foued, 2020). Furthermore, public transports pose risks in terms of being

in close contact with many strange people, which may create anxiety in terms of the lack of social distancing.

- Accommodation

This includes spending guidelines relative to cities, types of hotels, personnel employed, preferred hotels or hotel chains, luxury or economy hotels. The pandemic may have increased travel consumer expectations of hygiene and sterilisation of accommodation which will need to be addressed by accommodation providers. Chebli & Foued (2020) note that the pandemic has resulted in hygiene and health awareness and that travellers are more concerned about the cleanliness of airports, public spaces, hotels, restaurants and tourist attractions. Cancellations due to an increase in COVID-19 infections also warrants policies regarding guaranteed reservations and cancellations as well as extra services to be given special attention, particularly during this time of uncertainty and increased risk awareness.

- Package concept

The "EU Package Travel Directive" is a regulation introduced in 1993, with the main requirements being that organizers should provide financial insurance to customers should the company dissolve, provide extensive information before the package is bought and must accept strict liability for breach of contract (Shaw, 2010). Many tourism companies have been forced to close their doors due to the lack of business during COVID-19 (Gossling et al., 2020). Furthermore, Bae & Chang (2021) suggest that the COVID-19 crisis will impact on traveller propensity to travel in groups and purchase tour packages. This can be attributed to various things: firstly, the fear of being in a closed space in which is not able to take distance as well as the fear of being stuck in the middle of the ocean on a cruise, due to testimonies in the media of having to quarantine on cruise ships (Chebli & Foued, 2020). Furthermore, due to tourists being confined to their homes for months during the lockdown periods of COVID-19, people may show a desire for independence, free will and control – resulting in group travel being suspended due to its restriction on individual freedom due to its organised programme (Chebli & Foued, 2020). Additionally, Moutinho (2000) suggests that price-based market share between competing operators has resulted in the decrease of quality holidays on offer. This, coupled with decreased cashflows, may further decrease the attractiveness of tourism packages. These factors may not eliminate tour packages altogether, but may require unpacking them.

- Destination attributes

This involves positioning and image. Suppliers and carriers must consider image – for example, first class passengers expect first class service and it is the job of the suppliers to ensure they select distribution intermediaries that can produce such an image and can fulfil the expectations of tourists (Shaw, 2010). Mansfeld & Pizam (2006) note that destinations are symbolic of cultural identity, therefore, strikes against destination image reproduces into an attack on the entire nation and culture. The COVID-19 pandemic has, for example, created negative perceptions about travel to China, as this is where the outbreak began (Zhan et al., 2020; Chan, 2021). Furthermore, during times of the pandemic, the performance of the host destination's medical and health system is gaining increasing importance (Chebli & Foued, 2020) and therefore may require adequate attention in terms of integrating a productive and efficient medical system into the destination image.

- Activities

It is believed that the tourists' characteristics are closely linked to their activities (Fletcher et al., 2018). Some activities however, for example, gambling, reproduces social problems at host destinations (Shaw, 2010). In terms of the COVID-19 pandemic, certain activities may not be suited to the new health crisis environment in which social distancing is encouraged – which impacts the nature of tourism offerings that are appropriate. Furthermore, the COVID-19 pandemic and ensuing economic impacts have resulted in many restaurants and activities being forced to close their doors due to no longer having the financial capacity to remain open (Gossling et al., 2020). This could mean that tourists are unable to engage in the activities that they wish to incorporate into their experience of international travel, hence deceasing the overall value they place on such an experience.

- Attractions

Fletcher et al. (2018) suggests that one of the single most important reasons for leisure travel is attractions at destinations. For example, the Colosseum in Rome, Table Mountain in South Africa and the Eiffel Tower in Paris. However, as previously mentioned, tourists may be avoiding attractions that are popular and overcrowded (Bae & Chang, 2021; Chebli & Foued, 2020) for fear of being close to others. When analysing travel and tourism purchase decisions, the consideration of attractions and other facilities that play a role is important. Infrastructural developments in local economies are of high importance and COVID-19 may be altering the attitudes towards previously engaged attractions, impacting on the tourism operations that have its foundations in these attractions.

- Leisure infrastructure

Existing infrastructure is highly relied upon to handle travel, hospitality and communication (Moutinho, 2000). The COVID-19 pandemic may require this infrastructure to be adjusted to new conditions of travel which may present challenges for host destinations. A lot of resources are required to adapt leisure infrastructure to the current state of the health crisis. For example, temperature screenings and entrance forms and the personnel and equipment to handle this.

iv. Outcomes

- Economic

The economic effects of 9/11 were monumental, causing a hidden recession (Floyd et al., 2004stat). Tourism and travel are closely linked to the economy and therefore finding strategies that satisfy the financial demands of the public but also considering the prosperity of tourism businesses will affect the touristic product. COVID-19 may be discouraging people from travelling. Risks of being quarantined away from home as well as the risk of being infected has resulted in some individuals being weary of travel (Bush, 2020). This results in serious economic impacts – for example, airline companies are seeing a lack of customers and are experiencing record losses (Bush, 2020). Particularly during such a global health crisis, economies are struggling to recuperate after the damage of lockdowns and travel restrictions have impacted the tourism economy and by association the economies of touristic destination countries considerably (Gossling et al., 2020). UNWTO (2020) originally projected a 20-30% decline in 2020 international arrivals which would translate in a loss of tourism receipts to around US$300-450 billion, whereas the WTTC (2020) originally estimated a loss of up to US$2.1 trillion in 2020. Despite the implementation of fiscal and monetary programs, it is unclear how these will profit the tourism sector or if tourism demand will be effectively stimulated (Gossling et al., 2020). It is assumed that economies and spending power of tourists will be heavily impacted for years to come following the end of the pandemic.

- Community

The community will also be socially impacted by the COVID-19 pandemic. COVID-19 has been seen to result in panic, which is visible on many levels (Bush, 2020). Panic shopping only results in further disruptions in supply chains and causes people to take anticipatory measures (Bush, 2020). Furthermore, as the virus is believed to have originated in Wuhan, a

Chinese city, some individuals are becoming prejudiced against Chinese or Asian-looking people in their areas (Bush, 2020). As the disease spreads, this may fade, however some people may continue to carry these prejudices.

- Environment

In the promotion of tourism, the artificial or natural environment is an important contribution. With proper planning and managing, minimising the negative environmental impacts while encouraging travel and the positive implications is possible (Fletcher et al., 2018). This is especially important in the current pandemic context as heightened awareness of the impact of tourism on the environment is at the forefront of tourist concerns (Chebli & Foued, 2020). Increased attention is needed to communicate the message to tourists that their travel behaviours are environmentally sustainable.

- Ecology

The eco is the home, where people live and ecology is the science of how all living creatures interact with each other and the eco. For example, coal fuelled the industrial revolution. The COVID-19 pandemic may alter how tourists interact with the ecology as new attitudes and behaviours are being formed.

- Stakeholders
    - Tour operator

Tour operators act as the intermediary in the distribution system of tourism, by linking the supplier and consumer. COVID-19 may impact their roles in terms of what has changed on the supply side (in terms of what is available to the tourist, since many tourism businesses have been forced to close down due to the pandemic) and the demand side (the expectations of tourists). Tour operators need to effectively combine tourism offerings and provide appropriate values to the tourist at reasonable prices (Shaw, 2010). They have great influence over the decision-making process (Moutinho, 2000) and their roles are therefore at the forefront of addressing the impacts of COVID-19.

    - Travel retailers

Travel retailers are the sellers of carrier tickets and operator tours (Shaw, 2010). Their role will also be impact to some extent by COVID-19 as it influences traveller expectations, perceived risks and purchasing power (Chebli & Foued, 2020). Refundable tickets in case of

cancellation are receiving increasing importance and the amount of money tourists are willing to spend is changing. This impacts the travel retailer's ability to provide their products in a way that will gain interest of the travel consumer.

- Travel agents

Travel agents are an important part in the distribution system in terms of providing information on tourism offerings to consumers (Buhalis, 1998). Their role is of increasing importance during time of uncertainty in the unprecedented context of COVID-19. Chebli & Foued (2020) state that tourists are particularly willing to learn more and follow current information about travel before making decisions to take a trip. Travel agents may act as information brokers in this sense, as they are points of reliable and up-to-date information that can attract tourists and influence their decisions.

- Tourists

Tourists are defined as temporary visitors for reasons of leisure, recreation, sport, health, holiday, religion and study with a minimum stay of 24 hours (Holloway, 2002). Tourists are impacted tremendously by COVID-19, particular in terms of their internal motivations regarding travelling during the current pandemic situation. Various influences are changing their expectations and intentions around travel and these changes are further impacting on the rest of the Holiday System. The Holiday system would not exist if it were not for the demand created by tourists.

- Residents

Residents are the people who live at the destination on a long-term basis (Shaw, 2010). They are also impacted by COVID-19's influence on the tourism sector as the prosperity of their local economies depend on the prosperity of the tourism economy and activities in their areas. Many destinations rely on income from tourism as their main source of GDP (Gossling et al., 2020) and a decrease in tourist arrivals filters through into the well-being of the local economy as a whole.

- Destination services

Destination services can be seen as the amalgamation of tourism products and services that results in the total tourism experience under one brand name (Shaw, 2010). Destination services may be impacted by the pandemic in so far as it affects tourism demand and the

ability of the destination to provide the services that it is known for. Being adaptable is becoming increasingly important.

v. External influences

Apart from the COVID-19 pandemic, which acts as a considerable external influence on the Holiday System, as can be seen from the discussion so far, other influences include:

- Competition

A high volume of competitors means the more likely that one will cut prices to gain market share (Shaw, 2010). This normally occurs when competitors are of similar sizes and there exists no clear market. The COVID-19 pandemic has resulted in many competitors being forced to close their doors, and on the other hand, gives rise to new opportunities to get a competitive advantage by capitalising on changing tourist expectations and providing to these expectations in a way that is better than competitors. Tourists will be searching for more information (Chebli & Foued, 2020) and will ultimately go with the company that best suits their needs and perceptions.

- Technology

New products, processes and services are results of the developing technological advancements (Shaw, 2010). In the COVID-19 pandemic, new technologies will emerge to support the context of the pandemic and many opportunities arise for the development of technological solutions to problems and challenges that are particular to the pandemic. The pandemic may result in a collective effort to find ways of handling its impacts and technology may be a tool to support this cause (Bush, 2020). Technology is also known to be increasingly making the world smaller and offers the tourist the ability to be highly informed and involved (Buhalis, 1998) which influences their touristic decisions.

- Legislation

Travel and tourism are regulated via governmental legislation, public policies and actions of institutions. Tourism activities and processes must adhere to both legislation and common-law requirement (Shaw, 2010). COVID-19 has brought with it the introduction of new rules and regulations that need to be adhered when offering tourism experiences. Tourism companies are working within the boundaries of laws of the host country they find themselves in, which means they are forced to follow the guidelines expected from legislation

regarding the response to the pandemic. Furthermore, tourists will need to be informed of the differing regulations and requirements present at different destinations which may create anxiety and stress and deter them from making travel-related decisions.

- Demographics

Demographics include things such as age, sex, income, socioeconomic group and stage in life cycle. The impacts of the pandemic will have different results to tourists belonging to different demographic groups and this requires attention when creating an offer of value to present to the tourist (Lee et al., 2021).

- Politics

COVID-19 has resulted in many governments being under scrutiny for their response to the virus, often being described as slow and unenthusiastic (Bush, 2020). The effects of COVID-19 may result in widespread political dissatisfaction among citizens and may lead to change in some of the world's countries and operations. Tourists may be deterred by political unrest or avoid destinations in which they do not agree with the policies of the government.

The Inclusive Holiday System consists of inputs, primary and secondary features, outcomes and external influences that could be examined as risks or impacts of risk that the tourism industry could currently be exposed to in the COVID-19 context. This offers interesting insight into how the system may be changing due to the pandemic from various viewpoints and which ultimately influence tourist risk perceptions and decision-making.

4.6 Summary and Conclusion

This section began by investigating crises and disasters within in the tourism context. The importance of disaster and risk management following a crisis in tourism is noted and Ritchie (2004)'s tourism crisis and disaster management framework is described in terms of strategic management. This included three stages; pre-crisis planning, crisis response and recovery and resolution and future learning. Crises and disasters in tourism and its impacts on tourist behavioural intentions was discussed.

Following this, this section described previous epidemics as sources of tourism crises – particularly previous SARS and Ebola outbreaks and how these tended to impact and influence tourist perceptions of risk and safety. It did so by presenting statistics on previous

epidemics to show how demand is affected by health-related disease outbreaks – suggesting the need for systematic measures against such crises.

This section then describes COVID-19 as a global health pandemic and its impacts on the tourism sector, hindering the operations of tourism industries, organisations and destinations. It describes some current tourism literature on risk perceptions of tourists due to COVID-19 and presents and discusses a theoretical foundation put forth by Chan (2021) in the form of a conceptual model for the identification of research agendas addressing the effects of COVID-19 for the future.

Finally, this section describes and discusses the Inclusive Holiday System and dissects it in terms of the influence that COVID-19 may be having on the different sub-systems of the Holiday System and how these changes reproduce into further changes in other sub-systems and elements of the overall system.

This section provides a theoretical foundation for the reader to understand the impact of the COVID-19 pandemic on the tourism industry, as previous health crises have, and emphasizes the exaggerated and important role that this global crisis has on the tourism sector. This chapter reiterates how the re-defining of travel consumer expectation and perceived risks is a priority as crises impact and influence the entire system of tourism. The research presented in this study begins to address the changes that are evolving for the travel consumer, particularly in terms of the risks they perceive to be involved in international travel, which undoubtedly will constitute differing factors than those that have previously been identified in prior research due to the global scale of the pandemic. This will give tourism practitioners the information needed to adequately respond to these perceived concerns of tourists through appropriate risk management strategies that contribute to addressing such risks, and in the process, encourages travel consumers to engage in tourism again.

CHAPTER FIVE: TOURIST PERCEIVED RISK

5.1 Introduction

An individual's perceived risk can be understood as their awareness and assessment of uncertainty and negative consequences. The global risk of natural and man-made disasters is increasing and becoming more uncertain due to things such as the advancements of information and communication technology and climate change and its resulting crises. Tourism is sometimes considered as having dual and reciprocal roles as an economic regeneration industry and at the same time, also being made up of activities that contribute to exacerbating these crises – for example, the mass movement of tourists. Therefore, as crises and disasters become more frequent, it is important to constantly keep up with the trends of the risks that tourists perceive in the wake of such events.

Williams & Balaz (2013) studied the impact of uncertainty and risk, in terms of perceived danger, objects, incidents or activities that could influence traveller decision-making and behaviour. The magnitude and validity of those mediating variables and decision processes may be differently affected by the ways in which possible tourists perceive tourism risks, especially in the post-pandemic time, which is rife with uncertainties. Evaluating perceived risks towards natural and man-made disasters may show different pathways that influence the overall tourist experience, selection of product and travel decisions – even though most studies report a negative relationship between perceived risk and travel intention during sudden disasters, natural and man-made (Kozak et al., 2007; Chew & Jahari, 2014; Floyd et al., 2004). Prior studies have generally noted that risk perceptions influence destination selection (Kozak et al., 2007; Sonmez & Graefe, 1998; Fuchs & Reichel, 2006; Floyd et al., 2004; Law, 2006) and this influence has tended to be described as dynamic and uncertain due to more frequent crises occurring today. Some scholars discovered that the perception of risk led only to the substitution of destination rather than a termination of travel plans all together (Rittichainuwat & Chakraborty, 2009). Nonetheless, it is a rich contribution to the literature to begin describing and identifying the variety of perceived risks that arise following such unprecedented experiences and acts to assist the industry in responding and recuperating as well as prepares the industry against future occurrences.

Tourism researchers have been performing more updated and relevant studies on tourist, destination and industry responses to the impacts of COVID-19 (Li et al., 2020), contributing to the updating of tourism literature – much like the study in this paper. Compared to other

epidemics, COVID-19 has evoked panic among people worldwide, leading to a proximate temporal distance to disease outbreak, close spatial distance and strong hypotheticality of transmission and serious consequences (Li et al., 2020). Li et al. (2020) highlighted six categories of risk perception – namely, health risk, psychological risk, performance risk, social risk, time risk and image risk – which are suggested to be relevant to the experience of the COVID-19 pandemic. They indicate varied temporal, spatial and social distances. Risk perception is known to derive from psychological and emotional factors, instead of being based on just facts. However, there seems to be a lack of a mature theoretical base to holistically assess the risk-associated attributes linked to a wide range of natural and man-made disasters such as epidemics (Chan, 2021). It is therefore important to broaden the understanding of the risk-experience-behaviour relationship in tourism literature in order to achieve insights into how tourism risks impact tourists' travel decisions, behavioural intentions and destination image. Due to each crisis/disaster being different and can be assumed to have differing impacts on the tourist psyche, it is relevant to study the changes in risk perception after a global event such as COVID-19.

This section looks at the previous literature that exists in terms of perceived risk. It begins by defining the concept of "risk perception" and distinguishes between perceived risk and perceived uncertainty. It describes the different categories of perceived risk as previously defined by prior consumer behaviour literature. It then defines risk perception as understood in this research paper.

This section then describes risk perceptions as used in the tourism literature. It describes subjective, objective and cognitive risk perceptions in terms of the tourist. It presents different research areas in which the risk construct has been utilised – mainly tourist satisfaction, behavioural intention, past travel experience, information search and revisit intentions.

This chapter then goes on to identify different risk dimensions and their use in the tourism literature. It presents the topics that have been previously investigated within the tourism risk perception literature and notes the different dimensions of tourism risk that these investigations have identified. It is noted that differences in definitions and conceptualisations of tourist risk perceptions exists in the literature, and that these differences often converge into meaning similar things. This gives the reader a basis from which to note the diversity that exists in the understanding of the tourism risk construct and emphasizes the importance

of developing a market-driven perceived risk typology that is relevant to the current times, as previous literature has shown such differing findings which may be relevant to the times in which those studies were conducted, but that may have changed since.

The next section deals with the dominant risk perceptions in tourism literature in order to begin developing a conceptual basis for this research paper. In order to begin researching the topic presented in this paper, the dominant risk perceptions should be investigated and new dimensions can then be added, according to findings. This section notes that previous studies on tourist risk perception have often imposed consumer behaviour risk dimensions onto the case of the tourist; and that this approach may be too broad and lack the relevancy needed to provide useful insight for tourism practitioners. The section defines the most common risk dimensions mentioned in tourism literature and provides the articles in which these dimensions have been identified. This provides a basis from which this study can begin.

Lastly, this section describes two theories, Social Cognitive Theory and Protection Motivation Theory, that can be used to explain how risk perceptions can be antecedents of behavioural intentions, thus making it important to understand risk perceptions of tourists clearly in order to ascertain how they may impact on the behavioural motivations and intentions in a new pandemic context.

5.2 Risk perception

The central issue of consumer behaviour is presented through the concept of "choice", and due to the fact that the outcomes of a choice cannot be known until the future, the consumer is forced to interact with uncertainty, or risk (Taylor, 1974). Perception of risk is especially important as it is often the only thing the consumer has to base their decision-making on, and the perception thereof may create anxiety, which needs to be dealt with by the consumer in the same way as actual risk (Taylor, 1974; Bauer, 1960). Cui et al. (2016) notes that risk perception is used to describe a concept of people's attitude and intuitive judgement towards risk. The amount of risk perceived in a particular choice and the ways of dealing with this risk chosen by the consumer is often affected by the individual consumer's level of self-esteem or self-efficacy.

Bauer (1960) notes that consumer behaviour involves risk in that the actions of the consumer will produce outcomes which he cannot estimate with any certainty, some of which at least may be unpleasant. Thus, introducing the notion of perceived risk and uncertainty into the concept of buying behaviour (Bauer, 1960). Marketing literature maintains that there is a

distinction between the two. Perceived risk is conceptualised as “a subjectively determined expectation of a potential loss, in which some measure of probability can be attached to each possible outcome” (Quintal et al., 2010:798), whereas perceived uncertainty is described as “a subjectively determined expectation of ambiguity about a potential loss, in which no measure of probability can be attached to each possible outcome” (Quintal et al., 2010:798). Karl (2018) notes that risk and uncertainty have often been used interchangeably but that the literature has defined risk as the assessment of the probabilities that certain negative consequences will occur due to a decision made, whereas uncertainty makes reference to partial knowledge during decision-making processes (Karl, 2018).

This research paper, however, conceptualises risk and uncertainty as falling under the same construct. Prior streams of research have viewed the notion of “risk” and “uncertainty” as under the same construct, such that uncertainty is a function of risk because “risk is seen as an individual’s subjective feeling of uncertainty that the consequences of a potential purchase will be favourable” (Quintal et al., 2010:798). Maser & Weiermair (1998) define it as contexts where choice situations involve two types of uncertainty and risk: uncertainty about outcomes and uncertainty about consequences, therefore defining perceived risk as a function of uncertainty and its consequences, with some consequences being more acceptable to the consumer than others. Taylor (1974) noted that risk can be interpreted in terms of possible loss, which can be psycho/social in nature or functional/economic nature – or even a combination of both forms of loss.

As perceived risk stems from expectations of probable loss, it can arise from different types of potential losses, most commonly, according to previous marking and consumer behaviour literature, falling under six dimensions that can be used to explain the composition of perceived risk, namely: performance/functional risk, financial risk, psychological risk, social risk, physical/health risk and time risk (Murray & Schlacter, 1990; Maser & Weiermair, 1998; Mitchell, 1999; Reisinger & Mavondo, 2005; Karl, 2018). Table 5.1 below defines each risk dimension.

Table 5.1 Risk Dimensions and their Definitions

Risk dimension	**Definition**
Performance/Functional	The possibility of the purchase malfunctioning and/or not performing as it was designed or advertised and thereby failing to deliver the desired outcome and not performing up to expectations.
Financial	The probability that a purchase results in a loss of money as well as the subsequent maintenance cost of the product or the purchase not being worth the price paid.
Psychological	The purchase affecting the mental well-being of the consumer.
Social	The potential loss of status in one's social group as a result of the purchase; looking foolish or untrendy resulting in embarrassment for the consumer.
Physical/Health	The probability that the purchase will pose a threat to the physical well-being or health of the consumer.
Time	The possibility that the failure of a purchase results in an opportunity cost of finding another satisfactory product; the loss of time when making a bad purchase decision; the loss of time when researching and making the purchase

This study focuses on the tourist as the consumer. Therefore, risk perception is defined in this study as the potential loss perceived by an individual in the context of the processes involved in travelling and tourism – rooted in the possible adverse effects that the individual may experience when travelling internationally in the current state of the pandemic. Perceptions of risk may be in line with the actual situation, but because it refers to the expectancy of the individual for loss, it is likely that it negatively affects their attitude toward a behaviour (i.e., travelling internationally in the current pandemic situation). It may affect the individual's perceived control over undertaking an action, since the greater the perception of possible negative consequences associated to intention to travel, the less control the individual may feel he/she has over the behaviour.

5.3 Tourist Perceived Risk

Tourism is a sensitive industry that is very reactive to the slightest risk, especially with regards to human safety and health safety. Tourism is usually associated with pleasure-seeking and leisure, whereas risk refers to something that is to be avoided as they impinge on the 'normal' state of pleasure in tourism, which is built upon the idea of the absence of risk. Many theories around risk within the tourism industry focus on risk and uncertainty being inherent to tourism as risk and uncertainty are essentially associated with the limits of knowledge (Williams & Balaz, 2015). Risk is sometimes understood to begin where knowledge ends (Williams & Balaz, 2015). When a travel consumer engages in the tourism industry (i.e., buying accommodation or booking flights) there is a certain degree of risk that they become involved in due to the fact that tourism products/services are intangible and can usually only be experienced after they have been paid for. Risks exists because there cannot be perfect knowledge of the future, and the degree of uncertainty is highly variable across different activities. The COVID-19 pandemic further contributes to this uncertainty as tourism operates in a new landscape and under new policies, procedures and regulations.

Although initially being introduced in consumer behaviour theories, 'tourism risk perception' has received wide attention from researchers in the tourism field since the 1990s. Roehl and Fesenmaier (1992), pioneering such research, have argued that certain levels of risk are involved in travel processes, tourist destinations and tourism activities. Ever since, many studies have emerged that use the risk perception concept to explain the naming of risk dimensions and their impact in various contexts of travel and tourism (Tsaur et al., 1997; Sonmez & Graefe, 1998; Lepp & Gibson, 2003; Boksberger et al., 2007; Dolnicar, 2005; An et al., 2010; Cetinsoz & Ege, 2013; Chew & Jahari, 2014; Casidy & Wymer, 2016; Cui et al., 2016).

Even though there exists different conceptualisations of perceived risks and its dimensions within these studies, they all build upon the concept of a considered probable loss as a result of choosing with uncertainty between tourism offerings (Cui et al., 2016; Hasan et al., 2017). Tsaur et al. (1997) defined tourist risk perception as the possibility of an adverse situation arising at the destination, while Sonmez & Graefe (1998) define tourist risk perception as the risk value perceived by a tourist in travel situations. Moutinho et al. (2011; as cited in Zhan et al., 2020) defines tourist risk perception as a function of the outcomes and uncertainties resulting from the inherent doubt related to the consumption and purchase of tourism

products. Tourist risk perception is defined by Fuchs & Reichel (2006) as the potential danger that is associated with the trip and which may change decisions around travel if it exceeds an acceptable level for the specific individual; and Maser & Weiermair (1998) define it as a function of uncertainty and its consequences, with some consequences being more acceptable to the tourist than others.

The concept of tourist risk perception is a highly contested topic (Quintal et al., 2010; Reisinger & Mavondo, 2005) and its definitions can be classified into three interpretations: subjective, objective and cognitive (Cui et al., 2016). Subjective interpretations refer to risk perceptions as the tourists' subjective feelings towards possible negative consequences and impacts that may arise during travel (Chien et al., 2017; Zhan et al., 2020), including the subjective evaluations of uncertainties involved in the process and results of consuming tourism experiences, concerns about possible losses, adverse impacts and exposure risks (Fuchs & Reichel, 2011). Objective risk perception is defined as the objective evaluations of potentially negative consequences and the level of uncertainties as a result of travel to a tourism destination, made by the tourist (Cui et al., 2016). Finally, cognitive risk perceptions concern the deviation between subjective evaluations of outcome expectations and objective consequence of a behaviour (Zhang, 2009; as cited in Zhan et al., 2020), i.e., the threshold regarding the amount of risk the tourist is willing to take on. This is because risk and risk perceptions are a multi-dimensional construct related to things such as fear, anxiety, worry and avoiding uncertainty. Uncertainty avoidance relates to certain individuals' feelings of being threatened or uncomfortable in ambiguous and unknown circumstances, which may result in the individual refraining from situations in which the outcome is not predictable.

Risk perceptions have been found to be one of the most important determinants of individual's behaviours in situations of risk (Teeroovengadum et al., 2020). Studies on the effects of risk perceptions on tourist satisfaction found that risk perceptions tend to lead to more cautious behaviour amongst travellers (Reisinger & Mavondo, 2005). Therefore, tourists' perceptions of risk are one of the most integral factors in their travel decision-making process (Rittichainuwat & Chakraborty, 2009). Literature has shown that tourist risk perceptions also have a significant impact on their behavioural intention (Cetinsoz & Ege, 2013; Maser & Weiermair, 1998; Reisinger & Mavondo, 2005; Quintal et al., 2010; Kozak et al., 2007; Fuchs & Reichel, 2011; Sanchez-Canizares et al., 2021; Rittichainuwat & Chakraborty, 2009; Floyd et al., 2004; Chien et al., 2017; Law, 2006; Karl, 2018; Williams & Balaz, 2015). Tourists view risks differently due to many factors, including differences in

geographical location and culture (Law, 2006), psychological factors (Reisinger & Mavondo, 2005) and travel experience (Kozak et al., 2007), which all impact their behavioural intention in a different way (Quintal et al., 2010). Typically, tourists avoid travel destinations and activities they consider risky (Chew & Jahari, 2014), while others engage with risk as part of travel excitement (Lepp & Gibson, 2003).

Past travel experience has been found to be the strongest predictor of future travel intentions (Floyd et al., 2004; Rittichainuwat & Chakraborty, 2009; Lepp & Gibson, 2003). Former studies have shown that tourists with greater international travel experience show a lower level of general risk perception (Fuchs & Reichel, 2011; Sonmez and Graefe, 1998) or at least a lower perceived risk in certain dimensions (Rittichainuwat & Chakraborty, 2009). Another predictor of travel risk perception is information search behaviours/sources (Kozak et al., 2007; Maser & Weiermair, 1998). High risk perception has been empirically shown to result in extensive information search (Roehl & Feisenmaier, 1992; Maser & Weiermair, 1998), as was seen in the results of a study conducted by Maser & Weiermair (1998) on 228 Austrians, showing that the higher the perceived risk of travellers, the more the tourist engages in information search, making the decision-making process more rational.

The literature suggests that tourists make their travel decisions based on their perceptions of risk, not necessarily on reality (Roehl & Fesenmair, 1992; Rittichainuwat & Chakraborty, 2009) and that the degree of the perceived risk varies before travelling and during travelling to a destination (Rittichainuwat & Chakraborty, 2009). The consequences of tourist risk perception during travel impacts their experience, loyalty, revisit intention, satisfaction and word-of-mouth engagement (An et al., 2010; Cetinsoz & Ege, 2013; Qi et al., 2009).

Studies have also focused on the relationship between tourist risk perception whilst travelling and the respective post-visit behaviour intention in terms of revisit, recommend and loyalty intentions (Cetinsoz & Ege, 2013; Quintal et al., 2010; An et al., 2010; Fuchs & Reichel, 2011). Furthermore, the effect of tourist risk perceptions has also been studied on a wide range of themes, including destination image (Chew & Jahari, 2014), attitude and satisfaction (An et al., 2010). This relationship between tourist risk perception and satisfaction has received large attention in consumer behaviour studies, with results indicating that a high level of perceived risk decreases customer satisfaction and negatively influences repurchase intention of customers (Li & Murphy, 2013; Jin et al., 2016).

It can therefore be seen that tourist risk is multidimensional, in which both the consequences and outcomes are diverse in nature (Mitchell, 1999). As a result, it is important to identify the most common risk dimensions in order to develop a conceptual foundation with tourist risk perceptions as its basis.

5.4 Identification of Risk Dimensions and Use in Tourism Literature

The risk construct has been presented in many studies and can be conceptualised as a subjective potential loss that could come from uncertainty to which some probability of occurrence can be assigned (Sanchez-Canizares et al., 2021; Quintal et al., 2010). Risk perception is a central element in the decision-making process of the traveller or tourist and may lead to the altering of decisions regarding travel and destinations (Sanchez-Canizares et al., 2021; Maser & Weiermair, 1998; Fuchs & Reichel, 2011). Risk perception has proven to be more powerful than reality (Sonmez & Graefe, 1998) and have the potential to affect travel-related decisions (Kozak et al., 2007).

Roehl & Fesenmaier (1992) were the first to contribute to the stream of research around the concept of risk perception in tourism. In the tourism context, the perceived risk of travelling in general or related to a specific destination is very likely to influence the intention to travel, the intention to change one's travel plans, destination choice or avoidance of travel or destinations (Reisinger & Mavondo, 2005; Pennington-Gray et al., 2011; Schroeder et al., 2014). Prior studies on travel risks are plentiful and usually follow different research streams. One such stream focuses on risk perceptions at specific travel destinations (Fuchs & Reichel, 2006); another on specific tourism events, such as the Olympic Games (Schroeder & Pennington-Gray, 2014); another after events violating personal security, such as terrorism (Floyd et al., 2004). A further research stream has approached the effects perceived risk on travel, travel intention and travel satisfaction (Roehl & Fesenmaier, 1992; Sonmez & Graefe, 1998; Dolnicar, 2005; Reisinger & Mavondo, 2005; An et al., 2010; Cetinsoz & Ege, 2013). These prior studies have utilised typologies of risk from other disciplines instead of identifying more appropriate travel-related risk categorisations.

Table 5.2 below summarises the literature on tourist perceived risk, although is not exhaustive. It highlights the topic under investigation in the previous research articles and identified the different dimensions of tourism risk that these research papers discovered.

Table 5.2 Previous literature on tourist risk perceptions

Researchers	**Article topic**	**Dimensions of tourism risk perception**
Sonmez & Graefe (1998)	Past travel experiences and perceptions of risk	Psychological, financial, time, satisfaction risk, physical, political, social, terrorism, equipment, health,
Maser & Weiermair (1998)	Perceived risk and information sources	Natural disasters, hygiene and disease, crimes and accidents, health concerns
Dolnicar (2005)	Barriers to leisure travel	Political, environmental, health, planning, property
Simpson & Sigauw (2008)	Traveller-driven travel risks associated with travelling	Physical, performance, psychological, financial, social
Floyd et al. (2004)	Impact of risk perceptions on travel intentions	Safety, social, financial, travel experience
An, Lee & Noh (2010)	Air travel risk factors	Natural disaster, political, physical, performance
Cetinsoz & Ege (2013)	Perceived risk and revisit intention	Physical, time, socio-psychological, satisfaction, performance
Jonas et al. (2010)	Health risk perceptions travelling to developing countries	Physical injuries and safety, sexually transmitted disease risk, drug use risk, environmentally-induced risk
Boksberger et al. (2007)	Air travel	Financial, social, time, functional, personal
Fuchs & Reichel (2006)	Destination risk perception	Financial, human-induced, natural disaster and car accident, service quality risks, socio-psychological, food-safety, weather problems
Baker (2014)	Terrorism and religious tourism	Financial, physical, social, psychological, functional, situational and travel risks
Chew & Jahari (2014)	Image, risk and revisit intention	Physical, financial, socio-psychological

Yi et al. (2020)	Perceived risk in sharing economy in tourism	Financial, privacy, physical, performance
Casidy & Wymer (2016)	Risk, satisfaction and willingness-to-pay	Performance, social, financial, psychological
Hartjes, Baumann & Henriques (2009)	Health risks and preventative behaviour	Food/water, psychological, personal and sun exposure
Reisinger & Mavondo (2005)	Travel anxiety and international travel intentions	Terrorism, socio-cultural, financial and health, safety
Rittichainuwat & Chakraborty (2009)	Perceived travel risks in Thailand	Terrorism, disease
Kozak, Crotts & Law (2007)	Risk perception and international travellers	Infectious disease, terrorist attacks, natural disaster
Zhan et al. (2020)	Risk perception and Covid-19	Health, financial, social, performance

Tourism is understood as a service-dominated industry. Due to being a part of the service sector, service-specific characteristics inherent to tourism include intangibility, inseparability, variability and perishability – which all act to intensify the perceived risks associated with them, as compared to goods (Sirakaya & Woodside, 2004). Tourism is vulnerable to distinctive risks due to the "intangible and experiential nature of tourism" (Sirakaya & Woodside, 2005, p.816). It involves an individual leaving familiar places that they have high levels of personal or tacit knowledge of, to unfamiliar places in which they have less of these, resulting in higher levels of uncertainty than in local decision making because of the tacit knowledge differences. Furthermore, the tourism industry and its 'product' is susceptible to other factors such as crime, political unrest, natural disasters, bad weather, disease, terror, unfriendly locals, strikes and local food being inedible (Hasan et al., 2017). These factors

often play a role in shaping tourist risk perception when planning tourism activities (Fuchs & Reichel, 2006; Roehl & Fesenmaier, 1992; Sonmez & Graefe, 1998; Tsaur et al., 1997).

Moutinho (1987, as cited in Hasan et al., 2017) suggests that physical, functional, psychological and social factors influence traveller risk perception when making travel decisions. Furthermore, researchers have identified four major risk factors relevant to tourism: 1) war and political instability, 2) health concerns, 3) crime and 4) terrorism (Floyd et al., 2004). Risks linked to terrorism and political instability have been found to influence travel intentions amongst even experienced travellers (Floyd et al., 2004; Rittichainuwat & Chakraborty). Health concern risks have also received wide attention (Chien et al., 2017; Jonas et al., 2010; Novelli et al., 2018) and crime is also present in the literature (Shaw, 2010; Schroeder & Pennington-Gray, 2014).

Moutinho (1987, as cited in Hasan et al., 2017) found five factors associated with tourism risk perceptions and Roehl and Fesenmaier (1992) expanded these to include seven factors, namely; physical, financial, time, equipment, satisfaction, social and psychological. Tsaur et al. (1997) divided risk factors into either physical risk (the possibility of an individual's health being in threat, injury and sickness) and equipment risk (dangers associated with equipment malfunctions). Sonmez & Graefe (1998) identified risk factors that would likely result in destination avoidance and these included health, political instability and terrorism. Fuchs & Reichel (2011) define crime, terrorism, congestion and political unrest as human-induced risk, whereas other researchers define them individually. Li et al (2020) define personal risk and health risks separately, whereas Cetinsoz & Ege (2013) define them together, under 'physical risk'. Rittichainuwat & Chakraborty (2009) include other risk types such as lack of novelty, deterioration of attractions and inconvenience of travel, which are not common to other studies. These differences in the definitions and conceptualisations suggest that there aren't a set of agreed upon risk factors in the tourism industry, but that they often converge and integrate to refer to similar things.

Tourism risk perceptions and the multiple dimensions it consists of consistently refers to negative consequences or impacts that could occur while travelling (Cui et al., 2016). Tourism studies on risk dimensions in tourism often summarize tourist risk perception as five to seven dimensions (Cui et al., 2016; Hasan et al., 2017). Five dimensions of risk include: financial/economic risk, performance/equipment risk, psychological risk, social risk and physical/health risk. The sixth dimension is the inclusion of time risk, and the seventh, that of

opportunity loss (Cui et al., 2016; Hasan et al., 2017). Studies have also recently added safety for consideration – including things like social, natural and human-induced environments and their associated risks; including the security situations regarding food, transportation, housing, entertainment and shopping at destinations (Cui et al., 2016; Fuchs & Reichel, 2011; Li, 2010). The degree of intensity of the risks is dependent on the nature of tourism services and products under consumption and the travellers' characteristics – as some travellers are inclined to avoid risky situations while others are unaffected by them (Lepp & Gibson, 2003). Some tourists are novelty-seekers, meaning they enjoy visiting new places and having new experiences, even if they might be risky (Rittichainuwat & Chakraborty, 2009).

This section has demonstrated the differences and similarities in previous literature's conceptualisation and understanding of the different components that make up overall tourist risk perception. It is interesting and important to note how the tourism risk literature is compiled of many different factors that often integrate into a similar overall foundation from which to understand tourist perceived risk.

5.5 Dominant Risk Perceptions

Even though approaches to explaining risk perceptions as a concept has found a bit of discordance, the components of risk perception are described in both consumer behaviour literature and tourism literature, resulting in the increase of the number of risk dimensions over time. Researchers have therefore tried to define the dimensions from different aspects and contexts of tourism activities as some risk factors are related to specific offers in tourism, due to different characteristics. Differences in views and explanations of risk dimensions represent a similar approach in order to describe it as a probable loss as a result of choices made in situations of uncertainty, influencing tourist behaviour even when in reality the risk does not exist (Quintal et al., 2010; Hasan et al., 2017).

Perceived risk as a research topic has been given considerable attention over the decades. Typically, scholars have divided the types of perceived risks with buying general products or services as financial, physical, performance, social, psychological and time/convenience (Conchar et al., 2004). In travel and tourism literatures, risk has often been examined using virtually the same classification system (Simposon & Siguaw, 2008). This typology and classification in the tourism literature, based on risks in general and not risks relevant to travelling, may be overly broad and therefore prevents appropriate managerial responses. For example, assessing the case of 'psychological risk' from prior literature, it's meaning could

range from ‘a disappointing travel experience’ (Sonmez & Graefe, 1998) to ‘a vacation will not reflect my personality or self-image’ (Roehl & Fesenmaier, 1992) – both meanings could require separate tourism management responses. This denotes a limitation to using risk categories that are borrowed from non-travel-related literature. Dolnicar (2005) comments further on this and suggested that using standard risk inventories might not be a good foundation for studies of perceived risk in the tourism context, and that more market-driven knowledge and insight is required into the nature of tourists’ fears and the components therein. If not, there remains only a generic and broad typology of factors comprising each category of risks that may affect travel intentions significantly – making it difficult for travel managers to develop appropriate strategies to calm concerns of perspective travellers.

Previous travel risk literature further faces a second limitation – the categories of travel risk have been determined by researchers prior to surveying respondents, instead of respondents indicating their own perceived travel risks. For example, Roehl and Fesenmaier (1992) – pioneering research into perceived travel risks – drew on other disciplines in order to define general risk categories that would seem to be valid in the context of pleasure travel as well. Research into this topic following this have similarly tended to employ these general items/categories. Fuchs & Reichel (2006), on the other hand, utilised factor analysis to identify specific dimensions of travel risks for a specific destination. In their study, they first identified three items per risk dimension for the traditional risk categories and then followed this with content analysis of interviews with tourists and guides at the destination to reveal other items (Fuchs & Reichel, 2006).

The number of risk dimensions has increased with the years of research in tourism as scholars find new dimensions to associate with new offers. However, the literature shows a common tendency to relate to particular dimensions; such as: financial risk, social/socio-psychological risk, psychological risk, physical/personal/health risks and functional/performance risk (Hasan et al., 2017). These dimensions are reported to apply to different contexts of tourism and are used to investigate tourist risk perceptions in behavioural components.

It is necessary to develop a management-actionable travel risk typology retrieved directly from travellers, such as Simpson & Sigauw (2008), who conducted a study with over 2000 respondents about their perceived risks when travelling. They then developed a typology of 10 risks specific to leisure travel from the traveller’s perspective, which comprised sub-categories of the six broad classifications of Conchar et al (2004), allowing tourism

administrators to identify opportunities for managerial response. The current paper also has its foundation in this regard as perceived risks specific to the traveller's perspective is studied. This ensures a more accurate typology gained from traveller points of view, instead of imposing prior general categories on their perceptions.

5.5.1 Definitions of Risk Dimensions in the context of Tourism

Tourist perceptions of multiple risk dimensions refers to the negative consequences that may appear when travelling (Cui et al., 2016). Researchers have therefore paid a lot of attention to discover, assess and evaluate risk dimensions associated with different tourism attractions, resources and processes (Fuchs & Reichel, 2011; Rittichainuwat & Chakraborty, 2009; Roehl & Fesenmaier, 1992; Sonmez & Graefe, 1998). These studies focus mainly on identifying the underlying risk factors that may be associated with travel destinations and activities in different contexts.

However, the factors identified in these studies are no longer sufficient to claim as common to the general tourism context, especially since the outbreak of the COVID-19 virus. Therefore, researchers such as Cui et al. (2016) and Hasan et al. (2017) summarized and ranked the common dimensions based on their level of wide application and degree of importance assigned by tourists in order to help develop a framework that assists studies of risk dimensions in different tourism contexts. Financial risks, Physical risks, Social risks, Psychological risks and Functional risks are the ones they identified as being the most recorded and given the most attention in previous studies. Table 5.3 below describes the seven most commonly mentioned risk dimensions in tourism literature and defines them in terms of the tourism context.

Table 5.3 Most common risk dimensions mentioned in tourism literature (Source: Hasan et al., 2017)

Risk Dimension	Definition	Authors
Financial risk	Risk that purchasing a tourism product or service may not or is not worth the money in terms of value	Moutinho (2000), Roehl & Fesenmaier (1992), Sonmez & Graefe (1998), Fuchs & Reichel (2006), Fuchs & Reichel (2011), Chew & Jahari (2014), Cui et al. (2016)
Physical/health/personal risk	The possibility of accident, insecurity, changing environment and weather, natural disaster, life-threatening diseases, illness and so on causing damage to personal bodily health	Moutinho (2000), Roehl & Fesenmaier (1992), Sonmez & Graefe (1998), Lepp & Gibson (2003), Cetinsoz & Ege (2013), Chew & Jahari (2014), Cui et al. (2016)
Social/sociopsychological risk	Risk that the choice of tourism products and services is detrimental to the tourists' social image, causing adverse impressions from friends and family	Moutinho (2000), Roehl & Fesenmaier (1992), Sonmez & Graefe (1998), Fuchs & Reichel (2006), Cetinsoz & Ege (2013), Chew & Jahari (2014)
Psychological risk	The risk that while purchasing tourism products or services feelings of worry, tension or embarrassment leading to a loss of self-esteem	Moutinho (2000), Roehl & Fesenmaier (1992), Sonmez & Graefe (1998), Fuchs & Reichel (2011), Cui et al. (2016)
Functional/performance risk	Risk that the quality of tourism products or services do not meet the expectations of tourists	Moutinho (2000), Cetinsoz & Ege (2013), Boksberger at al. (2007)

Natural Disaster risk	Risk of the possibility of natural disasters occurring such as flash floods, tsunamis, earthquakes	Maser & Weiermair (1998); Dolnicar (2005); Fuchs & Reichel (2006); An et al. (2010)
Time Risk	Risk referring to the possibility of losing/taking too much time or wasting time	Roehl & Fesenmaier (1992); Sonmez & Graefe (1998); Boksberger et al. (2007); Li (2010)

Each risk factor causes an expectation of a probable loss, influencing an individual's attitude towards engaging in a behaviour negatively (Quintal et al., 2010), with studies suggesting that lower perceived risks encourage consumers to evaluate products positively, whereas high perceived risks lead to customers being more conservative and hesitant to buy the product (Horvat & Dosen, 2013).

Roehl & Fesenmaier (1992) make use of risk categories from the marketing literature – equipment risk, financial risk, physical risk, psychological risk, satisfaction risk, social and time risks – in order to identify three dimensions of pleasure travel risk – namely; physical equipment risk, vacation risk and destination risk. This study's results have limited utility due to the limited number of items measuring perceived risk (one item per dimension) and the narrow scope. As an example, the item used to measure the financial risk category was 'possibility that the vacation will not provide value for the money spent' (Roehl & Fesenmaier, 1992:18), which while being useful for the intended purpose, is too general to provide actionable information for tourism organisations. Sonmez & Graefe (1998) later expanded the scale produced by Roehl & Fesenmaier (1992) by including health, terrorism and political instability risks into their study of how perceived risks may impact future travel intention. Reisinger & Mavondo (2005) also modified the risk categories by identifying 13 travel risks: cultural, financial, health, physical, equipment/functional, political, psychological, social, satisfaction, airplane hijacking and bomb explosion, biochemical attacks and time risks. Factor analysis was then used to reduce the risks into three types: terrorism, health financial risks and socio-cultural risks; which were found to significantly influence anxiety or safety perceptions of the tourists, depending whether they were domestic or international. The researchers in these previous studies made use of prior research and

logic to develop the risk categories before utilising them to test their study objectives, instead of developing empirically based travel risk categories (Simpson & Sigauw, 2008).

Dolnicar (2005), on the other hand, recognised the need for market-driven tourism perceived risk categories and typologies. Dolnicar (2005) asked respondents what aspects of the decision process of planning their next holiday do they perceive as risks, and what their concerns are. This study was exploratory in nature and utilised a student sample, but it highlighted the need for market-driven research in order to identify the specific travel-related risks that impact the decision-making of tourists (Dolnicar, 2005). Fuchs & Reichel (2006) also present as an exception, whereby they developed a multi-faceted questionnaire designed to measure the destination risk perception of Israel. This study marked the differences between traditionally used risk categories and those specific to travellers (Fuchs & Reichel, 2006). During factor analysis in the study, it was revealed that items measuring overall physical risk category are actually loaded on various sub-factors – such as human-induced risk, natural disasters or car accidents – showing that traditional risk dimensions are not relevant for travel and tourism and that travel-specific risk categories would be more useful to tourism managers (Fuchs & Reichel, 2006). In measuring specific variables that make up the specific risk construct, it allows for new directions for handling the problem – for example, high levels of human-induced risk (i.e., crime) enables legal authorities to draft a plan that addresses this particular problem. This research by Fuchs & Reichel (2006), however, is destination specific.

A study by Simpson & Sigauw (2008) developed data-driven categories of perceived risks specific to travel from the perspective of travellers and potential travellers. They collected over 2000 questionnaires, asking respondents to “Think about your last trip to any location and list all the concerns or risks you considered before deciding to go on the trip “(Simpson & Sigauw, 2008:318-319). The authors then used a traditional perceived-risk framework to develop a risk classification sub-schema more relevant to travel. This process was done inductively, based on the comments supplied by the respondents. Several iterations were required before a final category scheme was developed that fit the data well and was both inclusive and exclusive to all comments. These specific travel risk categories were: health and wellbeing, criminal harm, transportation performance, travel service performance, travel and destination environment, generalised fears, monetary concerns, property crime, concern for others and concern about others.

Thus, further research is necessary to find travel risks that are relevant in order to understand potential impediments to travel, in general, and to give the tools to tourism organisations to appropriately respond. This is particularly useful in periods of pandemic contexts as the risks perceived by tourists may be of a higher magnitude or of a different typology than usual travel risks in non-pandemic situations.

5.6 Risk Perceptions as Antecedents of Behavioural Intentions

Tourism product choice is influenced by tourist perceived risk which also influences purchasing and behavioural intention of repurchasing (An et al., 2010; Cetinsoz & Ege, 2013). Furthermore, tourism studies have shown that risk perceptions influence destination image (Chew & Jahari, 2014; Sonmez & Graefe, 1998), satisfaction (An et al., 2010; Jin et al., 2016; Quintal et al., 2010), purchase and repurchase intention (Cetinsoz & Ege, 2013; Chew & Jahari, 2014).

Two theories help explain the link between perceived travel risk and the travel behaviour of tourists: Social Cognitive Theory and Protection Motivation Theory.

5.6.1 Social Cognitive Theory

Social Cognitive Theory (SCT) was introduced by Bandura (1986; 1997, 2001; as cited in Schunk & DiBenedetto, 2020) and operates on the conceptual framework of "triadic reciprocality" (reciprocal interactions) between three sets of influences – behavioural, environmental and personal (Schunk & DiBenedetto, 2020). This concept describes motivational processes as personal influences that are continuously changing and that affect behaviours and environments and that are affected by them in return. Central to Bandura's theory is that individuals strive to attain a sense of agency, the belief that they have a large degree of influence over the important events in their lives (Schunk & DiBenedetto, 2020). They engage this agency through the use of cognitive and self-regulative capabilities, such as setting goals and creating strategies to attain them. Integral to this concept of agency is the individual's sense of "self-efficacy" – their perceived capabilities to learn and perform actions (Bandura, 1997; as cited in Schunk & DiBenedetto, 2020). The interacting sets of influences (behavioural, personal (cognitions and emotions) and environmental) can be described as "what people think can affect their actions and environments, actions can alter their thoughts and environments and environments can influence individuals' thoughts and actions" (Schunk & DiBenedetto, 2020:2). The model describes motivational processes as types of personal influences and is in line with the idea of an interplay between internal and

external influences that impact motivational processes (Schunk & DiBenedetto, 2020). Figure 5.1 below describes the Social Cognitive Theory graphically.

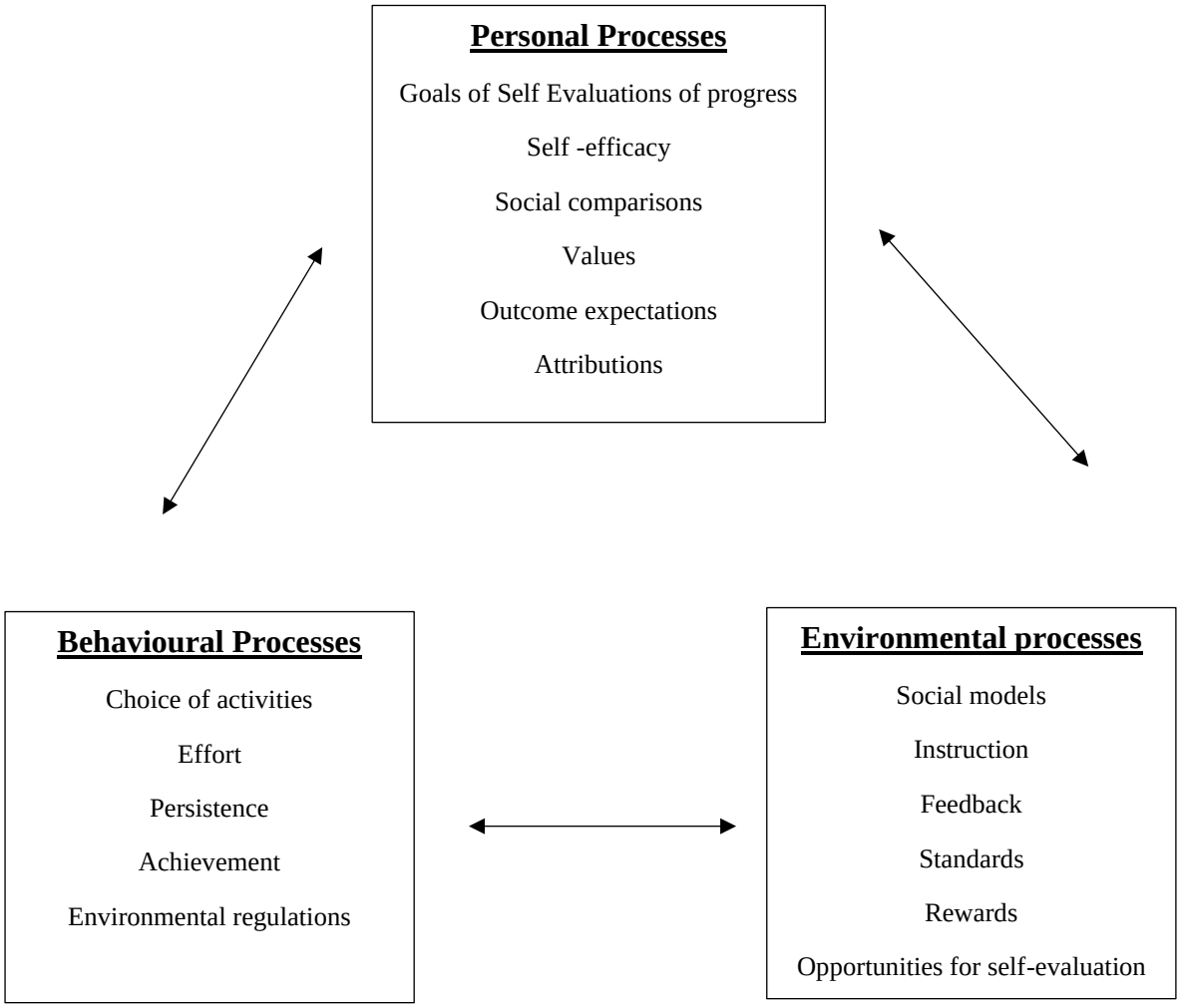


Fig 5.1 Social Cognitive Theory (Source: Schunk & DiBenedetto, 2020)

SCT emphasizes that learning occurs in a social context through the dynamic and reciprocal interaction between people (personal factors), their behaviour and their environments. It comments on the way in which individual's acquire and maintain behaviour while considers the social environment in which the behaviour is performed. Outcome expectations (beliefs about the likelihood and value of consequences of behavioural choices) may be in terms of physical, social or self-evaluative outcomes. In the context of the COVID-19 pandemic and the risk perceptions associated with it, for example, these outcomes could be associated with fears of getting infected, be looked upon disapprovingly by society and feeling guilty about the spread of the virus. These expected outcomes in the form of perceived risk, shape the intended travel behaviours of the tourist and consequently, their actual behaviours

(Teeroovengadum et al., 2020). In terms of the above model, the perceived travel risk would represent a personal process, the environment in which this occurs is in the current pandemic situation and the behavioural process includes the decision to travel or not.

5.6.2 Protection Motivation Theory

Rogers (1975; as cited in Schroeder & Pennington-Gray, 2016) developed the Protection Motivation Theory (PMT) and it is considered one of the most prominent models existing in the field of health behaviour (Schroeder & Pennington-Gray, 2016). This attitudinal model focuses on the cognitive processes that mediate behavioural change and offers a framework for understanding the reason for attitudinal and behavioural changes in risky situations. A core assumption that exists in the PMT is that two cognitive processes are undergone by individuals when deciding whether or not to engage in protective behaviours when faced with risk. First, the threat appraisal process by which an evaluation of risk in terms of perceived severity and perceived vulnerability is undertaken (Schroeder & Pennington-Gray, 2016). Perceived severity refers to the level of harm that an individual may experience due to an event, whereas perceived vulnerability represents the perceived likelihood that the threatening event will occur. Secondly, the coping appraisal process in which individuals evaluate the behaviours to cope with risk, in regards to response efficacy and self-efficacy (Schroeder & Pennington-Gray, 2016). Response efficacy refers to the perception of the effectiveness of the behaviour in terms of protecting oneself from the risk, whereas self-efficacy is the perception that the individual will have the capability to successfully carry this recommended behaviour out in order to protect oneself from the risk.

PMT assumes that threat appraisal occurs before coping appraisal because there must be a perception of risk before the individual can decide to engage in risk-reduction behaviours or not. The outcome of the two cognitive processes, which act as mediational processes, is that they come together to stimulate, maintain and guide risk-reduction behaviours (Schroeder & Pennington-Gray, 2016). Figure 5.2 below depicts the PMT graphically.

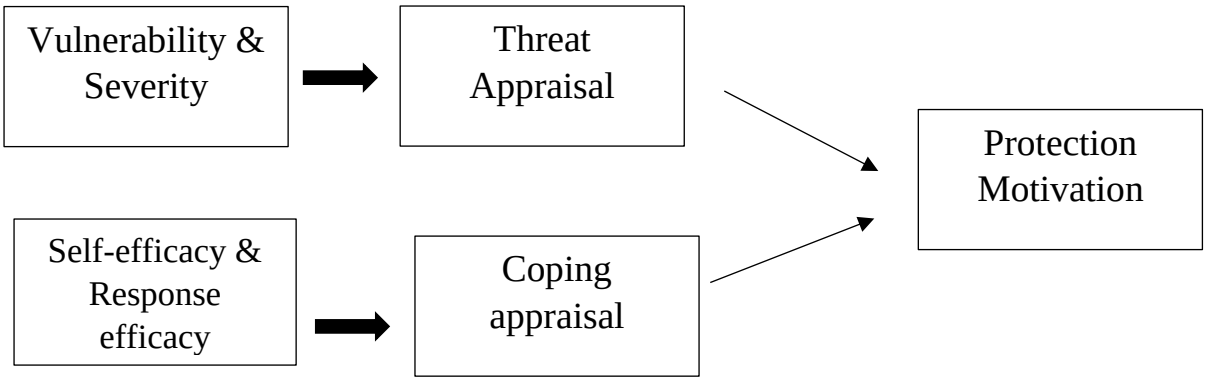


Fig 5.2 Protection Motivation Theory (Source: Schroeder & Pennington-Gray, 2016).

In terms of COVID-19, risk perceptions may influence both the perceived vulnerability and severity of the virus as well as the individual's self-efficacy and response efficacy in terms of their ability to perform behaviours that will protect themselves from any adverse consequences of travelling internationally during the current pandemic situation. Threat appraisals, which will contain perceived travel risks may result in the tourist engaging in certain behaviours that will mitigate these perceived risks and coping appraisal is the tourist's perception of how well they would be able to protect themselves from the perceived travel risks.

Both the SCT and PMT show that tourist perceived risk impact on their behavioural intentions and ultimately their behaviour. SCT suggests that the pandemic will influence the personal processes of the tourist and their associated behaviours, as will their personal processes (expected outcomes – such as perceived risks) interact with their behavioural decisions and the pandemic and finally, their behaviours interact with their self-evaluations and on the state of the pandemic. In terms of the PMT, tourist's motivation to travel would depend on their assessment of the degree of severity of the potential risks and their susceptibility to it and if there are any ways of avoiding such risk. These are relevant to the current paper as it explains how perceived risk can be a part of internal processes that are influenced by external processes and that work in conjunction to determine behaviours and actions. It emphasizes the importance of investigating and evaluating the impact that new perceived risks may have on tourists' behavioural intentions in terms of travelling, and identifying what these perceived risks may be is an important place to start.

5.7 Summary and Conclusions

This section describes concepts of perceived risk, tourist perceived risk, risk dimensions and their associations in the tourism literature and risk perceptions as antecedents to behavioural intentions. This section was necessary in order to create an in-depth understanding of the concept of risk so that a foundation is created in which to address the contents of the study of perceived risks of international travel for South African travellers in the current pandemic context.

The section began by describing the concept of perceived risk in consumer behaviour literature; commenting on the difference between risk and uncertainty. It also defines six different dimensions of perceived risk: financial, physical, performance, psychological, social and time risks common to consumer behaviour literature. It further made the distinction between three interpretations of perceived risk: subjective, objective and cognitive. Risk perception was then defined for use in this study.

The next section described perceived risk in the touristic context. Different definitions of tourist perceived risk was provided by different authors. Perceived risk has also been shown to influence behavioural intention; and tourists perceive risks differently based on geographical location, culture, psychological factors, past travel experiences and information searches. Some tourists avoid risky travel, while others purposely engage in it. It also addressed the relationship between tourist perceived risk and revisit intention, destination image, attitude and satisfaction.

This section then went on to discuss previous literatures in tourism regarding different risk dimensions making up the tourist perceived risk, and different elements of tourist perceived risk used in previous studies are investigated. Due to the literature identifying risk dimensions of various dimensions, the next part of this section highlighted the most dominant risk dimensions as per the literature and defined these dimensions in terms of the tourism context. It further highlighted the importance of developing a market-driven risk typology relevant to the current context in which tourism finds itself: that of the COVID-19 pandemic.

Two theories that may explain the link between perceived travel risk and travel behaviours were explained. Social Cognitive Theory could be used to describe how perceived risk could be increasing due to the pandemic and in turn impacting on behaviour. Each factor in this triad are reciprocally determining each other. Protection Motivation Theory notes that perceived risk impacts threat and coping appraisals which in turn influences protection

motivations of tourists. Heightened awareness of risks could be impacting these appraisals, resulting in the protective behaviour of tourists.

This section was useful in conceptualising the concept of perceived risk and allows the reader the ability to engage with the methodology and results of this study with background knowledge. Results of the South African travellers' perceived risks of travelling internationally in the current pandemic situation can be assumed to possibly fall within the dimensions previously highlighted in the tourism literature, with the addition of new dimensions that may arise from the investigation.

CHAPTER 6: METHODOLOGY

6.1 Introduction

Due to the importance and weight of the tourism sector in the economies of many countries and its contribution to the country's Gross Domestic Product (GDP), it has been given increasingly more attention. In this context, strategic management and planning emerges as an important tool to manage tourism sectors and promote economic growth. Ritchie (2004) argues that planning is central to the success of tourist destinations and that attention is needed to be placed on creating value in tourism products and services for current and potential travellers in order for the destination to reap the economic and social benefits from this added value. In order to provide the tourist with a touristic offering that they value, it is important to understand the elements that make up their perceived travel risk, so that tourism practitioners can adapt their offerings to be in alignment with what the tourist is seeking and avoiding.

The COVID-19 pandemic risk has resulted in increased anxiety which is one of the key factors impacting tourists' holiday planning and decision-making. Travel risks increase when there is an increase in travel-related risks, leading to tourists changing their vacation plans and destination choices. Health-related risks, such as the risk of being infected by a disease, play a role in the decisions made. The research in this dissertation contributes to the body of knowledge currently growing around the impacts of COVID-19 by explaining tourists' risk perceptions - it provides empirical evidence on the change in tourist perceptions and fears, due to the pandemic, and provides insight on the impacts thereof on behaviour.

It is appropriate to assume that there are significant variations amongst the factors that define risk perception for different people. To characterise the risk perceptions of South African travellers, it is crucial to consider multiple risk dimensions that are involved in travel decision-making, particularly in times of a pandemic where risk perceptions may be transforming the idea of tourist risk previously discovered in prior studies. This can provide an evidence-based perspective on risk perceptions, with the potential to contribute to a better understanding of the changing tourism market. Therefore, efforts towards developing sound models that combine multiple determinants of travel risk perceptions, engaging multiple stakeholders – based on sound methods – to enhance the potential of monitoring risk

perceptions and of foreseeing the impact of these perceptions on the tourism industry, is useful.

As noted previously, prior travel literature on the classification of risk have typically been built on consumer behaviour theories of general buying behaviour and not necessarily for perceived risks that correspond directly with travel and tourism. This results in the risk typology possibly being too broad and providing little relevant information for appropriate managerial response in the tourism industry. Dolnicar (2005) and Simpson & Sigauw (2008) suggest that using risk categories borrowed from non-travel related research may be insufficient for tourism research, and that market-driven insights into tourist fears and uncertainties and the precise components thereof is required. When risk factors comprising the risk typology of tourists are too generic and broad, they become ineffective for tourism managers and decision-makers in targeting and settling potential traveller concern. This become particularly relevant in time of a global pandemic as the tourism landscape and the perceptions therein, are evolving.

Furthermore, previous travel risk research has seen the types of travel risk categories being determined by experts prior to surveying respondents instead of respondents identifying their own perceived risks (Simpson & Sigauw, 2008). The need to develop a management-actionable travel risk typology from the standpoint of the traveller is important, now more than ever and this study fulfils this need by investigating travel risks as perceived and identified by South African travellers themselves, in terms of international travel in the current pandemic climate. Therefore, this work contributes to the literature by developing a risk typology specific to international travel following the COVID-19 pandemic, derived directly from South African travellers. These identified risks and their subcategories will allow tourism providers the ability to discover opportunities and identify threats in the tourism industry and paths the way to appropriate managerial response. Furthermore, the application of these risk factors making up travel risk to a process of multi-criteria decision analysis will present the industry with a weighted model that allows the evaluation of different destinations' performance in terms of perceived travel risk, as well as the evaluation of possible interventions implemented in attempts to mitigate tourist perceived risk. The results of this study will provide tourism officials with the information needed to implement strategies that minimise perceived travel risks, contributing to the rehabilitation of the tourism economy following the damage of the pandemic.

The research for this dissertation, with the aim of advancing period-relevant knowledge on tourist risk perceptions with the potential to promote and encourage the tourism sector, adopts a Multi-criteria Decision Analysis (MCDA) methodology with a MACBETH approach, which is operationalised through the use of a Delphi Technique survey. Prior to this study, an extensive literature review was conducted as well as a preliminary data collection using Google forms. Its objectives are to create a tool with the capacity to synthesize evidence that can later be used for policies and actions to address identified risk perceptions for tourists, particularly after the COVID-19 pandemic.

Vieira et al. (2020) propose a new Collaborative Value Modelling framework in which there is a combination of Delphi and multi-criteria decision conferencing in order to build widely informed evaluation models. They argue that in situations that involve multiple stakeholders' perspectives, there is a need for an appropriate methodology that achieves two objectives: firstly, the technical objective of creating a sound model of values that combines multiple perspectives about the problem and the social objective of creating collective agreement around the model under construction (Vieira et al., 2020). Therefore, an integrated socio-technical setting that enhances multicriteria decision analysis with a web-Delphi participatory process is appropriate and useful (Vieira et al., 2020). This framework will support the process of the acquisition of judgemental knowledge within each one of the multicriteria process stages, from identifying and weighting criteria to building functions (Vieira et al., 2020). This paper makes use of this process described by Vieira et al. (2020) as it obtains perceived risk evaluation criteria from a sample of South African travellers through the participatory process of a web-Delphi and, although not in a decision conferencing procedure as Vieira et al. (2020) describe, obtains weighting and value functions for the criteria from the panellists, once again, through the Delphi, which is then inputted into the M-MACBETH decision support system. This is useful in terms of collecting and integrating constructed shared judgemental knowledge in a context where travel risk perception is made up of different elements and criteria, particularly in a time where international travel is undergoing changes due to the COVID-19 pandemic.

Organisations and risk managers have been looking for processes to prevent risk that threaten the goals of their operations and are increasingly recognising the need to determine the relative significance of different sources of risk (Bana e Costa et al., 2014) and the same can be said for any tourism organisation. Bana e Costa et al. (2014) recommends the use of MCDA methods, based on the MACBETH approach to improve study design when

prioritising risks and interventions to reduce risks. MCDA methods and the MACBETH approach allows for the accounting for the multiple dimensions that are involved in risk impacts and allows for the qualitative and quantitative information of risks and the subjective preferences of decision makers to be holistically incorporated (Bana e Costa et al., 2014). Risk management can be understood as relating to all sources of risk that can affect an organisation in terms of its goals, and the traditional way of assessing and comparing risks in order to define risk management strategy is through the use of Risk Matrixes (RMs). However, Bana e Costa et al. (2014) note the several inconsistencies related to the use of RMS and note that the major limitations of RMS are still unsolved and requires further theoretical and applied research – therefore, they recommend the use of MCDA methods to improve upon the traditional RM framework.

This section describes the methodology used in this research, beginning with describing the MCDA methodological processes, which includes the Delphi technique and MACBETH methods. It depicts the three phases involved in MCDA processes – the structuring phase (which includes Delphi-based research processes as presented by Beiderbeck et al. (2021) - these three phases are broken down in terms of the research aim for this paper), the evaluation phase (which involves the adoption of MACBETH as an approach, as presented by Bana e Costa et al. (2012)), and the prioritisation phase.

The research goal requires a methodological approach which firstly, collects and interprets information about risk indicators on the one hand, and secondly, ranks the indicators based on their relevance on the other hand. Therefore, a Delphi study combined with a Multi-Criteria Decision Analysis (MCDA) is used to fully address the research question. A combination of these methods has previously been shown to solve research designs which involve decision-making under situations of high complexity and uncertainty (Vieira et al., 2020; El Gibari et al., 2019; Santana et al., 2020; Venhorst et al., 2014; Vidal et al., 2011; Schoubroeck et al., 2019).

A Delphi survey is an iterative process of group facilitation designed to transform opinion into group consensus (Hasson et al., 2000). It involves the pooling of “expert” opinions to reach consensus based on structured feedback. Utilising group feedback from the previous round, the researcher develops another round of questions for the respondents (Okoli & Pawlowski, 2004). This qualitative survey method contributes to a higher efficiency of quantitative techniques such as MCDA (ECDPC, 2015). As such, the multimethodology used

multi-criteria decision analysis to appraise risks on a common basis and was used to engage stakeholders (international travellers) in multiple Delphi rounds to identify important risk dimensions for the tourism industry in South Africa. The participants are then engaged in a process of MCDA whereby the risk dimensions discovered are evaluated and weighted in a mathematical multicriteria model in order to address which are of most importance.

6.2 Multi-Criteria Decision Analysis (MCDA)

Multicriteria decision analysis (MCDA) is used in various disciplines and settings for decision-making. Examples include environmental decision-making and policy (Steele et al., 2009; Huang, 2011), in healthcare for the evaluation of the performance of logistics processes in public hospitals (Longaray et al., 2018) to rank and/or order allocated resources; in policy decision-making, such as the prioritising of investments in public health (Santana et al., 2020; Venhorst et al., 2014) and in public strategic planning (Bana e Costa et al., 2014; Bana e Costa et al., 2002). MCDA has also been used to evaluate airport performance and efficiency (Jardim et al., 2015), as well as to conduct risk assessments in airport maintenance runway conditions (Cunha et al., 2021). In the tourism field, MCDA has been used to develop evaluation indexes for tourist destination competitiveness (Carayannis et al., 2018; Cracolici & Nijkamp, 2008; Botti & Peypoch, 2013).

The MCDA methodology application can be understood as an interaction between the objective and the subjective, combined with uncertainty and instability (Bana e Costa et al., 2006). This study applies a multicriteria approach to decision support that is based on three fundamental points: firstly, The Structuring; second, The Evaluation; and thirdly, The prioritisation/recommendation phase (Bana e Costa et al., 2006). It can be understood as a participatory process and methodology that is applied differently to different problem contexts

The objective of MCDA is the study of decision problems in which several points of view must be taken into consideration. When making a decision, one generally considers several criteria that are more or less conflictive. Conflicts may exist around several criteria, and the decision maker has to consider the pros and cons of each one to reach the final optimal decision. This is the foundation of a multicriteria decision problem (Jardim et al., 2015). MCDA is a well-researched framework that can simultaneously assess multiple criteria in order to preform priority settings of different interventions or policies that address certain circumstances (Venhorst et al., 2014). There are different proposed approaches of MCDA but

according to Doogsen et al. (2009), the following elements are usually involved in this process; 1) selection of relevant interventions; 2) selection of criteria for priority setting; 3) collecting evidence and rating the performance of interventions on selected criteria and 4) deliberation on the performance of interventions and evidence with the aim to choose the best interventions for selection. Similarly; the four steps within which MCDA is usually conducted are described by the Canadian Agency for Drugs and Technologies in Health (CADTH, 2014; as cited in ECDPC, 2015) as: 1) identifying and weighting of criteria according to importance; 2) identifying all possible courses of action (or alternatives to the planned action); 3) scoring of alternatives based on information of each criterion; and 4) calculating weighted scores from the criteria weights and criteria scores.

This research paper, however, does not incorporate interventions into its processes and focuses rather on the selection of criteria for priority setting and weighting these criteria, in terms of the risks that South African travellers perceive in international travel in a pandemic situation. It also evaluates destinations based on their performance in regards to the perceived risks that are presented. MCDA has been criticised for being technically complicated, therefore, the development of a tool to support local policy makers in selecting criteria and rating performances of interventions on these criteria is required (Venhorst et al., 2014).

It is essential to find new ways of thinking about strategic planning and what we understand as decision making under uncertain situations, where it is necessary the determine and formulate priorities over time. In this light, the MCDA aims to offer support to managers in decision-making, based on an interactive process of reflection and learning and providing knowledge about the problems being faced (Bana e Costa et al., 2012). Bana e Costa et al. (2006) note that the distinction between multicriteria methodologies and traditional assessment methodologies is the incorporation of experts' subjective values into the assessment models. The model allows the researcher to analyse variables of a different nature (qualitative and quantitative), simultaneously. This helps identify solutions that can support decision-makers in finding the best solutions in addressing traveller perceived risks around travelling international following the pandemic.

Therefore, the objective of this study is to develop a rating tool against which destinations, strategies and interventions addressing tourist perceived risk can be assessed. The rating tool will be composed of criteria, criteria definitions, criteria weights and impact scales in order to measure the overall impact of perceived risk interventions and support priority setting

objectives – such a tool would be able to be used in a broader, MCDA based, priority setting process to develop risk control strategies in a local setting.

MCDA calls for the incorporation of expert opinion and empirical data. This methodology is flexible and can be adapted to suite the context of the risk-ranking exercise (ECDPC, 2015). The number of criteria used will vary according to the need, and weighting can be assigned to criteria through the use of different methods, such as simple relative ranking or Bootstrap method (ECDPC, 2015). The MCDA tool has the potential to be created to suite a certain context, and then adapted to suit a different local context (ECDPC, 2015). This makes this research particularly useful as its findings can be used as a blueprint when addressing tourist perceived risks in other contexts under the pandemic situation.

Although MCDA methods are generic and can be applied to different areas, the literature regarding the use of it in the tourism field is quite narrow (Botti & Peypoch, 2015). As such, this research paper combines the Delphi technique with the MACBETH approach in an attempt to analyse and identify subjective travel risk perceptions and the elements therein so as to help find solutions that are more transparent and in line with reality. Fig 6.1 below illustrates the methodological procedures followed in this research paper.

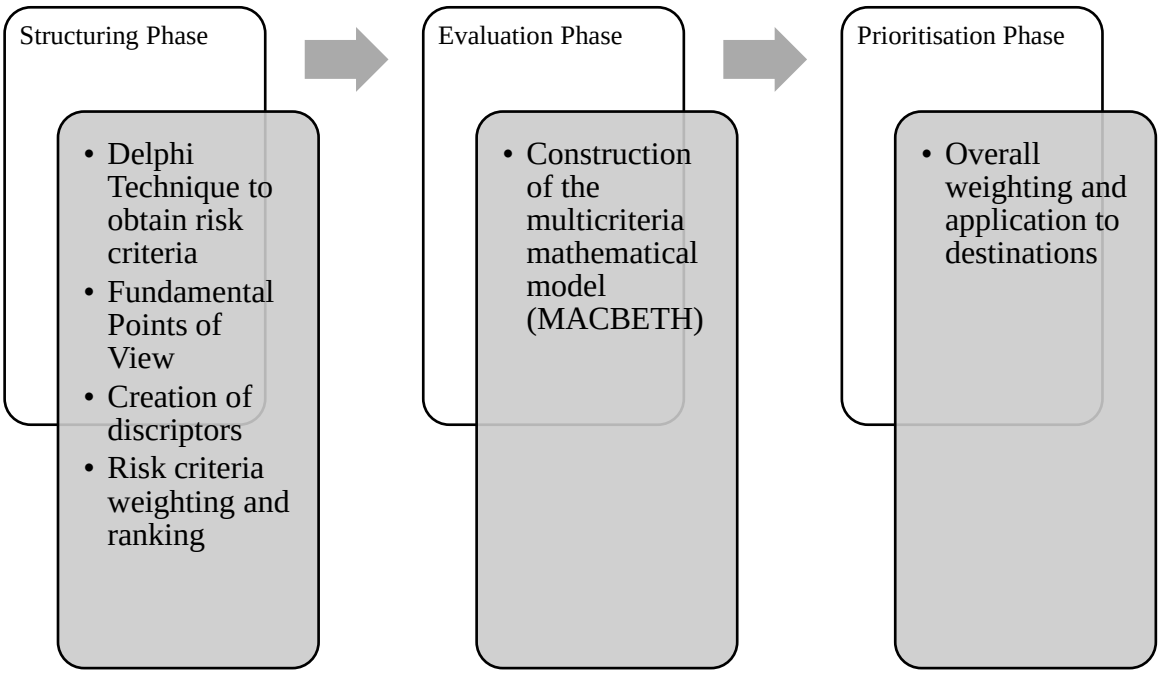


Fig 6.1 Structure of the methodological process

As can be seen, the study was divided into three main stages: 1) the structuring phase; which in this study was operationalised through the use of multiple Delphi rounds; 2) the evaluation phase, in which the MACBETH technique was utilised to obtain trade-offs between the risk criteria; and 3) the prioritisation phase, in which the overall weighting of the risk evaluation index is presented and applied to different destinations in order to evaluate their performance in terms of the perceived travel risks of a panel of South African travellers. This considered, this study is classified as both qualitative and quantitative. It is mostly qualitative in the structuring and prioritisation phases and quantitative in the evaluation phase through the establishment of a mathematical multicriteria model. In terms of the objective of this study, it can be defined as exploratory as it seeks to explore the perceptions and concerns of travellers, along with the relative importance of these concerns, to generate a better understanding of the travel decision-making process within a pandemic context.

6.3 The Structuring phase: The Delphi Technique

In this study the structuring process began with an in-depth literature review and a preliminary process, both of which informed the Delphi process that took place. The decision makers have three tasks that need to be completed in this structuring phase: 1) identify the options; 2) identify risk impact criteria; and 3) identify descriptors of performance (Figueiredo & Oliveira, 2009). The options, in this context are risks associated with travelling internationally in a pandemic situation, and for application of the MCDA model, the decision makers (the travellers) identified risks through a Delphi process – more specifically, in the case of this research, this entailed uncovering and identifying the perceived travel risks that are specific to South African travellers in a pandemic context. This technique allowed for this complex issue to be structured, organised and evaluated on the basis of the concerns and perceptions coming directly from the travel consumer (i.e., the decision makers in the context of deciding to travel or not). The process that was followed in this study is better defined and explained in the Delphi Technique section to follow.

The Delphi technique is described by Hasson et al. (2000:1009-1010) as a “group facilitation technique that seeks to obtain consensus on the opinions of ‘experts’ through a series of structured questionnaires (commonly referred to as rounds)”. The questionnaires are anonymously completed by the ‘experts’ (often referred to as the panellists, participants or respondents). The responses from each questionnaire are fed back to the participants in summarised form as part of the process. It is a scientific method of organising and managing

group-structured communication processes, aiming to generate insights into current or future challenges, particularly in situations where there is a limited availability of information (Rowe & Wright, 2011; Beiderbeck et al., 2021).

The Delphi survey technique was originally developed by the Rand Corporation in the 1950s for technological forecasting as a way to make effective decisions in situations where there is contradictory or insufficient information, creating a need for consensus methods. The Delphi technique has been previously used in the tourism literature. Cunliffe (2002) utilises the Delphi technique to undertake long-term forecasts for the tourism industry in terms of natural and human risks. Von Berger & Lohmann (2014) utilises the Delphi technique in order to identify the most prominent challenges to global tourism and to understand their nature, drivers and effects. Huang et al. (2011) applies the Delphi technique to explore the external environment forces of adopting a travel blog marketing channel from the perspective of travel agencies. Kaynak et al. (1994) made use of the Delphi survey to predict future tourism potential.

Furthermore, it is also a common technique employed in the process of qualitative risk assessment (Valis & Koucky, 2009; Markmann et al., 2013; Shi et al., 2020; Zhu et al., 2018). When applied to the risk management field, it can be used to both identify risks and subsequently assess the likelihood and impact (Safran, 2021). This process requires experts to produce an opinion on how likely they think the risk is to occur and the consequences of its occurrence. These responses are aggregated and reviewed by the participants until consensus is achieved (Safran, 2021). The ECDPC (2015) notes Delphi studies have been widely used to achieve consensus among experts. They suggest that in the context of communicable diseases, Delphi discussions could be most effective at various stages of the risk ranking process through identifying the diseases for prioritisation, discovering criteria for assessment, deciding how criteria should be weighted, independently scoring criteria, and discussing aggregated results (ECDPC, 2015).

It can therefore be understood as an iterative, multistage process with the aim of combining opinions into group consensus (Mckenna, 1994). The Delphi technique builds on a foundation of anonymity between participating experts who are asked to assess and comment on statements or questions regarding a particular research topic (Keeney et al., 2001), such that participant-related information can be collected, such as their expertise or confidence. Malhorta & Birks (2006:238) describe respondent anonymity as the respondent's perceptions

that their identities will not be discerned by the researcher or fellow participants, and that such anonymity is high in internet surveys as there is no contact with the interviewer while responding. The Delphi technique is designed to examine levels of consensus among experts of a given topic, making use of rank-order questions, open-ended questions or rating scales (Beiderbeck et al., 2021). During the study, the group opinion of the participants is summarised and given back to the participants during multiple rounds centring around the same theme. Each round allows the respondents the possibility to review the summarised results and reconsider their evaluations and assessments based on the contributed quantitative and qualitative data (Linstone & Turoff, 2011; Beiderbeck et al., 2021).

The first round may collect qualitative comments that are then fed (in quantitative form) back to the participants through a second questionnaire, or alternatively, qualitative data can be collected prior to the Delphi and used quantitatively in the first round (Hasson et al., 2000). After the results from the second questionnaire are statistically analysed regarding group collective opinion, the results help formulate the third questionnaire. This process repeats until consensus is achieved or until the law of diminishing returns sets in (Hasson et al., 2000). Said differently, responses are summarised between rounds and communicated back to the participants in the form of controlled feedback, until consensus is reached or until the number of returned questionnaires decreases.

The Delphi technique is intended to lead to a convergence of opinions, providing a more accurate set of results than other traditional opinion-polling techniques. It further produces results that are more accurate than those achieved from group discussions or brainstorming sessions through its ability to rule out personal sensitivities among participants that may result in possibly destructive group dynamics – for example; social desirability, which is described by Malhorta & Birks (2006:238) as the tendency of respondents to provide answers that may not be accurate due to them being desirable from a social standpoint – in other words, giving responses they feel to be acceptable to the interviewer or other participants. The Delphi further allows for the gathering of opinions without physically bringing participants together and, with the use of successive questionnaires, opinions are gained in a non-adversarial manner while the collective opinion is fed back. This assists in informing the individuals of the current status of collective opinion and helps them to identify items they may have missed or thought unimportant. The opportunity then exists for participants to change their opinions (Mckenna, 1994).

Since the outbreak of Covid-19, times of uncertainty have made this form of research particularly useful as participants re-evaluate current regulatory, social, economic and technological implications of the pandemic. This makes the research useful in that it facilitates a discussion that is valuable to all participants as they navigate a similar level of unsurety during an unprecedented time, thus sharing common challenges, as well as contributes to understanding the current viewpoints held by the tourism market. Beiderbeck et al. (2021) note that the results that are obtained from Delphi surveys can act as the final results, but they are becoming increasingly linked to mixed methodologies and aiding further research.

Below is Figure 6.2 which depicts the three phases of Delphi-based research, adapted from Beiderbeck et al. (2021). This includes stages of preparing, conducting and analysing. The next stage describes these stages as applied and carried out in this research.

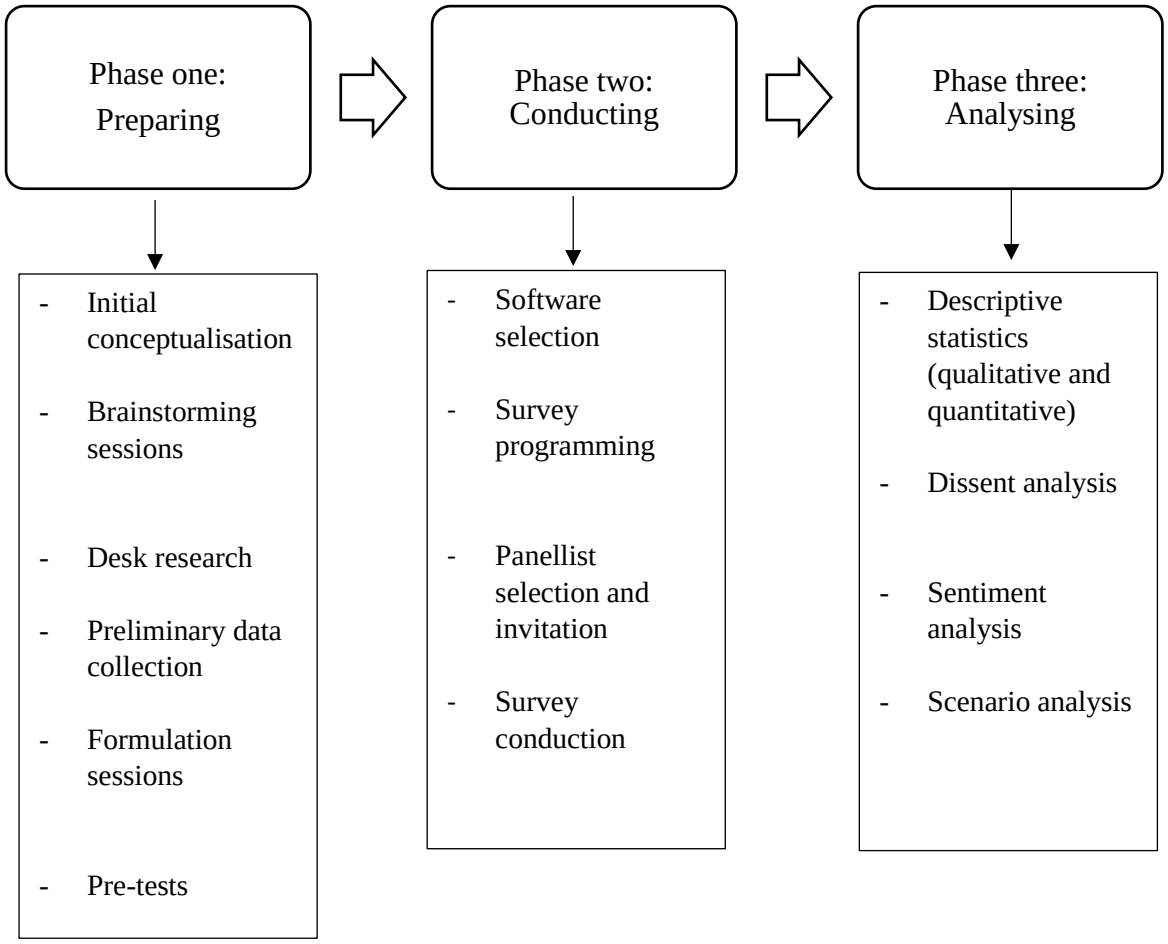


Fig 6.2. The three phases of Delphi-based research (Source: adapted from Beiderbeck et al., 2021)

6.3.1 Preparing a Delphi Survey

This phase, as described by Beiderbeck et al. (2021), typically involves four processes: definition of research goals, definition of Delphi format, definition of Delphi statements and definition of additional questions. In order for these processes to be achieved, it is important to begin with an initial conceptualisation process in order to define the research goals and Delphi format. Brainstorming with thesis supervisors via Zoom, as well as desk research were essential in order to allow for the uncovering of prior and current research and identify major contributing factors in the industry currently.

i. Initial conceptualisation, brainstorming sessions & desk research:

The initial conceptualisation was necessary to define the overall research goal – on the one hand, we wish to facilitate a discussion within the travel consumer industry amid the COVID-19 crisis, thus adding practical added value to all those who face unprecedented challenges due to the pandemic, and on the other hand, we want to gain scientifically accurate insights into the effects of COVID-19 on South African traveller risk perceptions through the use of the Delphi technique which informs a process of MCDA, providing travel and tourism practitioners with useful information.

An extensive and detailed literature review on prior studies pertaining to travel risk perceptions with the aim of identifying risk factors affecting travel intention and travel behaviour was carried out. This literature research made use of b-online and Ualg online libraries and was conducted in order to identify the first set of predefined risk categories. Different combinations of the terms ‘perceived risk’, ‘tourism risk’, ‘tourism safety’, ‘pandemics’, ‘travel risk perception’ was used in this query. The list of results was evaluated and discussed in order to avoid overlap in criteria.

Brainstorming online sessions were carried through with researchers who have prior knowledge in the Delphi domain, my supervisors, Professor Diogo Filipe da Cunha Ferreira and Luis Gomes, in order to define the Delphi format – which includes three central elements: scope, theory/framework and sequential or real-time conduction (Beiderbeck et al., 2021). The scope refers to who the study is intended to be focused on: in this study, the focus is on South African travel consumers that have travelled internationally before. The theory/framework exists within prior studies on perceived tourist and travel risk, as well as the concept of risk assessment, in which Delphi studies are often used as a method of identifying risk factors. It was decided that a real-time Delphi would be used in this research

as the internet survey program “Welphi” (web-Delphi based) allowed for convenient and resource-efficient conduction of the Delphi processes.

Schmalz et al. (2021) note that desk research before and during a Delphi study, as well as a thorough literature review, is critical. This does not, however, need to be limited to scientific bodies of research, especially when conducting prospective, forecast studies in which a lot of existing literature may not be available. In this case, existing research on the impact of COVID-19 on the risk perceptions of travel consumers is not abundant as the global crisis is ongoing and relatively recent. Therefore, it was useful to also focus on the popular press and media to identify any emerging, urgent issues that may be relevant to the research topic. Therefore, screening online travel articles and the information that is emerging about travel in the current pandemic context gives a first idea for potential risk factors. The initial long list of statements was first captured on Microsoft Excel and discussed with the research team, their feedback was used to further expand or eliminate factors to refine the list.

ii. Preliminary data collection:

This initial list of risk factors was then applied to the preliminary data collection process prior to the Delphi process: an online survey via Google forms to collect opinions and perceptions directly from South African travellers in the key risk dimensions from the initial list that they viewed as relevant for analysing the risks involved in travelling internationally in the current pandemic situation. A research design, according to Malhorta & Birks (2006:58), details the procedures carried out in the process of obtaining the information needed to solve research problems. This preliminary process is classified as an exploratory design as its objective is to provide insights and understanding of the nature of a topic. The Delphi process, on the other hand, was a descriptive process as it was used to determine the perceptions of consumers and to describe the characteristics of travel consumers in South Africa in terms of their perceived risks.

This preliminary exploratory study utilised a survey design (via Google Forms). This exploratory process is appropriate to use in a preliminary process in order to reduce a large number of possibilities to a smaller number of probable ones (Malhorta & Birks, 2006:64), which is what the objective was in its use in this preliminary process. Creswell (2014:201) notes that a survey design can be used for the description of trends, attitudes or opinions of a population through the studying of a sample of that population. The purpose of conducting this survey was to begin developing a tourist risk typology from a sample that represents the

South African traveller population in general so that inferences can be made about the perceived risks that are relevant to potential travellers in this current time.

The survey design, in the form of an online questionnaire, was the preferred type of data collection procedure for this preliminary process due to the economy of the design (not cost intensive – Google Forms is free to use), as well as the rapid turnaround in data collection (not time intensive) (Creswell, 2014:201). It further allowed for the distribution of the survey in a convenient way as people could access it through the internet; anywhere, anytime. Identifying attributes of a large population from a small group of individuals is advantageous as it allows for efficient data processing and allows the collection of information about attitudes that are usually difficult to observe (Creswell, 2014:203). Surveys are often conducted in order to examine the purchase and consumption behaviour of consumers (Malhorta & Birks, 2006:98), thereby being deemed appropriate for this paper. The advantages of a survey design, as described by Malhorta & Birks (2006:232-233), are reduced time expense, cost efficiency, the removal of interviewer bias, allowing for quality data to be retrieved from other fields and allowing for the contacting of wide and large sample groups. Participants were asked to indicate which concerns are relevant to their perceptions of travel risk when travelling internationally in the current pandemic with the use of fixed-response alternative questions. Furthermore, they were encouraged to contribute, in 'other' fields, any additional concerns that were not available as options. Eligibility to take part in this online survey was to have had international travel experience in the past ten years. This initial process collected 107 questionnaire responses.

The objective of this initial survey was to narrow down the possible perceived risks, along with identifying original ones, into categories; and to gain preliminary insight into what the South African tourist's perceived risk typology might look like. Malhorta & Birks (2006:70) note that exploratory research is often the initial step in a research design and that it may be followed by descriptive research. Therefore, findings of this survey are used in the Delphi Survey carried out following this initial enquiry. Participants were asked to provide their email addresses if willing to partake in the Delphi survey to follow. The perceived risks in tourism and travel as identified through this preliminary data collection informed the Delphi processes by providing risk dimensions and factors relevant to the South African traveller population, for consideration.

iii. Formulation stage:

The results of this preliminary data collection were then used for the formulation of the Delphi statements. The findings of the survey were reviewed by the research team so that the statements used in the Delphi survey could be iteratively developed. The goal of the formulation sessions was to define the final set of Delphi statements and to decide on question formats, related information and additional questions (Beiderbeck et al., 2021). It was decided that the first round of the Delphi survey would ask participants what the probability of occurrence was for each risk statement in terms of it being a concern for them before deciding to travel internationally in the current pandemic climate. Respondents were asked to indicate, on a 5-point Likert-type scale, the expected probability that such a risk would be relevant to their overall risk evaluation from *Very Unlikely (1)* to *Very Likely (5).* Structured questions are questions that pre-specify the set of alternative responses and the format of responses – these include multiple-choice, dichotomous or a scale (Malhorta & Birks, 2006:335). Scaling involves the creation of a continuum on which measured objects are located (Malhorta & Birks, 2006: 293) – it involves placing respondents on a continuum in terms of their attitude or opinion towards the topic at hand. The Delphi survey made use of ordinal scales in which numbers are assigned to objects in order to indicate the relative extent to which some characteristic is possessed (Malhorta & Birks, 2006:295). It is used to measure relative attitudes, opinions, perceptions and preferences and include 'greater than' or 'lesser than' judgements from respondents (Malhorta & Birks, 2006:295). Therefore, if participants indicated "*4: Likely*", then this could be considered as a relatively high probability that the risk is a concern for them prior to travelling.

Furthermore, it was also decided that the Delphi survey would include a qualitative free-text box where participants would be encouraged to list any other risk factors they would be concerned with when evaluating international travel risks. Unstructured questions are open-ended questions that respondents answer in their own words. They allow respondents to express general opinions and thoughts in a much less biasing influence as they are free to express any views, providing the researcher with rich insights (Malhorta & Birks, 2006:335). The comments offered in these qualitative text boxes were then reviewed and included in the second round.

The formulation sessions were also used to agree on additional questions, mainly demographic information. Based on what previous tourist risk research in prior studies found

most influences risk perception, it was decided that the demographic variables to be included would be: gender, age, educational attainment, frequency of international travel, type of accommodation typically booked, continent most often travelled to and reason for travel (business or leisure). Such information is useful in terms of learning more about the panellists' personal predispositions (Beiderbeck et al., 2021).

The formulation stage, as can be seen from the above, is a very important step in the Delphi process as it determines the Delphi format, Delphi statements and additional information requested. These sessions were informal and colloquial and included the perspectives of myself (the author of this research paper), Professor Diogo Filipe da Cunha Ferreira and Luis Gomes. It was decided that only one risk category per webpage would be used as to avoid the necessity to scroll online, preventing panellists from overlooking free-text fields and allowing them to get used to a consistent format (Beiderbeck et al., 2021).

iv. Delphi pre-test:

The Delphi format, statements and additional questions were pre-tested on fellow researchers in order to ensure clear comprehensibility and high reliability (Okoli & Pawlowski, 2004). According to the outcome and comments of this process, some wording and layouts were adjusted. The length of the survey was also tested as to avoid survey fatigue and elevated drop-out rates (Beiderbeck et al., 2021)

6.3.2 Conducting a Delphi Survey:

i. Software Selection:

A real-time Delphi was used in order to account for an ambitious time frame (Beiderbeck et al., 2021). This meant that a web-based Delphi software would need to be used, and so a subscription to the web-based Delphi platform – "Welphi" – was carried out. Welphi makes use of a web-based environment that allows participants that are geographically dispersed to be able to engage in the Delphi process whenever suits them. Welphi automatically computes statistical data and panellist comments, making them available to process by the administrator and the participants. Invitation and reminder emails are available directly from the platform. This cost the researcher 100 Euro a month to utilise. The Welphi platform was used for a total of two months.

ii. Survey Programming:

After phase one was completed, the programming of the survey commenced. Special attention was given to the web-based survey introduction due to a proper understanding of the process being crucial to the participants (Beiderbeck et al., 2021). This included the purpose and research goals, as well as the anticipated duration of the study, contact details of the researcher and information about the Delphi process – mentioning the anonymity of participants and the iterative character of the method. A link to a webpage about the Delphi process was also provided should participants wish to learn more about the technique. Participants were encouraged to provide comments in the comment fields.

iii. Panellist selection and Invitation:

Delphi studies make use of participants who are informed about the topic being researched. McKenna (1994; p.1221) defines these individuals as "a panel of informed individuals". The number and representativeness of respondents will impact the potential of idea generation as well as the amount of data to be analysed (Hasson et al., 2000). The larger the sample size, the greater the generation of data as well as the more data to be analysed, which may result in issues of data handling and analysis difficulties (Hasson et al., 2000). Beiderbeck et al. (2021) suggests that 'expert' selection to be used in the survey can be initially quite challenging, depending on the subject explored. Five aspects are to be considered: size of the panel, level of expertise, level of heterogeneity, level of interest and access to the panel. These aspects should be considered early in the process.

Sample is defined by Malhorta & Birks (2006:357) as a subgroup of the elements of a population selected for participation in the study. Hasson et al. (2000) notes that the selection of experts for Delphi surveys often involves non-probability sampling – either purposive sampling or criterion sampling. This does not involve random selection of participants, so representativeness is not assured, instead, they are selected purposely to apply their knowledge to a certain problem on the basis of criteria developed from the problem under investigation (Hasson et al., 2000). The sampling frame used in the Delphi survey was that of South Africans, residing in South Africa, that have travelled internationally in the past five years that had taken part in the preliminary survey and that had indicated interest in partaking in the Delphi survey by providing their email addresses. Malhorta & Birks (2006:362) define non-probability sampling as a technique that does not use chance selection but rather relies on the personal judgement of the researcher. These techniques may yield good estimates of the

characteristics of a population, but do not allow for objective evaluation of the precision of the sample results as there is no way of determining the probability of selecting any participant for inclusion in the sample (Malhorta & Birks, 2006:362). This study made use of purposive sampling, also known as judgmental or subjective sampling, in which the researchers rely on their own judgements when choosing sample members of a population to partake in their survey (Malhorta & Birks, 2006:363). The sample for this study were to be individual's that are 'informed' about topics regarding international travel – like those who had travelled in the recent past. It is important to note that such a sampling technique hinders the generalisability of the results to a wider population.

Beiderbeck et al. (2021) advises 'expert' panels to have at least 15-20 experts in order to ensure that statistical analyses can be carried out. 32 participants from the preliminary data collection indicated their willingness to partake in the Delphi by providing their email addresses. Beiderbeck et al. (2021) also suggests that variety in additional qualitative comments typically decrease from a quantity of 30-40 participants. In terms of level of expertise, Beiderbeck et al. (2021) notes that the needed level of expertise depends on the topic at hand – some Delphi studies require specific domain knowledge, whereas others benefit from broader and more generalist perspectives. It is important to pre-determine criteria for partaking in the Delphi survey as it helps to justify panel selection and allows the distinguishing between groups.

High levels of heterogeneity can act to mitigate cognitive biases, specifically so in holistic and future-related settings (Beiderbeck et al., 2021). A variety of background allows for inter-group analyses and the more diverse the experts, the more insights you gain from different perspectives. Level of interest that participants have in the survey results is also an aspect that requires attention. Due to the Delphi process requiring time and attention, the personal investment of participants may increase response rates and comment quality (Beiderbeck et al., 2021). Access to the panel is also an important factor early in the process as some experts are hard to contact (Beiderbeck et al., 2021).

The 'experts' used in this Delphi process include 32 participants that provided their email addresses in the preliminary process. In order to ensure that the panellists had some level of expertise in terms of being a travel consumer, eligibility to take part in the Delphi survey required participants to have travelled in the previous 5 years (considering the pandemic and related travel restrictions have only recently calmed down after two years, this stipulation

does not leave much time). This stipulation was put in place due to the fact that in order to get perceptions about travel risk due to the pandemic, participants had to have prior recent experience and knowledge regarding international travel, so as to ensure that their risk perceptions are relevant in terms of the context of study – the current pandemic situation. Otherwise, it is a possibility that panellists who have never experienced international travel, or have experienced it a long time ago, may be more so anxious-prone to international travel in general, regardless of the pandemic situation. As the experts selected for this Delphi survey are South African travel consumers, responses attained will be from the perspective of consumers and will represent risk perceptions pertinent to the traveller, ensuring the results are market-driven and relevant. Heterogeneity was high in terms of age, with participants ranging anywhere between 18-60 years. Level of interest of panel experts was also assumed to be high as travel consumers may be interested in hearing their peers' concerns regarding international travel that they perhaps had not yet thought about. Furthermore, following the first round, the response rates indicated values higher than 70%. Access to the panel was done through the email addresses provided, ensuring that participants that were invited were willing to take part.

iv. Survey Conduction

Hasson et al. (2000) notes that the number of rounds is dependent on the time available, the nature of the Delphi and consideration levels of sample fatigue. Recent evidence appears that either two or three rounds are preferred in Delphi studies (Hasson et al., 2000). Furthermore, consideration must also be given to the level of consensus to be achieved. There exists no universally accepted proportion in the literature regarding consensus as the level depends on sample numbers, research aim and resources. Mckenna (1994) suggests consensus be equated with 51% agreement among panellists, whereas Green et al (1999; as cited in Hasson et al., 2000) suggests 80%. Other researchers have criticised the value of using percentage measures and suggest that the stability of the response through the rounds is a more reliable consensus indicator (Hasson et al., 2000).

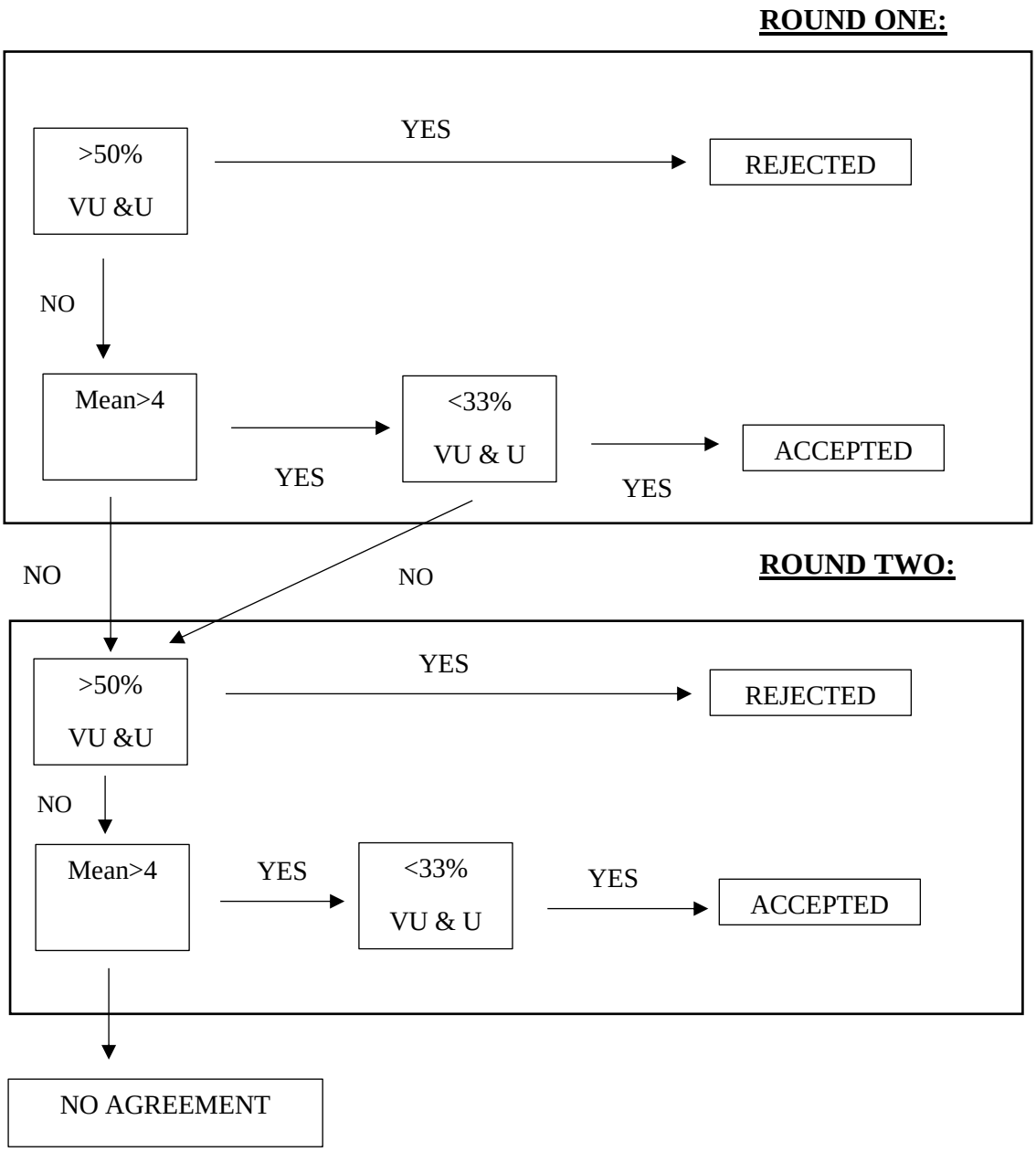
Beiderbeck et al. (2021) recommend an a priori (cascaded) termination criteria. Termination criteria can be based on one of three options: time-related (termination after a certain time period), participant-related (based on a number of participants that revised the survey at least once) and consensus-related (dedicated measures such as agreement thresholds or stability measures. Disagreement among panellists is a valid and insightful outcome, especially in

prospective studies, therefore Beiderbeck et al. (2021) applied a cascaded termination logic with agreement and stability thresholds on the first level and a time-related criterion on the second level (8 weeks). They did not reach a consensus after 8 weeks, therefore terminated the survey and included all participants who revisited the survey at least once. Beiderbeck et al. (2021) used interquartile ranges to assess consensus due to their robustness as a statistical measure, and note that although there are multiple interpretations of consensus levels in the literature, they argue a threshold of a maximum of 25% of the respective scale serves as indication of consensus.

Freitas et al. (2018), on the other hand, implemented group agreement rules which could be meant to determine either for approval or rejection of a given set of public health indicators by applying specific rules for dealing with differences in opinion. This was allowed by way of an enchained process. The first Delphi round in their study had established decision rules, with the addition of new decision rules in the second Delphi round. The number of majority agreements and disagreements were calculated by expressing the respondent's answers "Strongly Agree" (SA), "Agree" (A) and "Strongly Disagree" (SD) and "Disagree" (D) in percentage per indicator. In the first Delphi round, those indicators receiving higher than 50% "SA" responses, in conjunction with not having at the same time more than one third (<33.3%) of "SD" and "D" responses, were approved by 'absolute majority'. On the other hand, indicators that received more than 50% of either "SD" or "D" responses were rejected by 'absolute majority'. In the second round of the Delphi process, the same rules for approval and rejection were maintained, however with a more lenient rule added in order to allow for agreement on a large number of indicators. Those indicators receiving more than 75% of "SA" and "A" responses were approved by 'qualified majority', maintaining the same rule for rejection ('absolute majority') (Freitas et al., 2018).

Shi et al. (2020) conducted a study that utilised the Delphi Technique in order to carry out a risk assessment of residential aged care facilities in China. Their aim was to identify the risk factors that are associated with adverse events in old age homes and they achieved this by approaching managers of residential aged care facilities and asking them to rate on a Likert scale, how probable identified items were to cause adverse events. The filter criteria used by Shi et al. (2020) was set at a mean score of <4 or a coefficient of variation of >20%. It can therefore be seen that many differing consensus/agreement criteria and cut-offs exist in the literature.

In this research paper, agreement and termination was established with the following criteria: mean>4; while at the same time <33.3% of Very Unlikely and Unlikely responses, the risk statement was accepted. Risk statement rejection occurred when >50% of Very Unlikely and Unlikely responses occurred. Boulkedid et al. (2011) note that there is no consensual definition of "consensus" within the Delphi literature, and that this is one of the most sensitive methodological issues with the method. It is the investigator that must decide how agreement among participants will be measured and what cut-off will be used to define a consensus (Boulkedid et al., 2011). Since the aim of this research is to develop a weighted typology of the perceived risks of international travel for South African travellers, which includes the most relevant and important risk factors as defined by the panel, the combined methods used by Freitas et al. (2018) and Shi et al. (2020) seemed appropriate. This is because the respondents were required to state how likely the listed risk statements are to be a concern for them before deciding to travel internationally, therefore, focusing on the opposite ends of the Likert-type scale is fitting – there where consensus is reached on "Somewhat likely" – these risk statements insinuate a certain extent of concern, however are not included in the perceived risk typology due to the fact that they do not hold group agreement/consensus as being highly likely to be a concern. The results section, however, does highlight and discuss those risk statements that had a mean>3.5, since "Somewhat Likely" does indicate a degree of concern (these statements aren't considered no concern at all). Figure 6.3 below depicts the enchained process that was utilised in the decision to reject or approve risk statements for inclusion in the typology.



VU=very unlikely; U=unlikely; VL= very likely; L= likely

Fig 6.3 Flowchart of the decision rules adopted for approval or rejection of risk statements (Source: adapted from Freitas et al., 2018).

The responses from the first round were collected and used to create the second round. The second-round questionnaire therefore includes the same statements as before (those that did not meet the criteria for acceptance or rejection), together with the individual's ratings and the percentage values of the responses from the rest of the panel. In this way, the panellists are able to make decisions in light of information provided by their peers. Fig 6.4 below is a screenshot of the Welphi platform and how the respondents received their second questionnaire. The highlighted blocks indicate the individual respondent's chosen level from

round one, and the percentage values notify the individual respondent what the rest of the panel chose. Furthermore, the respondent was able to view previous round comments that were left by other panellists previously.

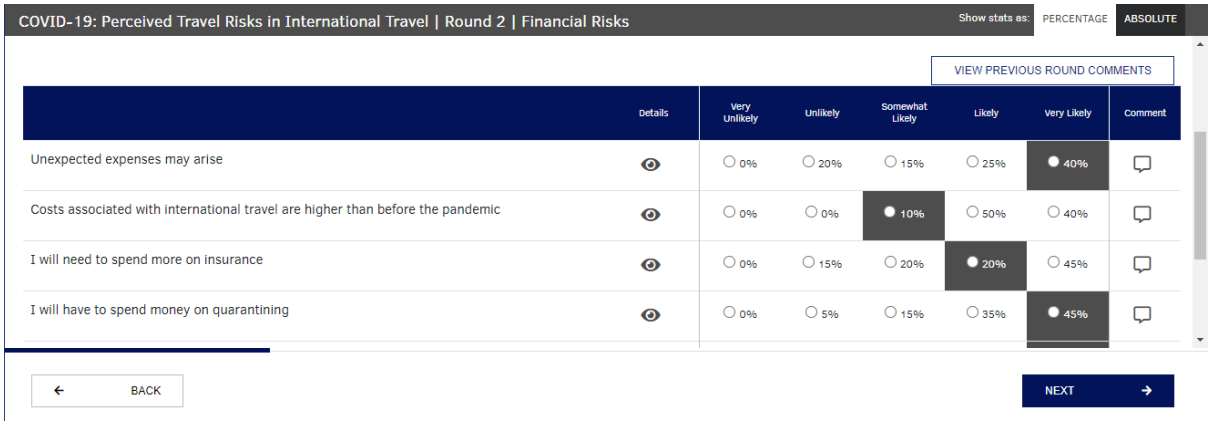


Fig 6.4 Screenshot of Welphi platform depicting Round two and what respondents were presented with

6.3.3 Analysing a Delphi Study

This process involves the careful management of qualitative and quantitative data (Hasson et al., 2000). Qualitative data collected from the first round can be analysed using content analysis techniques, by grouping similar items together in an attempt to combine items indicating similar things into one universal description. This process needs to be carried through with great care, as omitting infrequently occurring items goes against Delphi ideologies, in which participants should be the ones evaluating the quality of statements, not the researchers (Hasson et al., 2000). However, the number of items carried over to the second round needs to be given due attention as too many may affect consensus (Hasson et al., 2000).

Rounds are analysed in order to identify convergence and change of respondent's judgements or opinions (Hasson et al., 2000). In order to ascertain levels of collective opinion, the use of inferential and descriptive statistics is used (Hasson et al., 2000). Measures of central tendencies (means, medians and mode) as well as levels of dispersion (standard deviation and inter-quartile ranges) are used to provide information regarding collective opinion. Beiderbeck et al. (2021) suggest other methods of analysing Delphi surveys include Dissent analysis, Sentiment analysis and Scenario analysis.

Data analysis for the Delphi survey in this research paper included statistical methods and content analysis. Content analysis was used to establish a preliminary set of risk factors in the form of risk statements, as well as to ultimately transform the risk statements into a perceived risk typology representing the perceived risks of South African travellers. IBM SPSS Version 28 was used for all quantitative analyses. Descriptive statistics were used to describe each risk statement, including mean, median, mode and standard deviation.

i Reliability and Validity

When undertaking any research, reliability and validity need to be considered (Hasson et al., 2000). Reliability refers to the extent to which the study process produces similar results under constant conditions through all occasions, however, there is no accepted form of reliability testing when the Delphi technique is concerned (Hasson et al., 2000). Therefore, Lincoln & Guba's (1985; as cited in Hasson et al., 2000) criteria for qualitative research can be applied in order to assist in ensuring credible interpretations are produced. These criteria involve four major issues: credibility (truthfulness), fittingness (applicability), auditability (consistency) and confirmability (Hasson et al., 2000; Keeney et al., 2001).

Furthermore, the Delphi has its foundations in the assumption of safety in numbers (Hasson et al., 2000). Decisions are strengthened through reasoned arguments whereby assumptions are challenged, enhancing validity. Threats to validity exist in the pressures for convergence of opinions (Hasson et al., 2000), however the use of a web-based Delphi in which participants are geographically separated will prevent such from occurring. Use of panellists who have an interest in and knowledge of the topic will contribute to increasing content validity (Hasson et al., 2000) – therefore, South African travellers who have recently travelled internationally contributes to achieving this. Successive rounds contribute to the increase of concurrent validity; however, the validity of results will ultimately come down to response rates (Hasson et al., 2000).

The reliability and validity of the Delphi method was tested by panellist opinion consensus and by calculating the positive coefficients. Face validity is assumed due to the fact that the panellists are all South Africans who have travelled internationally in the past year. To enhance rigour in the study; the following strategies were maintained: preparing the risk statements through preliminary enquiries and an in-depth literature review, conducting a pilot test to ensure there are no wording difficulties and that the administration is feasible, providing a clear explanation of the goals of the research to panellists, distributing feedback

to the panellists iteratively and by conducting quantitative analyses to determine the reliability of the Delphi technique.

ii Content Analysis

Keeney et al. (2001) note that in the first round of a Delphi survey, open-ended questions should be used to allow panel members freedom in their responses and allows for the generation of ideas. Beiderbeck et al. (2021) highly recommend content analysis when analysing comments supplied by respondents. Insights from the participants' comments are valuable input for the analyses and discussion of research (Beiderbeck et al., 2021). The first round of the Delphi survey in this research paper included qualitative free-text boxes that allowed for panellists to list any other risk factors they felt relevant to their overall risk perception in international travel that were not identified in the statements. These qualitative free-text boxes underwent a content analysis by researchers in order to identify new risk statements that should be included in the second round.

Content analysis is defined by Downe-Wambolt (1992; as cited in Bengtsson, 2016:9) as "a research method that provides a systematic and objective means to make valid inferences from verbal, visual, or written data in order to describe and quantify specific phenomena (p.314)". Bengtsson (2016) notes that the process reduces the volume of text collected, identifies and groups categories together and seeks to gain some kind of understanding from it, while staying true to the text and achieving trustworthiness. The analysis conducted in the research paper was that of manifest analysis in which the researcher describes what the respondents actually say, which means staying close to the original text, using words as they are and describes the visible and obvious in the text (Bengtsson, 2016). This process of analysis involves four stages: decontextualization, recontextualization, categorisation and compilation (Bengtsson, 2016). The first involves breaking the text into smaller meaning units containing the insights that the researcher needs that answers the questions set out in the aim of the study (decontextualization), followed by ensuring that all aspects of the content have been included in relation to the aim (recontextualization). In the categorisation process, themes and categories are identified in the text and these should be internally homogeneous and externally heterogeneous (meaning no data falls between groups or can fit into two groups). Finally, the essence of the studied phenomenon needs to be found and discussed (compilation) (Bengtsson, 2016).

This process of content analysis took place in order to condense multiple qualitative comments from the first round into risk criteria that included all comments, without duplication, for the second round. Furthermore, similar content analysis took place at the end of the Delphi survey round two in order to condense the perceived travel risk typology into relevant criteria and sub-criteria. This begun by reading the unduplicated perceived travel risk responses and then identifying the risk categories that they fit into; allowing all comments to be categorized (inclusive), but fit into only one category (exclusive).

Keeney & Raiffa (1993) suggest five principles should be in place when criteria are being formulated: completeness (the criteria must include all of the important characteristics of the decision-making problems), operational (the criteria will have to be meaningful for decision-makers and available for open study), decomposable (the criteria can be decomposed from higher hierarchy to lower hierarchy so that evaluation processes may be simplified), no redundancy (the criteria must avoid duplicate measurement of the same performance) and minimum size (the number of criteria should be as small as possible to reduce the needed time, resources and cost). Concerted efforts were made to follow these principles when undertaking the process of content analysis in this study.

The research team attempted to fit statements into one of the categories, however, when comments could not be appropriately assigned, or could be assigned into more than one category, the categories were revised. Many iterations occurred until a final category scheme was developed, which suited the data well and which was inclusive and exclusive to all comments. Discussions between the research team resolved all conflicts.

Following the identification of the risk criteria and elements that constitute the South African's overall perceived travel risks, these factors were converted into a value tree structure of criteria, which is a necessary methodological step in MCDA (Longaray et al., 2018). This value tree structure of criteria can also be representative of a perceived risk typology depicting the areas of concern for the travel consumers; and is made up of risk criteria and sub-criteria – thus defining the impact criteria that is representative of the areas where those risks could impact. A few members of the Delphi panel were then asked to collaborate in the identification and construction of ordinal scales (descriptors) for each risk criterion (also known as a Fundamental Point of View (FPVs)). This procedure was necessary for determining the possible levels of impact of the options on the criteria – in other words,

this process operationalised the risk criteria and allowed them to be measurable. These descriptors and impact levels can be found in the following chapter – Chapter seven.

Following this, a value function was designed in order to assign value scores to the levels of impact descriptor relative to the fixed scores of 0 and 100 assigned to the higher and lower reference levels in the additive MACBETH model (Figueiredo & Oliveira, 2009). The panellists in the Delphi survey were then asked for qualitative values for scoring and weighting through the application of the MACBETH methodology (Figueiredo & Oliveira, 2009). Panellists were asked to indicate the degree of importance they associated with the particular risk criterion in terms of their contribution to their overall travel risk perception. This began the second stage of MCDA, the evaluation stage. Therefore, the set of risk criteria used within the model was informed via a participatory process through the use of the Delphi survey. A sample of "experts" (South Africans who had travelled internationally in the last 5 years) was involved in the participatory process, from structuring the overall perceived travel risk multicriteria model (risk dimension, risk criteria and sub-sub criteria), to evaluation phases (weights, value functions).

6.4 The Evaluation Stage

The second stage – the evaluation stage – involves the construction of the multicriteria mathematical model, through the adoption of the procedures involved in the MACBETH method (Bana e Costa et al., 2012). The MACBETH method allows for the aggregation of performance values in the different risk criteria using an additive value function model (Longaray et al., 2018). It does so through the converting of ordinal scales into cardinal scales on the basis of absolute judgement about the difference in attractiveness between two alternative options (Bana e Costa et al., 2012). Usually, the MACBETH model is executed through the following method: given two alternatives, the decision maker is asked to indicate which of the two is more attractive and the degree of this attractiveness on a semantic scale that is ordinal in nature. The MACBETH algorithm is made up of four linear programming minimization problems that are resolved sequentially: PPL1 performs the cardinal consistency analysis; PPL2 is responsible for the cardinal scale construction; PPL3 and PPL4 both reveal any sources of inconsistency (Bana e Costa & Chagas, 2004). In this second stage, the decision maker must carry out this procedure for all of the descriptors constructed, thereby indicating their preferences (Bana e Costa et al., 2012). Once this has been completed, the global evaluation model is established and can be used to analyse the impact

of potential actions (for example, evaluating destinations' performances in terms of perceived travel risks or interventions to mitigate perceived risks of travellers) based on the impact profile established, which identifies the contribution of each criterion (Longaray et al., 2018).

This second stage required the panellists to weight the FPVs, using MACBETH. In typical applications of MACBETH, judgement elicitation is done using the M-MACBETH DSS (decision support system). Each of the panellists were asked to give a qualitative judgement, in their opinion, of the degree of importance of each risk criterion to their overall travel risk evaluation. Whenever the contribution of the risk criterion was not null, they were required to judge its strength of importance using one of the MACBETH qualitative categories. Such an indication corresponds to a judgement of difference in attractiveness between the risk criteria and doing nothing to address their risk perceptions (i.e., comparison of attractiveness between the risk criteria and the status quo) (Bana e Costa et al., 2014). The individual judgement responses were converged to a compromise on group judgements whereby the majority rule was applied in cases that did not have complete or similar agreement (i.e., any outliers). These responses were used to rank the criteria according to order of importance of contribution to overall perceived travel risk.

Once this process was completed, the set of all group judgements were inputted into M-MACBETH – the decision support system introduced by Bana e Costa et al. (2012) and which supports the application of the MACBETH approach. A score of 100 was assigned to those risk criteria impact levels that indicated a lower level of perceived risk and a score of 0 was given to those risk criteria impact levels that indicated a high presence of perceived risk. M-MACBETH then generated quantitative value scores for the risk criteria that reconcile all judgements (through linear programming). The contribution of each risk criterion was then able to be undertaken in order to evaluate their performance in terms of overall travel risk perception.

i MACBETH

MACBETH (measuring attractiveness by a categorical based evaluation technique) has been described as "an interactive approach that uses semantic judgements about the differences in attractiveness of several stimuli to help a decision maker quantify the relative attractiveness of each" (Bana e Costa & Chagas, 2004: 324). It has been used increasingly in situations of complex decision problems so that the trade-offs (i.e., replacement weights) between evaluation criteria can be calculated. It is known for its simplicity of use, strong mathematical

basis and ability to be receptible to subjective elements (Bana e Costa et al., 2012; Carayannis et al., 2018). The integration of the Delphi technique and the MACBETH MCDA technique allows for the combination of qualitative and quantitative factors, thereby creating a more informed and grounded decision model.

Bana e Costa et al. (2012) asserts that MACBETH is a user-friendly multicriteria decision approach that only require qualitative judgements about differences in value to assist a decision maker to quantify the relative attractiveness among several options. MACBETH is a socio-technical approach that makes use of multi-criteria decision analysis and value measurement concepts, and so integrates the technical elements of a multi-criteria value model and the social elements of participatory processes (Santana et al., 2020). Jardim et al. (2015) describes the basics of MCDA via the MACBETH approach's mathematical foundations.

Consider *X* (with #X = n≥2) as a finite set of elements (alternatives, courses of action, choice options) for which a group or an individual, *J*, would like to compare their relative attractiveness (desirability, value). *X* represents ordinal value scales that are quantitative representations of preferences – numerically reflecting the order of attractiveness of the elements of *X* for *J*. This ordinal value scale is constructed through a straightforward process: *J* ranks the elements of *X* by order of attractiveness – either directly or through pairwise comparisons – to determine the elements' relative attractiveness (Jardim et al., 2015). Once the ranking is defined, a real number v(x) needs to be assigned to each element *x* of *X*, such that:

1. v(x)=v(y) if and only if *J* judges equal attractiveness between the elements *x* and *y*
2. v(x) v(y) if and only if *J* judges *x* to be more attractive than *y*

Equally, a value difference scale is defined for *X* as the preferences' quantitative representation, used to reflect the order of attractiveness of the elements of *X* for *J* as well as the differences in their relative attractiveness – that is, the strength of *J's* preferences for one element over the other. *J* provides preferential information about two elements of *X* at a time, firstly, through ordinal judgement (i.e., of their relative attractiveness) and secondly, if the two elements are not indicated as equally attractive, by expressing a qualitative judgement about the difference in attractiveness between the most attractive of the two elements of *X* and the other one (Jardim et al., 2015). In order to make the judgemental process easier, six semantic categories of differences in attractiveness are offered to *J* as possible answers: "very

weak", "weak", "moderate", "strong", "very strong", or "extreme". By comparing the elements of *X* pairwise, a matrix of qualitative judgement is filled in.

The next step would involve creating a value tree with nodes, that is, the decision model. The nodes would correspond with the risk criteria that will be taken into account, so the choice of nodes is one of the key issues in the development phase. Subsequently, data needs to be obtained in order to fill the performance table of each indicator. This indicates the beginning of the prioritisation phase.

6.5 The Prioritisation phase

Once the risk evaluation model was built through the use of M-MACBETH DSS, it was able to be used to assess different destination performances in terms of perceived travel risks for this sample of South African travellers. The study aimed to develop a multi-criteria evaluation system for the assessment of perceived travel risks in terms of international travel in a pandemic situation. The Delphi technique allowed for the comprehensive identification of risk criteria, while the MACBETH approach allowed for weights to be attributed to these criteria in an easy and natural way (i.e., through semantic judgements).

Due to this study being the analysis of different risk factors, it is important to note that the risk severity of different alternatives is inversely express on a ranking of 0-100 – that is, the lower the 'score', the higher the severity of the risk. This can be seen in the ordering of the descriptors in chapter seven – in which the highest impact levels denote higher levels of non-risk. The number of levels of impact for each criterion vary according to the nature of the criterion (Figueiredo & Oliveira, 2009). In essence, the destinations or intervention strategies that perform 'higher' or attain 'higher' impact levels are deemed safer in the perception of this sample of South African travel consumers.

The risk evaluation model created through these methods enables the rating of different destinations with regards to their performance in perceived risks. In this sense, analysing the performance profiles of different destinations, for example, allows for the development of improvement actions, assisting tourism managers in understanding new alternatives and solutions that are relevantly focused in the right direction. Being equipped with such models allows for in-depth and mathematically sound perceived risk analysis with the power to create effective and efficient response strategies.

6.6 Summary and Conclusions

The multicriteria model was constructed and operationalised in three phases: structuring, evaluation and prioritisation. In the first phase, the relevant risk criteria were identified and categorised, and the descriptors and their respective ordinal scales were developed. The second phase saw the construction of value functions in which the aggregation model of the different risk criteria was developed, as well as the performance matrix constructed – with the use of the M-MACBETH DSS. Finally, the third phase allowed for the aspects of certain destination performances to be highlighted and flagged as important – such that areas of improvement can be identified.

This section included descriptions and explanations of multicriteria decision analysis processes and linked it to the conduction of risk assessments and risk analyses. It described, in much detail, the Delphi process undertaken in the structuring phase as well as the process of evaluation in terms of the MACBETH approach. It provided a short description of the fundamentals of the MACBETH additive mathematical foundation. The aim of this section was to provide the reader with information regarding how this study was carried out, with the intention and possibility to take this research further and conduct it in other contexts.

CHAPTER 7: RESULTS AND DISCUSSION

7.1 Introduction

This section presents the results of the study conducted for this Masters dissertation. It begins by presenting the preliminary data collection results, which began the process of risk identification in risk management. The information obtained in this process was used to inform the Delphi survey.

This section then presents the results of the Delphi rounds, explaining and describing the how the Delphi rounds were used to inform the risk criteria to be used in the multicriteria risk evaluation model. It identifies the risk statements that were accepted per predefined criteria and those that were rejected and discusses these findings. Furthermore, this section discusses the risk statements that just missed the predefined criteria for inclusion in the model, as this may provide useful information on perceived travel risks for future research as their descriptive statistics indicated that they were by no means no concern at all for the group of South African travellers.

Finally, this section presents the application of the data to the M-MACBETH DSS in order to ascertain the relative importance of the different risk criteria in terms of their contribution to overall perceived risk. In addition to this, the final evaluation model is applied to five different destinations as an example for how the model can be used to evaluate the performance of different destination alternatives on the perceived risks of travellers, and suggests that this could also be applied to strategic interventions addressing risk perceptions of South African travellers.

7.2 Preliminary Data Collection Results:

The preliminary process had the aim of informing the Delphi study by bringing to light which risk factors should be included in the Delphi, as well as to bring to light risk factors that the literature review had not yet identified. Furthermore, the preliminary process gave access to those participants that would be willing to partake in the Delphi survey. The survey received 107 responses.

The online survey, conducted through the use of Google forms, asked respondents to check the concerns that are applicable to their perceived travel risks within the differing categories.

The categories included were the five traditional perceived risk dimensions identified in the literature: financial, performance, social, physical and psychological. Each risk dimension had "other" fields that allowed participants to add other risk factors they felt were relevant that were not available in the options to be checked. The information gained from this preliminary process allowed the risk dimension categories to be included in the Delphi to be extended further to ensure that all dimensions of perceived travel risk was a part of the Delphi. Furthermore, respondents were requested to indicate their level of concerns for each risk category, which provided initial insight into the categories that were perceived to be most important. The below presents the results of the preliminary data collection.

i. Financial risks:

Table 7.2.1: Perceived financial risk factors relevant to South African travel consumers: preliminary results

Financial Risk factors	**Number of Responses**	**Percentage**
I do not have any concerns for financial risks	6	5.6%
Concerns that costs are higher than before	50	46.7%
Concerns regarding refunds in the case of cancellations	70	65.4%
Unexpected expenses	49	45.8%
Travelling now is not good value for money	16	15%
Travelling is too high of a financial investment for this time	28	26.2%

Only 5.6% of respondents indicated they have no concern for financial risks, suggesting that in some way or other, financial risks are perceived by many travel consumers in South Africa. The risk factor that received the most responses was "concerns regarding refunds in the case of cancellations" (65.4%). It seems that South African travel consumers are also particularly concerned that costs in travelling internationally are higher than before the pandemic (46.7%). Included in the other fields were comments such as "medical insurance", "cost of travel insurance and exclusions", "cost of quarantining", "unfavourable exchange rates" and "COVID" issues.

ii. Performance risks:

Table 7.2.2: Perceived performance risk factors relevant to South African travel consumers: preliminary results

Performance Risk Indicators	**Number of Responses**	**Percentage**
I do not have any concerns for performance risks	12	11.2%
Tourism attractions not being open during this time	43	40.2%
The experience will not live up to your expectations during this time	38	35.5%
Poor service delivery of experiences during this time	40	37.4%
Problems occurring during the international trip	64	59.8%
Tourism activities will not be of high quality during this time	24	22.4%
Employee skills may be insufficient to provide a safe tourist experience	16	15%

Performance risk factor "problems occurring during the international trip" received the highest number of checks (59.8%), suggesting the South African travel consumers are concerned with any issues arising during their international travels. Furthermore, it seems that consumers are concerned that tourism attractions may be affected by the pandemic, in terms of being open and available to visit (40.2%). "Other" fields made mention of things such as "Quarantine taking time", "Being stuck in another country if lockdown occurs, being stuck with nothing to do" and "Not enough money to pay due to income loss of the pandemic".

iii. Psychological risks:

Table 7.2.3: Perceived psychological risk factors relevant to South African travel consumers: preliminary results

Psychological Risk Indicators	**Number of Responses**	**Percentage**
I do not have any concerns for psychological risks	19	17.8%
Concern that the trip will not reflect your personality or self-image	1	0.9%

Concern that you will be disappointed with the travel experience during this time	31	29%
Travelling internationally will cause you anxiety during this time	35	32.7%
Travelling internationally during this time is stressful	38	35.5%
The 'unknown' causes psychological discomfort for you	27	25.2%
Keeping up with the different regulations and requirements in different countries is stressful	67	62.2%

The psychological risk factor with the highest number of indications is that of keeping up with the different regulations and requirements in different countries being stressful (62.2%), followed by "travelling internationally during this time is stressful" (35.5%). This indicates that international travel brings the emotion of stress to South African travel consumers and that such stress is a concerning risk for them. "Other" fields included comments such as "Vaccinations, regulations, lockdowns, quarantines" and "Changeability of the current COVID dynamic and trying to anticipate and plan for this; possible gap for a clever travel insurance offering".

iv. Physical risk:

Table 7.2.4: Perceived physical risk factors relevant to South African travel consumers: preliminary results

Physical Risk Indicators	**Number of Responses**	**Percentage**
I do not have any concerns for physical risks	11	10.3%
Concern of infection	43	40.2%
Destination may not have effective medical systems should you fall sick	27	25.2%
Travelling may require compulsory vaccination	21	19.6%
Inability to get timely medical assistance should you contract the virus	31	29%
Being sick away from home	49	45.8%
Concerns about hygiene standards at accommodations	24	22.4%

Concerns about the impact of tourism on the environment	16	15%
Concerns regarding being quarantined	73	68.2%
Concerns regarding air travel and the safety thereof	24	22.4%

The highest number of checks received in this risk category was that of "concerns regarding being quarantined" (68.2%). Along with quarantining being mentioned in many "other" fields, it is clear that the risk of having to spend time and money on quarantine is a big risk for South African travel consumers. 40.2% of respondents had concern for infection and 45.8% of respondents indicated that they were concerned with being sick away from home suggesting that the possibility of contracting COVID-19 in a foreign place is a risk for travel consumers. "Other" fields included comments such as "Would above be covered under travel insurance or excluded due to COVID pandemic exclusions" and "Quarantine risk – concern that vaccination type will not be accepted in other countries".

v. Social risk:

Table 7.2.5: Perceived social risk factors relevant to South African travel consumers: preliminary results

Social Risk Indicators	**Number of Responses**	**Percentage**
I do not have any concern for social risks	91	85%
Travelling internationally during this time will make others think badly of me	4	3.7%
Travelling internationally during this time will create conflict with those close to me	4	3.7%
Travelling internationally during this time will make me feel alienated when returning home	4	3.7%
Those close to me express negative attitudes towards international travel during this time	5	4.7%

85% of respondents indicated that they do not have any concern for social risks in travelling internationally. This suggests that this risk category is not a high concern for South African travel consumers at all. However, "Other" fields did make mentions of the social responsibility to not spread the virus to others, so this category was amended and added to the Delphi, including risk factors mentioned by respondents that correlate with the social dimensions.

vi. Level of concern:

The online survey further asked respondents to indicate their level of concern for each risk category on a 7-point Likert-type scale from (1) *not at all concerned* to (7) *extremely concerned*. The results below show the percentage of respondents who indicated a level of concern of (5) or higher, indicating high levels of concern.

Table 7.2.6: Level of concern (5) or higher for different risk categories of South African travel consumers: preliminary results

Risk Category	**Percentage level (5) or higher**
Financial Risk	71.9%
Performance Risk	52.3%
Psychological Risk	54.2%
Physical Risk	63.6%
Social Risk	3.7%

Level of concern indications shows that financial risks are of highest concern to respondents because 71.9% rated their level of concern for this category of risk as 5 or higher. This is followed by physical risks (63.6%), psychological risks (54.2%), performance risks (52.3%) and the least concerning risk for respondents are social risks which only had 3.7% of participants rating it a 5 or higher level of concern.

vii. Other fields:

Risk factors that were mentioned by participants that were not included in the options presented under each category included:

Other Risks mentioned that were not included in the above:

- "Not enough funds in case of quarantine"

- “Level of civil unrest within a country due to the virus and local vaccination policy, social upheaval and intolerance to tourists – will this impact negatively?”
- “Not being able to leave a country for a long period of time”
- “Risk of being stigmatised negatively and impacted by exclusion in the choice not to vaccinate. The political uncertainty in many destinations”
- “Other people being inconsiderate and not following guidelines”
- “Risks associated with refunds if one cannot travel”
- “Cancellation of flights”
- “Trying to locate a COVID test in the country you are visiting in order to return home”
- “Discomfort of wearing a mask all the time”
- “Levels of lockdown changing either at home or abroad, leaving one stranded.
- “Cancellations, being stranded overseas, fear-based knee jerk and often draconian reactions of some governments and blaming to hide their poor management, understanding and reputation of this global pandemic”
- “Language barrier”
- “Worried I get stuck in a country and flights are cancelled”
- “Country locking down so I can’t leave”
- “The cost of quarantining in another country”
- “Countries banning South Africa and leaving the country may be difficult”
- “Bringing the virus to a host country or back home”
- “The level of Gender-based Violence I have recently encountered in European countries and how unsafe I’ve been made to feel as a female is a big risk that is making me not want to visit there any longer at all. Additionally, racism issues in Europe have been a very big turn-off recently especially being someone who is Asian”
- “Risk of being stuck somewhere for a prolonged period of time and not being able to get back to South Africa to continue with work”
- “Lack of open restaurants/activities”
- “Late cancellations and governmental knee jerk reactions”
- “Logistics to prepare and limitation of activities due to pandemic”
- “Getting COVID”
- “Delays and costs associated with travel – quarantine on a multi-city trip”

- "Lockdown during travel"
- "Most of my travel is to the East for business. I cannot justify the costs at the moment not knowing what to expect when in Asian countries. There is a distinct lack of communication from China on the COVID situation there"
- "Increased risk of getting sick due to the stresses and lengths of flights and stress of getting all the legalities checked"

Individual responses within the "other" fields, varying in length and complexity, yielded a total of 41 understandable travel risk comments that were not available in the presented options; with about 21 responses once duplications were eliminated. The types of responses were then attempted to be categorised into the five "traditional" risk categories mentioned in the literature: Financial, Psychological, Social, Physical, Performance. However, these categories proved to be too "broad", resulting in classification into these five categories providing little information to assist travel and tourism decision-makers, as it led to condensing relevant mentioned factors into poorly corresponding categories.

Therefore, the five traditional perceived risk categories were used as a framework in which sub-schemas were developed, along with the addition of any other relevant categories different to the traditional ones. This creation of travel risk categories was done inductively, based on respondents' comments in "other" fields; in other words, risk factors not supplied within the available options in the survey under the five traditional categories. It was found that in addition to the five traditional risk categories, that the category of "time/convenience" risk should also be included in the Delphi survey as indicated by comments in the "other" fields.

viii. Preliminary Perceived Risk Typology:

The information that was collected through this preliminary process allowed for the establishment of a preliminary perceived risk typology for South African travel consumers that would be used to begin the Delphi study. Comments that received low responses were excluded from the Delphi survey and those mentioned in the "Other" fields were incorporated for further study. Below is Table 7.2.7 that summarises the findings of this survey and is the preliminary perceived risk typology.

Table 7.2.7 Perceived risk factors relevant to South African Travel consumers following the preliminary enquiry

Risk Category	Risk Dimensions	Risk Criteria
Financial Risk	Increased Expenses	Unexpected expenses Costs higher than before Medical/travel insurance Quarantine costs
	Decreased Spending Power	Income loss due to pandemic Travelling too high of an investment for this time
	Decreased value for money	Value of travel decreased Exchange rates unfavourable
	Refunds-related	Obtaining refunds if one cannot travel COVID policies on bookings
Performance Risk	Destination Environment Performance	Lack of Atmosphere Limitation of Activities Language barriers
	Tourism Service Performance	Not meeting expectations Poor service delivery of experience Lack of employee skills to provide a safe touristic experience Tourism services lacking quality Poor hygiene at accommodations
	Transportation Performance	Flight cancellations Safety on public transport Increased length of flights
Psychological Risk	Undesirable Emotions	Disappointment Anxiety Stressful to keep up with different regulations and requirements in different countries
	Vaccinations	Compulsory vaccinations for travel Stigmatization/exclusion in decision not to vaccinate
	Policies	Discomfort in wearing a mask all the time
Physical risk	Concern for Infection	Contracting the virus Being sick away from home
	Destination Medical Facilities	Ineffective medical systems Inability to get timely medical assistance
	Environmental Concern	Impact of tourism on the environment

Social Risk	Concern For Others	Social responsibility to prevent the spread of the virus
	Concern About Others	Others not following guidelines Gender-based violence Racism/discrimination
Political Risk	Destination Situation	Civil unrest Social upheaval
	Destination Government	Government unpredictability Lack of communication
Time/convenience Risk	Quarantine	Time spent quarantining Multi-city trips
	Planning	Anticipating and planning for changing COVID dynamic Keeping up with different regulations and requirements in different countries Locating a COVID test in the host country in order to return home Medical/travel insurance and their COVID exclusions
	Lockdowns	Changing levels of lockdown at the destination or at home leaving one stranded Missing work due to being stranded

7.3 Structuring Phase: Web-Delphi Rounds:

i Participants' General Characteristics

From the 32 experts who were selected for participation in this web-based Delphi survey, 20 questionnaires were collected after the first round. They were collected from a pool of South African travellers that had travelled internationally in the last five years and that had provided their email addresses in the preliminary process, stating that they would be willing to partake in the Delphi to follow. 70% of participants were female, 25% were male and 5% stated "other" as their gender category. The youngest participant fell in the 18–24-year age bracket and the oldest participants were above the age of 60. Majority of the participants (65%) had attained at least a Diploma/Bachelor's degree educationally. 55% of participants stated that they usually travelled once every few years, 35% usually travelled once a year and 10 % usually travelled twice a year or more than twice a year – prior to the pandemic. The most common reason for travel amongst the participants was Leisure travel (85%), and the most-commonly stated continent typically travelled to was Europe (75%). AirBnBs, BnBs and Rented apartments were the typical accommodation booked (35%), followed by hotel (25%)

and staying with friends and family (25%). Table 7.3.1 below displays participants' general characteristics.

Table 7.3.1 Participants' General Characteristics (n=20)

Variables	n	Percentage (%)
Gender		
Female	14	70
Male	5	25
Other	1	5
Age (years)		
18-24	1	5
25-30	5	25
31-45	3	15
46-60	9	45
60+	2	10
Educational Attainment		
No school	0	0
Matric	3	15
Diploma/Bachelor's Degree	13	65
Post-graduate	4	20
PhD	0	0
Travel Frequency		
Once every few years	11	55
Once a year	7	35
Twice a year	1	5
More than twice a year	1	5
Typical Accommodation		
Hotel	5	25
Backpackers/Hostel	3	15
AirBnB, BnB, Rented	7	35
Stay with friends/family	5	25
Continent most travelled		
Africa	4	20
Europe	15	75
North America	0	0
South America	0	0
Asia	1	5
Australia	0	0
Antarctica	0	0
Reasons for most travel		
Business	3	15
Leisure	17	85

ii Positive Coefficients

The positive coefficient is an important basis of expert consultation and suggests the enthusiasm and cooperation of panellists in the research (Shi et al., 2020). It makes reference to the recovery rate of the web-based questionnaire, which can be calculated as the ratio of experts participating in the survey to the total number of experts. A response rate of 70% or above indicates high positivity among experts (Fowler, 2013; as cited in Shi et al., 2020). The recovery rate for the four rounds were 62.5%, 85%, 94.1% and 87.5%; with an effective recovery rate of 62.5%, 85%, 94.1% and 87.5% from each respective round. See table 7.3.2 below for the panellists' positive coefficients. Although the first round did not attain a response rate of 70% or above, the subsequent response rates indicate improved positive coefficients, suggesting that some participants that originally expressed willingness to partake in the Delphi, decided not to when the survey was eventually sent out – however, those who did respond in the first round were invested in completing the process.

Table 7.3.2 Four Rounds of panellists' positive coefficients

Round	Questionnaires issued	Questionnaires retrieved	Return Ratio (%)	Number of effective questionnaires	Effective return ratio (%)
First	32	20	62.5	20	62.5
Second	20	17	85	17	85
Third	17	16	94.1	16	94.1
Fourth	16	14	87.5	14	87.5

iii Perceived Risk Statement Results

Round One

In the first round, following the group agreement rules discussed in Chapter six (mean>4 while at the same time <33.3% Very Unlikely and Unlikely responses for acceptance; >50% Very Unlikely and Unlikely for rejection of risk statements), a few risk factors were accepted and rejected. Those that were either accepted or rejected were removed from evaluation in the second round. Those that did not reach consensus were carried over to the next round for re-evaluation. The next section will present the statistical results of the risk statements and describe those statements that were rejected and accepted. The tables containing the risk statement results can be found at the back of this research paper, in Appendix A. Table 7.3.3 below summarises the statements that were accepted, and Table 7.3.4 summarises the statements that were rejected.

Table 7.3.3 Approved risk statements by predefined criteria in Round One (N=20).

Risk Statement	**Mean**	**Standard Deviation**	**Very Unlikely (%)**	**Unlikely (%)**
Costs associated with international travel are higher than before the pandemic (fin)	4.30	1.182	0	0
I will have to spend money on quarantining (fin)	4.20	0.894	0	5
Exchange rates are unfavourable for travel (fin)	4.50	1.021	0	5
If I cannot travel it may be hard to obtain a refund for flights and bookings (fin)	4.50	0.961	0	10
Destination activities will be limited during this time (perf)	4.25	0.933	0	0
Flight cancellations may occur during this time (perf)	4.40	0.754	0	0
It is stressful to keep up with the different regulations and requirements in different countries (psy)	4.15	1.040	0	10
Wearing a mask all the time makes the experience uncomfortable (psy)	4.30	0.923	0	5
Time may be wasted quarantining (TiCo)	4.35	0.875	0	0
Travelling during this time requires much anticipation and planning for changing dynamics (TiCo)	4.45	0.826	0	5
I will have to spend time locating a COVID-19 test in the host country in order to return home (TiCo)	4.35	0.875	0	5
Understanding regulations and expectations is time consuming (TiCo)	4.30	1.081	0	10
Planning for travel during this time is particularly demanding (TiCo)	4.35	0.875	0	5

Travelling during this time will require researching medical/travel insurance and their COVID-19 policies (TiCo)	4.60	0.754	0	0
Changing levels of lockdown at home or at the destination may result in being stranded (TiCo)	4.05	1.191	5	5

Acceptance: mean>4 while at the same time <33.3% Unlikely & Very Unlikely responses

In the financial risk category, statements “Costs associated with international travel are higher than before the pandemic”; “I will have to spend money on quarantining”; “Exchange rates are unfavourable for travel”; and “If I cannot travel it may be hard to obtain a refund for flights and bookings” all met the criteria to be included in the perceived risk typology. This is because all the means of these statements were above 4, which indicates that the group consensus is that these statements are quite likely to be a concern before travelling internationally. French (2021) comments on the fact that user satisfaction with internet travel services (such as Expedia and Tripadvisor) decreased by 5.2% from April to September, due to the difficulties consumers faced when being forced to cancel trips due to the pandemic, in terms of obtaining a refund for their cancellations.

In the performance risk category, “Destination activities will be limited during this time” and “Flight cancellations may occur during this time” were both accepted due to their means being above 4. French (2021) notes that the during a pandemic situation, travellers will have to be more prepared to make last-minute changes due to any disruptions that may occur that impact on tourists’ further itineraries.

In terms of psychological risk, and in line with French (2021)’s comments that suggests that during the pandemic, booking international travel through a travel agent may ease the stresses involved in understanding different regulations and expectations at different destinations – “It is stressful to keep up with the different regulations and requirements in different countries” and “Wearing a mask all the time makes the experience uncomfortable” were the statements that achieved the criteria and are therefore accepted.

Finally, the time/convenience risk category showed acceptance of many statements due to fitting the criteria and these included: “time may be wasted quarantining”; “travelling during this time requires much anticipation and planning for changing dynamics”; “I will have to spend time locating a COVID-19 test in the host country in order to return home”;

"understanding regulations and expectations is time consuming"; "travelling during this time will require researching medical/travel insurance and their COVID-19 policies" and "changing levels of lockdown at home or at the destination may result in being stranded".

Table 7.3.4 Rejected risk statements by predefined criteria in Round One (N=20)

Risk Statement	**Mean**	**Standard Deviation**	**Very Unlikely (%)**	**Unlikely (%)**
Employees may lack skills to provide a safe tourist experience during this time (perf)	2.50	0.946	10	45
Tourism services will lack quality during this time (perf)	2.60	1.142	15	40
Possible compulsory vaccination for travel makes me feel pressured in my decision to vaccinate or not (psy)	2.65	1.843	45	15
Tourism is harmful to the environment (phy)	2.25	1.164	30	35
Travelling during this time may result in being confronted with discrimination (soc)	2.45	1.234	25	30

Rejection: >50% responses Unlikely or very Unlikely

The risk statements that were rejected from inclusion in the perceived risk typology for South African travellers included "Employees may lack skills to provide a safe tourist experience during this time"; "Tourism services will lack quality during this time"; "Possible compulsory vaccination for travel makes me feel pressured in my decision to vaccinate or not"; "Tourism is harmful to the environment"; and "Travelling during this time may result in being confronted with discrimination". These statements fell under the categories of performance, performance, psychological, physical and social risk. They were rejected due to the fact that more than 50% of respondents indicated "unlikely" or "very unlikely" for these statements to be a concern for them before deciding to travel internationally in the current pandemic situation. It can therefore be assumed that majority of the respondents do not feel that employees at the destination will lack sufficient skills to maintain a safe travel experience and that the quality of the tourism services would not have decreased or lost value due to the pandemic. Furthermore, majority of the respondents may have chosen

unlikely/very unlikely to “Possible compulsory vaccination for travel makes me feel pressured in my decision to vaccinate or not” due to already being vaccinated, as was commented on by one of the panellists. Despite the fact that prior literature has suggested that the pandemic may have resulted in travellers becoming more conscious of the impact of tourism on the environment (Chebli & Foued, 2020), majority of the respondents did not consider this to be something they would be concerned with before the decision to travel internationally. Finally, “Travelling during this time may result in being confronted with discrimination” was also rejected due to majority rule, but it is important to keep in mind that due to the panel sample being relatively small, perhaps it was made up of panellists that do not predominantly fall into minority groups, hence the risk of discrimination may not apply to them.

Those risk statements that were accepted or rejected were removed from the questionnaire for the second round, as consensus (as per the predefined criteria) had been reached on those statements. Those that were accepted were to be incorporated into the perceived risk typology, and those that were rejected were no longer of importance to the study.

Further to round one, the respondents were asked to list any other risk factors that they may be concerned about when deciding to travel in the current pandemic situation in qualitative free-text boxes. These comments underwent content analysis in order to ensure no duplicated comments were added to the second round. The statements that were included in the second round for evaluation by the panellists are presented in table 7.3.5 below.

Table 7.3.5 Qualitative responses from panellists included in the second round

Risk Category	**Comments from Free-text boxes**
Financial	There will be additional costs involved in meeting COVID-19 regulations (e.g. PCR tests)
Performance	The impact on further bookings in terms of cancellations and needing to reschedule Possibility of delays (due to things like a positive PCR result)
Psychological	Travelling during this time may result in feeling pressure and discomfort of being coerced into practices not aligned to personal beliefs Travelling during this time increases feelings of fear of being stuck in another (unexpected) country, not being able to return home due to red lists and travel bans to certain areas Travelling now involves a heightened sense of anxiety due to the possibility of falling ill and having to deal with the processes and restrictions involved in dealing with this Travelling now involves feelings of fear at being deported or delayed due to PCR test and document errors Travelling now may involve being at odds with the dominant narratives around COVID-19/vaccinations/protocols Travelling now will result in psychological trauma due to stress and exhaustion Sanitizing/vaccinations/wearing masks in order to travel are constraints that create stress and make travel unappealing
Physical	Long flight hours may lead to flight exhaustion
Social	Divisions created in families and social friendships around polarizing narratives to do with the entire experience of travelling may make it unappealing
Political	Travel requirements and regulations may change without much warning

Time/Convenience	Being pulled into the COVID-19 drama and all it asks and requires is a time and energy drain and fundamentally irritating

Round Two

The second round produced an improved response rate (85%). The second round contained those statements that did not reach agreement/consensus, along with the statements that had been identified in the qualitative free-text boxes in round one. The same predefined criteria to filter the statements that was applied in the first round was carried into the second round, due to its ability to distinguish between the risk statements that are truly concerning for the panellists. Table 7.3.6

Table 7.3.6 Risk statements accepted by predefined criteria in Round Two

Risk Statement	**Mean**	**Standard Deviation**	**Very Unlikely (%)**	**Unlikely (%)**
There will be additional costs involved in meeting COVID-19 regulations (e.g., PCR tests) (fin)	4.24	0.970	0	0

The second round of the Delphi survey resulted in one more risk statement being accepted as per the selection criteria. This was from the financial risk category and was also a statement that was gained through the qualitative free-text boxes from round one. The statement "There will be additional costs involved in meeting COVID-19 regulations (e.g., PCR tests)" had a mean of 4.24, suggesting that it was highly likely to be a concern for the sample of South African travellers before deciding to take an international trip in the current pandemic situation. Rebell (2021) notes that travelling post-pandemic involves more costs than pre-pandemic, such as multiple COVID-19 test costs and suggests that tourists pay more attention to the hidden costs in international travel at this time. The statistical outputs from SPSS for the second round can be found at the back of this research paper in Appendix B. A full list of the risk statements used in the Delphi processes can be found in Appendix C and D, for rounds one and two respectively.

It was decided to end this part of the Delphi study at this point, due to time constraints. As Beiderbeck et al. (2021) suggest, termination of Delphi studies can be done on a time-related criterion. Although not all statements received consensus/agreement, it was decided that the risk statements that had been accepted by definition of the selection criteria sufficiently

indicated the most concerning risks for the panellists. Panellists had been given the opportunity to voice any other concerns that may apply to them in the first round, and these were incorporated into the second, ensuring that any other risk factors relevant to the panels risk evaluation were accounted for. The next section, however, highlights and discusses the risk statements that received a mean>3.5 in the second round, indicating a relatively high concern for the panel. This is being included in this research paper because as the scale provided to the participants included "Somewhat Likely" as the middle point (3), therefore means higher than 3.5 insinuate that such a risk statement is by no means no concern at all to the participants and thus deserves attention, however will not be included in the perceived risk typology of this paper. This information may direct future research and contributes to creating a holistic and well-rounded view of the South African travellers perceived risk in international travel in the current pandemic situation. Table 7.3.7 below notes the statements from round two that achieved means>3.5.

Table 7.3.7 Risks statements not accepted for the perceived risk typology with mean>3.5

Risk Statement	**Mean**	**Standard Deviation**
Unexpected expenses may arise (fin)	4.00	1.115
I will need to spend more on insurance (fin)	3.82	1.572
Income loss due to the pandemic may have made travelling too much of an investment for this time (fin)	3.71	1.131
The value for money in travelling has decreased (fin)	3.65	1.173
The impact on further bookings in terms of cancellations and needing to reschedule (perf)	3.76	0.870
Possibility of delays (due to things like a positive PCR result) (perf)	3.59	0.903
Being sick away from home is concerning (phy)	3.94	1.249
Medical systems in host countries may be ineffective (phy)	3.71	1.213
I may be unable to get timely medical assistance in host countries (phy)	3.82	1.131
Travel requirements and regulations may change without much warning (TiCo)	3.88	0.928

“Unexpected expenses may arise”; “I will need to spend more on insurance”; “Income loss due to the pandemic may have made travelling too much of an investment for this time” and “The value for money in travelling has decreased” are all financial related risk statements that scored relatively high means. This suggests that travel consumers may be concerned about the unexpected and increased expenses that may arise since the start of the pandemic – such as the increased need for travel insurance (should they be forced to cancel their trip) or medical insurance (should they contract the virus or need to be hospitalised at the destination). These findings are in concordance with the findings of Chebli & Foued (2020), who suggest that following the pandemic, tourists will become more concerned with travel insurance due to no longer being willing to take risks. Furthermore, it seems a considerable number of panellists were concerned about income loss due to the pandemic and that international travel during this time may be too much of a financial commitment for their situations right now. Chebli & Foued (2020) also note that the purchasing power of the average consumer will be impacted by the resulting economic crisis of the pandemic, and that tourists will try to reduce their travel expenses. The fact that value for money may be considered to have decreased for travelling at this time may suggest one of two things; perhaps travellers feel that travelling under the regulations and conditions of COVID-19 may negatively affect the experience and thus would rather wait to spend the money on travelling when the situation has completely normalised or, on the other hand, perhaps travellers find that their South African Rand money will not get them the experience they hope for due to the weakening of the Rand against, for example, the Euro.

The performance risk category statements that received relatively high rankings included “The impact on further bookings in terms of cancellations and needing to reschedule” and “Possibility of delays (due to things like a positive PCR result)”. Both these statements were suggested by panellists in the qualitative free-text boxes in round one, and both received considerable agreement from fellow panellists. Both statements make reference to the possibility of adverse events should cancellations or infections occur. This denotes a direct linkage to risks that are pertinent to the pandemic situation. Panellists show a concern for the impacts of COVID-19 not only before deciding to travel, but also after the decision as the COVID-19 pandemic may impact on their travel experience when in the process of travelling (for example, needing to amend an entire itinerary due to an occurrence at one place).

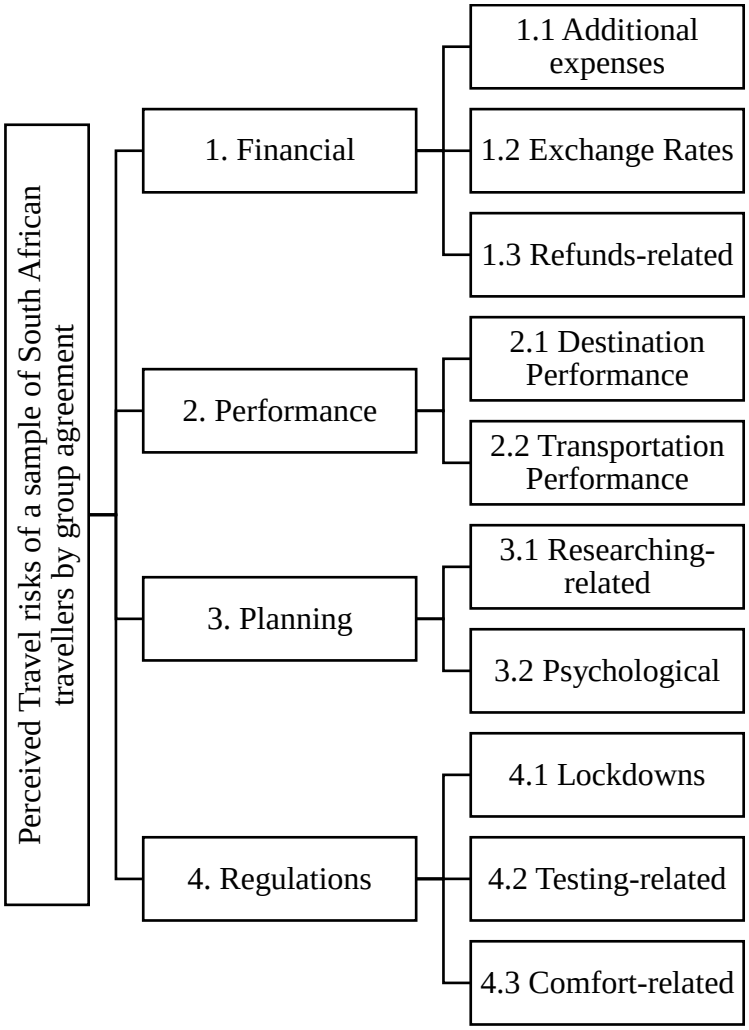
In the physical risk category, statements “Being sick away from home is concerning”; “Medical systems in host countries may be ineffective” and “I may be unable to get timely

medical assistance in host countries" got considerable acknowledgement from the panellists. This is interesting, because another risk statement that was included in both rounds but that did not get significant ratings in either was about concerns regarding getting infected with the virus. On the one hand, as Chebli & Foued (2020) comment, tourists will be more concerned regarding health and hygiene awareness as well as the quality of care and medical systems at the destination, which is also suggested by the results of the statements that received means>3.5 from this study, however, on the other hand, the results suggests that South African travellers may not be particularly concerned with getting infected with the virus when travelling, but rather what will occur if they do. Therefore, it can be assumed that for this sample of South African travellers, any hesitation to travel in the current pandemic situation is not linked to fear of the virus itself, but rather the structures in place around them and in their environment to respond if infection were to occur. However, this result could also be due to the limitation of this study regarding the time of data collection, whereby the pandemic was not in its peak, suggesting perhaps the fear of the virus itself had dissipated by then.

Finally, "Travel requirements and regulations may change without much warning" also received considerable ratings. Concern for the unpredictability of the changing dynamics of the responses to the virus is a clear perceived risk for South African travel consumers. It is clear that South African travellers are concerned with being caught off guard and not being prepared for any situation that unfolds. Chebli & Foued (2020)'s study also supports this claim as they found that tourists are expressing a higher willingness to search for information as a way to prepare themselves against any unexpected circumstances during their travels; and suggest that governments and tourism managers should direct their efforts towards increased communication and information dissemination.

iv South African Travel Consumer Perceived Risk Typology

After the second round, once the risk statements that were rated by panellists as significant, per predefined criteria, were identified, content analysis was used to identify categories across the accepted risk statements and in order to develop the typology. The aim was not to force responses into the traditional perceived risk frameworks but to rather revise categories and create a typology that is most suitable to the sample and data. This was also necessary in order to ensure that the typology components were mutually exclusive and that no one component could be inserted into two categories. Figure 7.3.1 below depicts the perceived risk typology after content analysis of the accepted risk statements occurred.



Numbers (1-4) depict the risk dimensions, numbers (1.1-4.3) depict the evaluation criteria.

Fig 7.3.1 Perceived Travel Risk Typology of a sample of South African Travellers in the current pandemic situation

In order to make the evaluation criteria measurable, it was necessary to operationalise them, thereby describing and explaining how the criteria is able to be measured. Table 7.3.8 below notes the sub-sub criteria that can be used to assess the evaluation criteria and on which the MCDA can begin.

Table 7.3.8 Perceived travel risk dimensions and evaluation criteria with sub-criteria and scale components

Criteria	Sub-criteria	Sub-sub criteria	Indicator	Scale
1. Financial	1.1 Additional expenses	PCR Tests	PCR Test costs	No PCR test costs PCR test costs
		Quarantining	Costs	No quarantine costs High quarantine costs
			Time	No time spent quarantining >1 week spent quarantining
	1.2 Exchange rates	Favourability	Rate of exchange	Exchange rate favourable Exchange rate ± Equal Exchange rate unfavourable
	1.3 Refund-related	Ease of process	Input of effort	Low effort input obtaining refunds High effort input obtaining refunds
		Portion refunded	Amount refunded	Full refund obtained Partial refund obtained No refund obtained
2. Performance	2.1 Destination-related	Operation of activities	Level of limitation	No activities will be limited Some activities will be limited Most activities will be limited
	2.2 Transportation-related	Cancellation of flights	Occurrence of cancellation	No flight cancellations will occur Flight cancellations will occur
3. Planning	3.1 Researching-related	Availability of information	Level of availability	High availability of information Low availability of information
		Time Spent	Amount of time spent researching	Low time spent High time spent
		Planning Impact on Stress levels	Level of stress	Low level of stress Moderate level of stress High level of stress
	3.2 Psychological			
4. Regulations	4.1 Lockdown	The occurrence of lockdowns	Lockdown occurrence	No lockdowns occurring Lockdowns occurring
		Number of cases	Level of the number of cases	Low number of COVID-19 cases Moderate number of COVID-19 cases High number of COVID-19 cases
	4.2 Testing-related	Locating a COVID-19 test	Level of accessibility	High COVID-19 test accessibility Low COVID-19 test accessibility
		Outcome of the test	Result	Negative result Positive result
	4.3 Comfort-related	Mask wearing	Level of mask wearing	Never wearing a mask Wearing a mask sometimes Always wearing a mask

Panellists were presented with the above scoring scales and were requested to indicate their level of agreement with the operationalisation of the risk criteria. Panellists were asked to please provide explanations or improvements with any criteria or operationalisations that they did not feel were appropriate. Presenting as a limitation to this study, many respondents did not provide answers for this section. Answers that were provided were all "agree" or "strongly agree"; however, it cannot be assumed that providing no answer at all can be ascertained to agreement. Therefore, these scoring scales would need to be refined in future research. Ideally, those operationalisations that did not achieve agreement would be included in another round and amended as per respondents' suggestions and further reviewed by fellow panellists, however, due to a lack of comments in this part of the process, this could not be achieved.

7.4 Evaluation Phase: Weights and Value functions

Round Three

The panellists were then invited to a third round in which the different risk criteria were weighted. Panellists were asked to indicate, in their opinion, the degree of importance they placed on the different criteria, using the semantic judgement scale from MACBETH (no, weak, very weak, moderate, strong, very strong and extreme), in terms of their contributions to their overall travel risk. This information was then used to create a ranking of the criteria based on the degrees of importance assigned by participants. Table 7.4.1 below summarises the responses of panellists.

Table 7.4.1 Degrees of importance of risk criteria in terms of contribution to overall travel risk perception (N=16)

		Degree of Importance						
Evaluation criteria	**Of the below areas of perceived risk in international travel, what in your opinion is the degree of importance in terms of overall perceived travel risk?**	**no**	**very weak**	**weak**	**moderate**	**strong**	**very strong**	**extreme**
1.1 Additional expenses	This refers to any additional costs that will be encountered in the travel experience due to the COVID-19 pandemic, such as PCR test costs and Quarantining (i.e., time spent quarantining and the cost of quarantining)	0	0	2	1	5	8	0
1.2 Exchange rates	This refers to whether exchange rates are favourable or not	1	0	2	1	1	10	1
1.3 Refunds-related	This refers to the ease of process of obtaining the refund and the portion of refund obtained should a cancellation occur	1	0	1	4	3	6	1
2.1 Destination performance	This refers to the level of limitation of the destination activities due to the COVID-19 pandemic	1	1	1	7	4	2	0
2.2 Transportation performance	This refers to the occurrence of flight cancellations due to the COVID-19 pandemic	0	2	1	4	4	3	2
3.1 Researching-related	Referring to the level of availability of COVID-19-related information and the amount of time spent acquiring the information needed before deciding to travel	1	1	1	3	7	3	0
3.2 Psychological	This refers to the level of stress that comes as a result of planning international travel in the pandemic situation	0	2	3	4	3	4	0
4.1 Lockdowns	This refers to the occurrence of a lockdown when travelling internationally, and therefore, by the level of COVID-19 cases at the time	0	1	1	5	5	3	1
4.2 Testing-related	This refers to the level of COVID-19 test accessibility and the result of the COVID-19 test	1	0	2	5	2	5	1
4.3 Comfort-related	This refers to the level of mask wearing that occurs during the international trip	1	1	0	5	3	2	4

Each MACBETH scale indicator was assigned a value (i.e., no=1; very weak=2; weak=3; moderate=4; strong=5; very strong=6 and extreme=7), and once the values were weighted according to the judgement provided by the panellists, the values were summed – resulting in a relative ranking. Table 7.4.2 below presents the criteria in order of importance in terms of their contribution to international travel risk perceptions, as provided by panellists.

Table 7.4.2 Criteria ranked in terms of importance in contribution to overall travel risk perception.

Criteria	**Weighting**
1.1 Additional expenses	83
1.2 Exchange rates	83
1.3 Refunds-related	80
4.3 Comfort-related	78
4.2 Testing-related	77
4.1 Lockdowns	75
2.2 Transportation performance	75
3.1 Researching-related	71
3.2 Psychological	68
2.1 Destination performance	66

Round Four

As can be seen from the above values, additional expenses (1.1) and exchange rates (1.2) obtained the same value in weighting (83), as did lockdowns (4.1) and transportation performance (2.2) (75). For this reason, the panellists were consulted once again and asked to indicate which between the two in each case they prioritised. This final Delphi round resulted in additional expenses (1.1) being considered more important than exchange rates, and lockdowns (4.1) were rated more important than transportation performance (2.2). Table 7.4.3 below depicts the fourth Delphi results achieving the goal of settling the draw.

Table 7.4.3 Fourth Delphi results depicting the prioritisation of criteria importance (N=14)

Risk Criteria	**Number of prioritisations**
1.1 Additional expenses	11
1.2 Exchange rates	3
4.1 Lockdowns	8
2.2 Transportation performance	6

i MACBETH

The next part of the evaluation stage of this research began by constructing a value tree on the M-MACBETH DSS. Figure 7.4.1 below depicts this value tree, describing the multiple

criteria involved in the perceived risks of international travel for the sample of South African travellers.

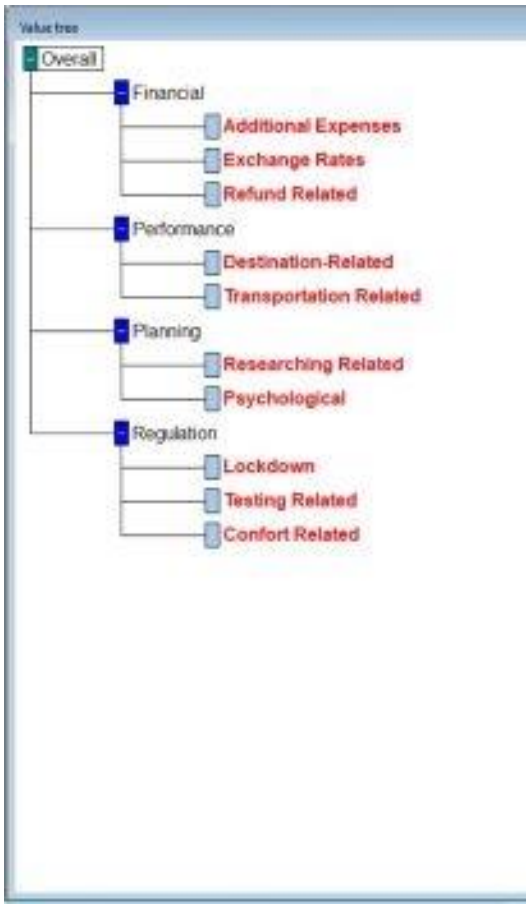


Fig 7.4.1 Multicriteria value tree

In the value tree, the red statements represent the FPVs, and the headings of these are the risk dimensions/areas of concern. In order to apply such a multicriteria model to the M-MACBETH DSS, impact levels were constructed in order to measure the performance of potential actions in the FPVs. Descriptors, the name of the qualitative scales created, ensure that the FPVs can be operationalised (i.e., set of ordered levels of performance). It is important to note that impact levels are ordered from least to most preferred option (i.e., most preferred option would be a situation with no levels of perceived risk) and were created in relation to the operationalisation of the criteria and the identified risk criteria. As the impact levels increase, the level of perceived risk decreases. In other words, tourist destinations that score high on the performance indicators are deemed safer (i.e., containing less risk) to this panel of South African travellers. The impact levels were obtained through an informal focus

group session with five of the South African traveller panellists. The tables below describe the descriptors and indicate their impact levels.

Descriptor 1.1: Additional Expenses

Impact Levels	Description
N3	Travel situation with no PCR test costs, no quarantine costs and no time spent quarantining
N2	Travel situation with PCR test costs, but no quarantine costs and no time spent quarantining
N1	Travel situation with PCR test costs, high quarantine costs and >1 week quarantining

Descriptor 1.2: Exchange Rates

Impact Levels	Description
N3	Exchange rates favourable
N2	Exchange rates more or less the same
N1	Exchange rates unfavourable

Descriptor 1.3: Refunds-related

Impact Levels	Description
N5	In the case of cancellation, full refund obtained with low input of effort to obtain the refund
N4	In the case of cancellation, full refund obtained with high input of effort to obtain the refund
N3	In the case of cancellation, partial refund obtained with low input of effort to obtain the refund
N2	In the case of cancellation, partial refund obtained with high input of effort to obtain the refund
N1	In the case of cancellation, no refund obtained with high input of effort to obtain the refund

Descriptor 2.1: Destination Performance:

Impact Levels	Description
N3	No Activities will be limited
N2	Some activities will be limited
N1	Most activities will be limited

Descriptor 2.2: Transportation Performance

Impact Levels	Description
N2	No flight cancellations will occur
N1	Flight cancellations will occur

Descriptor 3.1: Researching-related

Impact Levels	Description
N4	Planning international travel with high availability of information and a low amount of time spent researching
N3	Planning international travel with high availability of information and a high amount of time spent researching
N2	Planning international travel with low availability of information and a low amount of time spent researching
N1	Planning international travel with low availability of information and a high amount of time spent researching

Descriptor 3.2: Psychological

Impact Level	Description
N3	Low levels of stress when planning international travel
N2	Moderate levels of stress when planning international travel
N1	High levels of stress when planning international travel

Descriptor 4.1: Lockdown

Impact Level	Description
N3	No lockdowns occurring and low number of COVID-19 cases
N2	No lockdowns occurring but moderate number of COVID-19 cases
N1	Lockdowns occurring and high number of COVID-19 cases

Descriptor 4.2: Testing-related

Impact Level	Description
N4	High COVID-19 test accessibility and a negative result
N3	Low COVID-19 test accessibility and a negative result
N2	High COVID-19 test accessibility and a positive result
N1	Low COVID-19 test accessibility and a positive result

Descriptor 4.3: Comfort-related:

Impact Level	Description
N3	Never wearing a mask
N2	Wearing a mask sometimes
N1	Always wearing a mask

Pairwise comparisons were conducted with the focus group in order to establish in the M-MACBETH DSS the scales of difference between each impact level. The Figures (7.4.2-7.4.3) to follow show examples of this in the DSS. As can be seen from these screenshots, the difference between different impact levels is assessed in terms of their difference in attractiveness for the South African travel consumer, and the DSS converts these semantic judgements into numerical values, dividing the impact levels according to a mathematical model. MACBETH allows you to evaluate the options' (impact levels) relative attractiveness indirectly, through the use of a value function that converts any options performance on the criterion into a numerical score (Bana e Costa et al., 2012). This study conducted the comparisons using qualitative performance levels as the indirect bases for comparison.

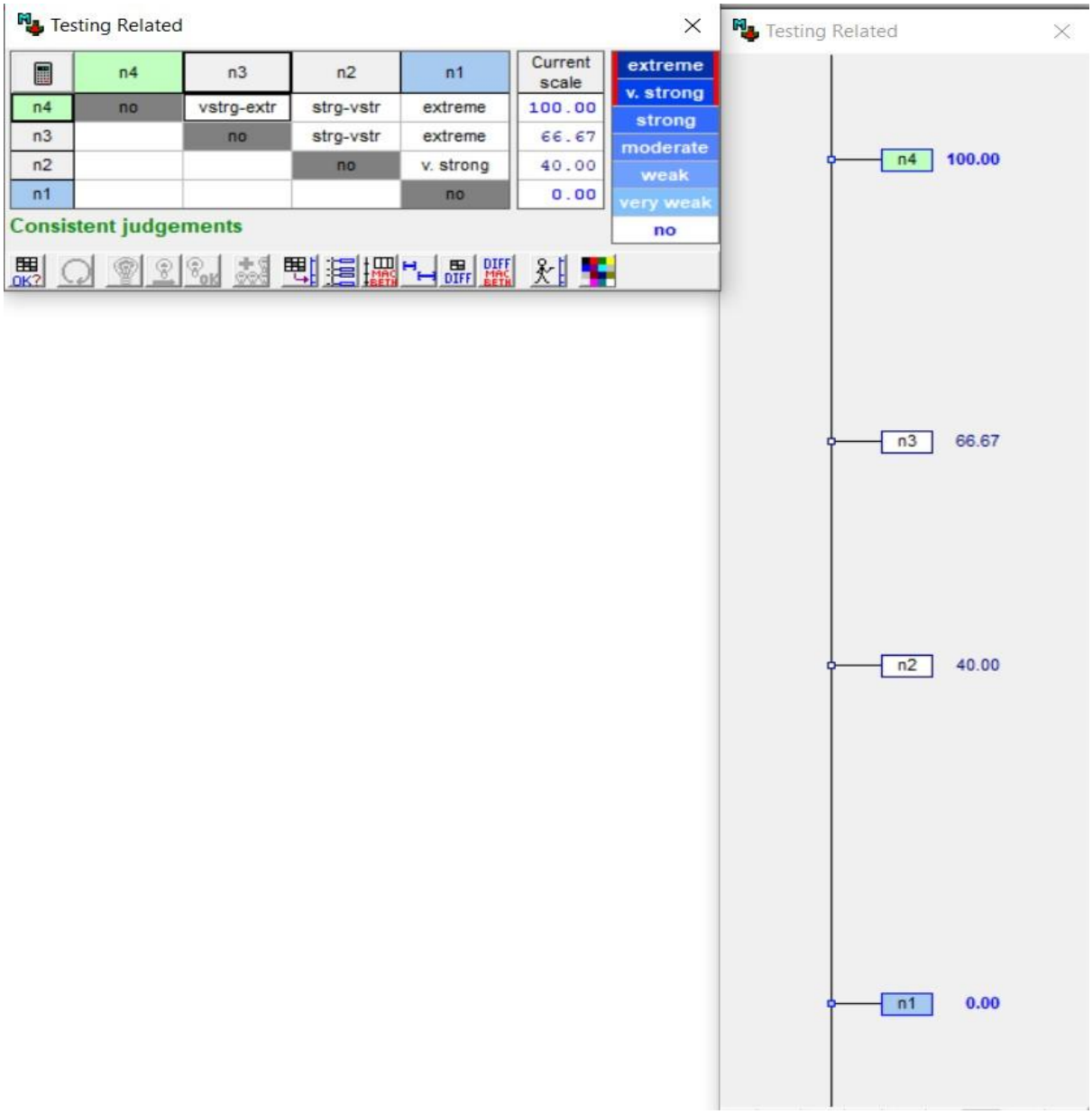


Fig 7.4.2 Testing -related impact level scales

In this example, N1 – "Low COVID-19 test accessibility and a positive result" – which implies the worst-case scenario for the descriptor (i.e., the highest degree of risk) is given a value of null. In other words, this impact level contributes nothing to the mitigation of the perceived risk of a traveller under this criterion. Then, according to pairwise comparisons made by the panellists in the focus group regarding the comparison of impact levels, the subsequent impact levels are assigned numerical value – in this case, N2 is 40, N3 is 66.67 and n4 – "High COVID-19 test accessibility and a negative result" – representing the best-case scenario – is given 100 points.

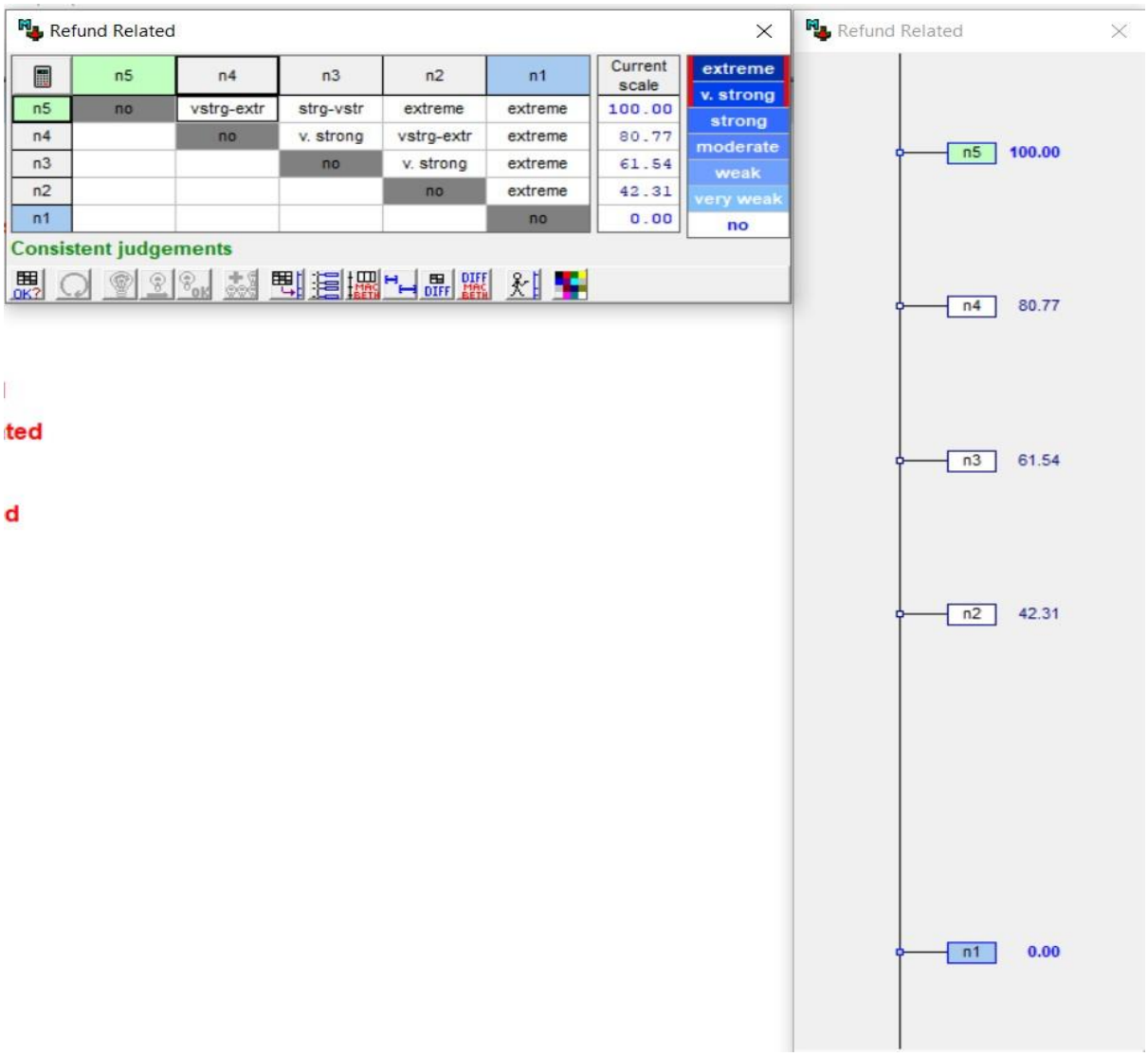


Fig 7.4.3 Refund-related impact level scales

Similarly, the worst-case scenario in the refund-related criterion would be that of N1 – "In the case of cancellation, no refund obtained with high input of effort to obtain the refund". The difference between N1 and N2 in terms of relative attractiveness is 42.31, according to pairwise comparisons of the focus group, and so on for the resulting impact levels. This process assigns the ability to numerically investigate the difference between levels of impacts, through producing only a qualitative judgement on difference in attractiveness.

As described by Bana e Costa et al. (2012), the ranking of criteria weights is determined by ranking the overall references in terms of their overall attractiveness. This was achieved in the Delphi round in which panellists were required to indicate, in their opinion, the overall contribution of each risk criteria to their overall travel risk perception, by choosing one of the MACBETH judgements. From this information, using the M-MACBETH DSS, a weights scale can be built from the weighting matrix of judgements. Figure 7.4.4 below depicts the

overall weighting matrix of judgements between all the criteria, followed by Figure 7.4.5 which is the built weighting scale – which shows the order of attractiveness (or, in other words, importance) of each criterion in terms of their contribution to overall travel risk perception.

Weighting (Overall)

	[AddExpenses]	[ExchangeRat]	[RefundRelated]	[TestingRelated]	[ConfrotRelat]	[Lockdown]	[ResearchRelat]	[DestRelated]	[TranspRelat]	[Psychologic]	[all lower]	Current scale
[AddExpenses]	no	weak	moderate	moderate	moderate	weak-mod	strong	strong	v. strong	extreme	positive	20.60
[ExchangeRat]		no	weak-mod	weak-mod	weak-mod	weak	moderate	weak-mod	strong	extreme	positive	16.80
[RefundRelated]			no	weak	weak	weak	weak	vweak-weak	weak	strong	positive	12.47
[TestingRelated]				no	weak	weak	weak-mod	weak	vweak-weak	moderate	positive	11.38
[ConfrotRelat]					no	weak-mod	weak	weak-mod	weak-mod	moderate	positive	10.30
[Lockdown]						no	weak-mod	weak	weak-mod	moderate	positive	9.21
[ResearchRelat]							no	weak	weak-mod	weak	positive	7.59
[DestRelated]								no	weak-mod	weak	positive	6.23
[TranspRelat]									no	weak-mod	positive	4.88
[Psychologic]										no	positive	0.54
[all lower]											no	0.00

Consistent judgements

Fig 7.4.4 Weighting matrix of judgements between criteria

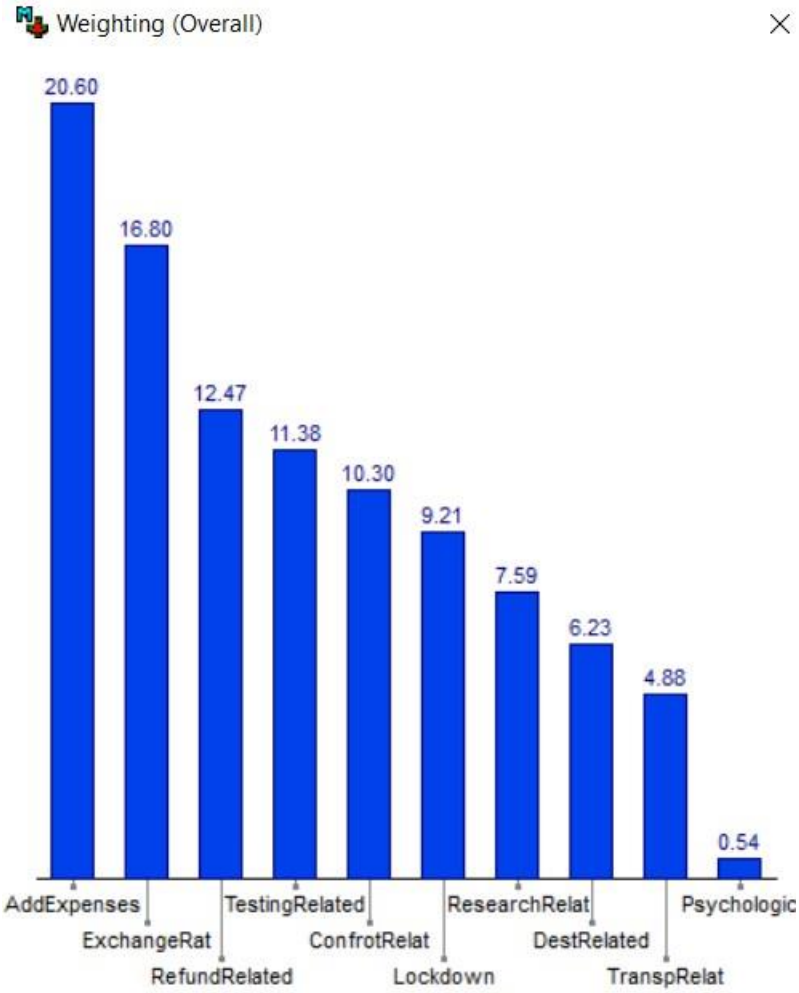


Fig 7.4.5 Weighting scale of criteria (ranked)

This then concluded the construction of the MACBETH multicriteria model. The results depict the relative contribution of each criterion towards overall travel risk perceptions when travelling internationally in a pandemic situation. This model can then be used in order to evaluate particular destination alternatives, comparing them according to their difference of attractiveness in multiple criteria – in the case of this research paper, that would entail comparing different destinations in terms of the level of perceived risk they contain according to certain criteria that was stipulated by panellists of a Delphi survey. The conversion of a destination's performance into a score will require that the destination's performance be entered into the model. The next section will test the model by evaluating five different destinations – Portugal, USA, Germany, India and The United Kingdom.

7.5 Prioritisation Phase: Testing the model and analysing the results

In order to test the evaluation system created, it was necessary to obtain information on tourist destinations (i.e., Portugal, the USA, Germany, India and the UK). The researcher did research in order to determine the performance of each of these destinations on the criteria included in the model. The information was collected and each destination was assigned an impact level according to their performance on the criterion. Due to this being a hypothetical application of the model, a few limitations are necessary to be mentioned.

In terms of the criterion "refunds-related", the researcher based her information collection on the cheapest flight to the destination found on Google flights. The airline's website belonging to this option was investigated in order to get information regarding cancellation and refund policies so that an evaluation of performance on the "refunds-related" criterion could be conducted. It is important to note that this criterion is not only for the evaluation of flight cancellations, but also other cancellations that would require the traveller to seek a refund.

Furthermore, this section required the researcher to assume that the individual travelling has not been vaccinated, as things such as required PCR-tests prior to travelling is dependent on whether or not the individual is vaccinated, as those who are do not require PCR-tests. Additionally, some impact levels were difficult to evaluate due to the hypothetical situation in which this example is based – i.e., not knowing the results of a COVID-19 test.

Finally, impact levels were assigned to the performance of the different destinations in the "researching-related" criterion from the basis of the researcher's experience researching. For example, the availability of information, levels of stress involved and the amount of time spent researching were all specific to the researcher's interpretation of such information

availability, level of stress in planning and time spent searching for the information needed to travel to such destinations.

The assigned impact levels of each destination were inputted into the M-MACBETH DSS under the multicriteria mathematical model constructed, as explained above. Figure 7.5.1 below shows the performance matrix, including the impact levels each destination achieved.

Table of performances

Options	AddExpenses	ExchangeRat	RefundRelated	DestRelated	TranspRelat	ResearchRelat	Psychologic	Lockdown	TestingRelated	ConfrotRelat
Portugal	n2	n1	n2	n3	n2	n4	n3	n3	n4	n2
USA	n2	n1	n4	n3	n2	n3	n2	n2	n4	n3
Germany	n2	n1	n2	n3	n2	n3	n2	n2	n4	n2
India	n2	n2	n2	n3	n2	n1	n1	n2	n4	n1
UK	n3	n1	n2	n3	n2	n4	n3	n2	n4	n3

Fig 7.5.1 Performance matrix of Portugal, USA, Germany, India and the UK on the multicriteria model

Following this information input, the M-MACBETH DSS converted these performances into value scores. Figure 7.5.2 Depicts the overall value scores achieved by each destination, following the multicriteria mathematical model.

Table of scores

Options	Overall	AddExpenses	ExchangeRat	RefundRelated	DestRelated	TranspRelat	ResearchRelat	Psychologic	Lockdown	TestingRelated	ConfrotRelat
Portugal	61.96	54.55	0.00	42.31	100.00	100.00	100.00	100.00	100.00	100.00	54.55
USA	64.84	54.55	0.00	80.77	100.00	100.00	71.43	54.55	54.55	100.00	100.00
Germany	55.36	54.55	0.00	42.31	100.00	100.00	71.43	54.55	54.55	100.00	54.55
India	53.19	54.55	54.55	42.31	100.00	100.00	0.00	0.00	54.55	100.00	0.00
UK	71.82	100.00	0.00	42.31	100.00	100.00	100.00	100.00	54.55	100.00	100.00
[all upper]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
[all lower]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weights :		0.2060	0.1680	0.1247	0.0623	0.0488	0.0759	0.0054	0.0921	0.1138	0.1030

Fig 7.5.2 Overall value scores of destinations Portugal, USA, Germany, India and the UK

As can be seen from this output, the UK scores highest in terms of scoring relative to the travel risk perceptions of this sample of South African travellers. This means that out of travelling internationally from South Africa to any of the examples of destinations, the UK presents the “safest” according to the perceived risks of this panel. This may be due to the fact that in the weighting of the criteria, “comfort-related” (which referred to the level of mask-wearing that would occur on the trip) was weighted relatively high (10.3), and the UK has recently put an end to the mandatory wearing of masks. Similarly, the USA also performed well on this criterion as they have also ended mandatory mask-wearing. It is clear from these results that destinations that place less attention on mask-wearing perform better, indicating, firstly, that this sample of travellers consider mask-wearing a disadvantage to the

travel experience; and secondly, that destinations that relax mask regulations may fare well in terms of mitigating perceived risks.

Furthermore, the UK does not require any additional testing or quarantining in order to enter its borders, resulting in the UK performing well on the "additional expenses" criterion. All the destinations performed well regarding "testing-related" as all of the destinations had testing centres available at their airports. Additionally, in terms of 'destination performance' criterion, all destinations performed very well due to the state of the pandemic at this time, that being a state in which restrictions are minimising and most activities are becoming operational once again.

However, as can be seen from the exchange rate criterion, only India performed relatively well as the South African rand was considerably weaker against all the other currencies. This could be due to the economic crisis that South Africa is experiencing following the COVID-19 pandemic impacts (Bush, 2020).

It can be seen from the above results that Germany as a tourist destination performs relatively lower in terms of the "lockdown" criterion. This is due to the fact that at the time of this information collection, it had high cases of COVID-19 cases – 1.6 million confirmed cases in the last seven days. Furthermore, relatively, it did not perform well in both 'researching-related' and 'psychological' criteria as the experience of information collection was not only confusing for the researcher due to conflicting information and differing regulations in different areas of Germany, but also resulted in higher stress levels being experienced in the planning of international travel.

It is important to consider the limitations (further discussed in the next chapter) involved in the timing of this research. It is appropriate to assume that if such research were to be conducted during the peak of the pandemic, that not only would the identified risk perceptions from the Delphi process be different, but so would the destination performances on these criteria.

7.6 Summary and Conclusions

This section presented the results of the study carried out in this research paper. It described the preliminary findings and thereby gives the reader the ability to analyse how the risk statements decided to be included in the Delphi were obtained. It then presented the results of the four Delphi rounds, describing the statements that were accepted, rejected and included

for evaluation. This led to the presenting of a perceived risk typology, in which the statements that were approved via the Delphi were subjected to content analysis and divided into different categories that represent the travel risks as perceived by this sample of South African travel consumers.

This section then went on to describe the results obtained from the application of the MCDA methodology, using the MACBETH approach. It describes the descriptors of impact and presents the weighting and ranking of the multicriteria that make up the travel risks perceived by the sample. Finally, an overall weighting performance matrix is presented to the reader that depicts the relative importance of the contribution of each criterion to overall travel risk.

The destinations of Portugal, USA, Germany, India and the United Kingdom are assessed as a practical application of this tool. Their performance against the risk criteria is assessed and compared, and it is clear to see from the results that the UK would be the best destination for this sample of South Africans to travel to internationally, in terms of providing them the best situation with regards to their risks.

Given this model, it is able to quantitatively provide the aspects – according to this group of South African travel consumers (the ‘decision-makers’) – that significantly impact and contribute to the performance of destinations and interventions with regards to perceived travel risk following the COVID-19 pandemic. Therefore, tourism managers are able to identify the areas that need to be prioritised to improve overall performance.

In terms of the objectives of this study, the aims were achieved in so far as a multicriteria model being developed which may act as a managerial instrument with which to evaluate performances of destinations and strategies in a process of addressing perceived travel risks in international travel. This model enables a better visualisation of the risk factors constituting overall perceived travel risk, allowing the identification of areas requiring special attention, equipping the tourism industry with the tools to achieve tourist perceived risk mitigation.

CHAPTER EIGHT: CONCLUSION

8.1 Conclusions of the Research

This study represents a bottom-up hierarchal structure risk index and provides an evidence-based approach to analyse risk perceptions of tourists within a chained sub-index structure. This is headed by risk dimensions – including Financial, Performance, Planning and Regulations risks. Sub-indices include the risk criteria which integrates a set of tourist risk perceptions which are individual evaluation axes for appraising tourist risk perceptions regarding travel decision-making and are made operational by one or more indicators. The risk criteria identified through this multimethodological research include additional expenses, exchange rates, refunds-related, destination performance, transportation performance, researching-related, psychological, lockdowns, testing-related and comfort-related. The risk criteria are weighted by importance of contribution to overall travel risk. Table 8.1 below depicts the risk index as informed by the research in this paper.

Table 8.1 Perceived travel risk evaluation index

Risk Category	Criteria	Overall weights
Financial	1.1 Additional expenses	20.60
	1.2 Exchange rates	16.80
	1.3 Refunds-related	12.47
Performance	2.1 Destination	6.23
	2.2 Transportation	4.88
Planning	3.1 Researching-related	7.59
	3.2 Psychological	0.54
Regulations	4.1 Lockdowns	9.21
	4.2 Testing-related	11.38
	4.3 Comfort-related	10.30

The set of risk criteria used in this evaluation model was informed via a participatory process (web-Delphi) and followed the methodologies of MCDA, in which experts and stakeholders judged the relevance of criteria identified, from the structuring of the risk evaluation index to the evaluating phases, which included the weighting of criteria and the establishment of value functions. The information generated through such a combination of methodologies not only

allows for a deeper understanding of the risk factors that influence overall travel risk perception but can also provide guidance for the evaluation and selection of policies and destinations with the greatest potential to address these risks, which often act to hinder travel. Qualitative risk analysis such as this allows for the prioritisation of perceived risks, the identification of main perceived risk areas and improves the understanding of the perceived risks that are present. Tourists and tourism are exposed to all kinds of risks, making it impractical to address all of them, thereby making it useful to have such knowledge of important risk criteria so that resources can be appropriately allocated. This can ensure that perceived risk treatments and plans to address perceived risks are more effective.

It can be seen from these findings that this sample of South African travellers evaluate additional expenses, exchange rates and refunds-related criteria as the most important when considering their overall travel risk perception. This is an interesting finding as all these criteria fall within the "financial" risk category, indicating that South Africans may be particularly concerned with the uncertainty involved in financially investing in travel during this time. According to Bush (2020), impacts of the pandemic is poor market performance, in which many of the world's financial markets are struggling, which may result in multi-year recessions. The fact that South Africa is currently experiencing an unprecedented economic crisis following the COVID-19 pandemic, where prices in general are on the rise, may make South Africans particularly weary of their financial situations.

The psychological criterion was evaluated to have the lowest contribution to overall perceived risk, which is indicative of the culture of South Africans, who are known to be a rather relaxed group of people, who do not often become easily concerned or stressed. Furthermore, destination performance was also rated relatively unimportant, and this may be due to the fact that restrictions are easing as the pandemic becomes less severe, particularly in European and American destinations, where tourism seems to be resuming to the same state as before the pandemic. Therefore, the sample don't seem to evaluate that destination activities will still be limited at this time.

Also rated relatively high perceived risks were that of testing-related and comfort-related. It can be assumed that this group of South African travellers are concerned with the inconvenience and hassle that is involved in PCR-test requirements, and this coupled with the high evaluation of additional expenses (such as PCR tests) suggests that the PCR regulation is of particular concern for this panel of South Africans. Furthermore, comfort-related factors

such as the need to wear masks all the time during their travel experience was also rated relatively high. Through the processes of the Delphi, it was mentioned by a few panellists that the mask wearing requirements, they felt, would hinder their experience and comfort. Particularly in terms of body language in which they felt that part of the travel experience includes the interaction with locals, often in a different language, which may be inhibited by the covering of faces. Perhaps this regulation, coupled with the concern for financial investment in travel at this time, may result in South Africans rather postponing their travel plans and preferring to wait until things are completely back to normal.

Therefore, there is a need to introduce structural (tourism infrastructure) and functional (changes in offerings) adjustments to the 'normal' businesses of tourism practitioners. Tourism providers will need to provide information to tourists to assist them in making travel plans in the current time and beyond which includes information specific to holiday planning measures during COVID-19 and providing up-to-date information on destination regulations and situations that include the addressing of the perceived risks they may be experiencing during this time.

Considering the multiple criteria and their weightings obtained from this sample of South African travellers, the model is applied to evaluate five different destinations (Portugal, USA, Germany, India and UK). This application produced results that in terms of perceived travel risks, the UK would be the most appropriate place for South Africans to travel to if they wished to minimise their risk perceptions.

8.2 Contributions of the research:

The contributions of this study are both methodological in terms of the application of this methodology to a new context, and with regards to the substantive and innovative results of the study. This can act as an important starting point for other researchers and practitioners to that hope to identify and prioritise determinants of travel risk perceptions and can be used to compliment previous studies in the field.

Web-Delphi was a successful format for interacting with a sample of South African travellers to collect their views and insights on: 1) the relevant risk criteria to evaluate and monitor tourist risk perceptions in terms of travelling internationally in a pandemic situation (web-Delphi for refining the selection of risk factors); and 2) the importance of particular risk criteria (web-Delphi for weights). It further added value to the tourism industry to improve performance based on the risk indicators (web-Delphi for value functions).

The involvement of different perspectives from stakeholders (South African travellers) in the process of developing the risk index added diverse points of view which validated the holistic perspective of looking at tourist risk perception, particularly in times of a pandemic. It serves as a catalyst for an extended dialogue as to which policies and procedures produce the highest benefit in terms of addressing risk perceptions in travel decision-making and promotes the mitigation of the adverse effects of the pandemic, in so far that it may have contributed to increased and new risk perceptions for the tourist, facilitating successful action. The information generated through such a study not only allows for a deeper understanding of the risk factors that influence overall tourist decision-making, but can also provide guidance for the evaluation and selection of policies with the greatest potential to address these risks, which often act to hinder travel intention and tourism activity (Quintal et al., 2010).

Tourist risk perception measurement may be recognised as one of the appropriate tools to support tourism industry decision-making, monitoring and assessment by ensuring validity and cross-population comparability (Santana et al., 2020). Summary measures built on indicators that are relevant are well-known instruments to provide a clear and comprehensive picture of tourism and tourist perceptions; with the multi-domain basis representing the complexity of tourist risk perceptions (Santana et al., 2020). This contributes to the generation of ideas for potential causes for future changes and in order to identify and inform which risk factors are relevant for current and future overall travel risk perceptions. The set of data is a starting point in which a strategic organisation of the risk factors can be carried out for further scenario analysis.

Although selecting and defining interventions and criteria for risk perception control is context-specific, this study and the rating tool that it aimed to develop can be a starting point for local tourism organisations as part of a broader, MCDA based, priority setting process. An important step in the local use of the rating tool would be to investigate how the tool and its components are understood by tourists in their context. Users of the tool could, for example, select relevant stakeholders and establish a consultation panel. These stakeholders could then discuss the interventions, criteria and scoring scales using democratic processes. After the collection of the relevant (local) information, the tool could be used as an input for a performance matrix, followed by an interpretation and deliberation of the results of this matrix. The tool should be perceived as a simple and legitimate way to frame tourism policy discussions in a more timely and balanced manner.

Within risk assessment literature, this study also proved that it might be useful to develop risk-rating techniques based on MCDA methods. Developing tools informed by this methodology has the potential to assist decision-makers identify and evaluate the risk factors and redefine priorities for intervention. Due to the incorporation of diverse stakeholders within the process of this risk analysis, the results can prove to be more familiar, transparent and inclusive.

This study also contributes to the limited knowledge on health and pandemic-related crises. Health-related crises could act to increase tourist risk perceptions, resulting in the decrease in tourism demand and thereby having significant effects on the socio-economic propensity of destinations that rely on tourism. Not only does research such as this assist in the response to the pandemic in the current time, but also contributes to a body of knowledge that may provide useful should similar situations occur in the future. This study supports the proposition that tourism destinations be prepared – in which risk assessments are crucial (Ritchie, 2004). In terms of risk management, this study provides useful in the development of risk identification that assists in practical response.

Due to this study being exploratory in nature, it provides initial insights and ideas. It could be considered as a first step in the operationalisation of research questions in a qualitative and quantitative manner. The results of this study facilitate the identification of a structure that informs further investigation in a field that is complex. The results are intended as a tool for further elaboration and development both in terms of research and application. Future studies could conduct similar approaches using other multiple criteria techniques, such as Analytical Hierarchy process (AHP) (for example, Tsaur et al., 1997) as well as carrying out comparative analyses. Furthermore, further research could focus on the managerial implications of the results. Any such efforts, such as this research carried out, can be seen as a step towards contributing to the assessment of tourist risk perception and risk analyses.

This research approach allowed for the dealing of both the dynamic nature of risk perceptions and its uncertainties and with the qualitative and subjective aspects of travellers' value systems. The risk evaluation model that was built as a result of this study allows for the appraisal of destinations and strategies for interventions in terms of the degree in which objectives addressing tourist risk perceptions are achieved.

1.3 Limitations of the research:

There are several limitations in this study. This study was not intended to provide a final answer but rather to produce initial insights. It can be viewed as the first step in the attempt to characterise and structure risk perceptions and should be extended further in future studies – qualitative or quantitative.

Given the explorative and qualitative nature of the study, an approach based on representativeness is not possible, nor necessary (Von Bergner & Lohmann, 2014). However, due to the explorative nature of this research and the methodological approach, there may be limitations in terms of generalising the results. These limitations may be observed with respect of the sample size and the selection process and with respect to the Delphi process. The selection of participants to take part in the Delphi is an essential part of the process and for the quality of the Delphi survey. However, even when ensuring that the panellists in this study had travelled internationally in the past five years, it is always possible that a different group of panellists would arrive at a different risk perception model. To ensure the participants were qualified (i.e., travelled internationally in the last five years) and to remain in concordance with the exploratory nature of the study, purposive sampling was deemed appropriate. Therefore, the singularity of this case, in which it is hard to make generalisations from the research results to the wider, general population is the main limitation to this research. From this perspective, future studies are recommended, including exploring and identifying other specific risk perceptions and applying the model to other contexts – in this way, it can be consolidated as an important instrument for supporting the managerial decision-making in tourism companies.

Due to time and financial constraints, the sample on which the research was conducted on was smaller than what would have been preferred in terms of the ability to verify the quality of the risk index (i.e., reliability and validity). Therefore, the index should be used as a tool to guide further studies in tourist risk perception. Additionally, the tool is based on the sample of panellists that took place in this study, representing their values and preferences, and it would be appropriate to assume that different stakeholder groups would likely have different views on the risk index criteria. Due to the Delphi being a subjective process, it can be subjected to personal interest bias. Qualitative risk scores may open to interpretation and variation in scoring even when definitions are provided (ECDPC,2015). This can be solved by applying the tool to a local setting, ensuring the context-specific quality of the process.

Through this, other stakeholder groups can be asked to comment on the relevance of the criteria included in the model and their perceived importance of the criteria, thereby adapting the model accordingly.

Although the participants were international travellers having done so recently in the last five years, the majority of participants were female, between the ages of 46 and 60 and reported that their travel frequency was once every few years. Consequently, there could be bias toward this demographic perspective on the topic. However, the broad range of responses received and risks identified exhibited a significantly diverse picture of travel risk perceptions. It is also worth noting that risk perceptions are subjective in nature and may be assumed to be different for different types of people. For example, some travellers may be naturally more anxious travellers whereas others may actually seek out risk practices in their travellers (Lepp & Gibson, 2003). Therefore, attempting to gain consensus on the different risk factors that should be considered important is a challenging task.

The focus on participants that have travelled internationally in the last five years may also have limited the risk information collected. It may be argued that selecting a broader representation of the tourism industry (by, for example, including tour guides, travel agents, tourism managers and practitioners) would have provided improved results with respect to the research question and the exploratory purpose of the study. However, it was the interest of the researcher to explore risk perceptions as they are perceived by *the tourist*, hence the focus on the travel consumer instead of different components of the tourism industry.

Furthermore, the subjective judgement of researchers in the Delphi process may impact the results by influencing the evaluation and classification of the responses, which is also considered a limitation of this research. However, the ability of panellists to provide comments and contribute to group discussion provides a relatively reliable method to reduce this potential problem.

Prior to the Delphi study, a preliminary process took place to inform the risk statements that should be included in the first round. The selection was based on the overlap between criteria and whether risk statements were appropriate and relevant for the study of overall tourist travel risk perception in a pandemic situation. However, there is no certainty that the exclusion or inclusion of risk statements resulted in valuable information being misplaced. However, the qualitative free-text boxes included in the first round may have contributed to

the reduction of this potential limitation as respondents were free to suggest further risk factors that they felt were relevant to the study.

The web-Delphi method has some inherent limitations. The Delphi technique was used to define a list of risk perceptions that included core criteria, their definitions and scoring scales. This method of survey ensures participant anonymity and allows participants enough time to properly consider their responses and their peers' responses. Part of the Delphi is that participants do not physically meet each other, which allows them to present and react to ideas unbiased by others (Hasson et al., 2000). The anonymity that is characteristic of the Delphi sets it apart from other consensus methods and is a considerably valuable factor – however, in order to achieve a sufficient response rate, the researcher had to be aware of the identity of the respondents in order to pursue non-responders. Therefore, it is necessary for the respondents to be known by the researcher, while ensuring that their judgements and opinions remain strictly anonymous (McKenna, 1994).

Furthermore, another limitation arises within the technique in that it may not allow for adequate elaboration from participants to explain difficult concepts and risk perceptions. Due to the lack of direct communication between participants, misunderstandings may arise between panellists as they do not have the ability to explain their thought processes behind different risk perceptions. Secondly, it is easy to ignore minority opinions in the process of consulting the panellists, possibly resulting in new ideas that are different to the mainstream being lost due to the need for confirmation from other participants. Additionally, Delphi surveys can be a resource-intensive process as it requires the input from a large group of experts, is often time-consuming and may be logistically challenging (ECDPC, 2015), may be the reason behind the drop-out of panellists, possibly due to response fatigue. However, this was not considered to have biased the results as the drop-outs varied in demographic characteristics and were random, containing no patterns.

Another limitation in this research refers to the difficulty of overlapping criteria, which could be explained by a lack of a broader theory on the associations between criteria. The wide variety and diversity of respondent comments and views highlighted the difficulty of developing a clear, consensus-based and exclusive criteria list and scoring scales. It was clear that there were many possible components and definitions of criteria. Some disagreements were still present between participants at the end of the process, and overlap between criteria may be suspected on the final perceived risk list.

Therefore, it cannot be guaranteed that the perceived risk typology is exhaustive and mutually independent, which presents an issue as this is one of the core assumptions in MCDA. For example, one participant noted the difficulty of choosing between “Lockdowns” and “Transportation Performance” in terms of their degrees of importance for overall travel risk as both could result in being stranded at the destination and she could not choose preference over one. This will need further attention in the future use of the tool because criteria should be independent from one another (Keeney & Raiffa, 1993). Criteria should be identified for independence and definitions should include distinctions between overlapping criteria. Furthermore, there are many different methods in dividing scoring scales into different categories and different ways of operationalising the risk criteria, therefore further research could focus on more informed and context-specific categories for scoring scales.

There are limitations to the collection of information which may make it hard to assess the performance of interventions addressing risk perception against certain criteria. However, this is a problem that is relevant to the general study of risk perceptions and it is therefore important to remain transparent on the quality of the evidence collected, and to further include stakeholders on the different indicators that could be used to assess risk criteria.

Furthermore, it is assumed that all responses obtained from panellists were worth including in the research – however, there is no evidence to suggest that such risk perceptions are of value. For example, some opinions provided may not have come from true experience, but rather of intuitive estimation of what would be considered important risk factors, even if they do not specifically apply to the participant.

Finally, the Delphi results merely reflect and are limited to the perceptions of participants at the time of conducting the survey, thus emerging in relation to the state of the COVID-19 pandemic at the time, participant personal experience, situational factors and knowledge of the topic. The study began at a time where the Omicron variant in South Africa had just begun, and concluded when the situation had considerably cooled down. This may have resulted in risk perceptions becoming minimised through the progressive rounds, and presents a picture of the risk perceptions of the travel consumers not at the peak of the pandemic, but rather as the situation was becoming less severe. Furthermore, perhaps it would be an idea to apply this multimethodology to the context of perceived travel risks in general, not only in terms of a pandemic setting.

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APPENDIX A ROUND ONE RISK STATEMENTS RESULTS

		Financial Risk Statement 1	Financial Risk Statement 2	Financial Risk Statement 3	Financial Risk Statement 4	Financial Risk Statement 5	Financial Risk Statement 6	Financial Risk Statement 7	Financial Risk Statement 8
N	Valid	20	20	20	20	20	20	20	20
	Missing	0	0	0	0	0	0	0	0
Mean		3.85	4.30	3.95	4.20	3.75	4.10	3.55	4.25
Median		4.00	4.00	4.00	4.00	4.00	4.50	4.00	4.50
Mode		5	4	5	5	5	5	4	5
Std. Deviation		1.182	.657	1.146	.894	1.446	1.021	1.146	.967
Variance		1.397	.432	1.313	.800	2.092	1.042	1.313	.934
Minimum		2	3	2	2	1	2	1	2
Maximum		5	5	5	5	5	5	5	5
Percentiles	25	3.00	4.00	3.00	4.00	2.25	3.00	3.00	4.00
	50	4.00	4.00	4.00	4.00	4.00	4.50	4.00	4.50
	75	5.00	5.00	5.00	5.00	5.00	5.00	4.00	5.00

		Performance Risk Statement 1	Performance Risk Statement 2	Performance Risk Statement 3	Performance Risk Statement 4	Performance Risk Statement 5	Performance Risk Statement 6	Performance Risk Statement 7	Performance Risk Statement 8	Performance Risk Statement 9	Performance Risk Statement 10
N	Valid	20	20	20	20	20	20	20	20	20	20
	Missing	0	0	0	0	0	0	0	0	0	0
Mean		3.65	4.25	2.75	3.10	3.05	2.50	2.60	2.65	4.40	3.20
Median		4.00	4.00	3.00	3.00	3.00	2.00	2.00	3.00	5.00	3.00
Mode		3[a]	4	2	3	3	2	2	3	5	3
Std. Deviation		.933	.716	1.070	1.021	.887	.946	1.142	.875	.754	1.322
Variance		.871	.513	1.145	1.042	.787	.895	1.305	.766	.568	1.747
Minimum		2	3	1	1	2	1	1	1	3	1
Maximum		5	5	5	5	5	5	5	5	5	5

Percentiles	25	3.00	4.00	2.00	2.25	2.00	2.00	2.00	2.00	4.00	2.00
	50	4.00	4.00	3.00	3.00	3.00	2.00	2.00	3.00	5.00	3.00
	75	4.00	5.00	3.75	4.00	4.00	3.00	3.75	3.00	5.00	4.75

a. Multiple modes exist. The smallest value is shown

		Physical Risk Statement 1	Physical Risk Statement 2	Physical Risk Statement 3	Physical Risk Statement 4	Physical Risk Statement 5
N	Valid	20	20	20	20	20
	Missing	0	0	0	0	0
Mean		3.30	3.85	3.80	3.80	2.25
Median		3.00	4.00	4.00	4.00	2.00
Mode		3	5	5	5	2
Std. Deviation		.865	1.226	1.152	1.152	1.164
Variance		.747	1.503	1.326	1.326	1.355
Minimum		2	2	2	2	1
Maximum		5	5	5	5	5
Percentiles	25	3.00	2.25	3.00	3.00	1.00
	50	3.00	4.00	4.00	4.00	2.00
	75	4.00	5.00	5.00	5.00	3.00

		Political Risk Statement 1	Political Risk Statement 2	Political Risk Statement 3
N	Valid	20	20	20
	Missing	0	0	0
Mean		3.00	3.45	3.25
Median		3.00	3.00	3.00
Mode		3	3	3
Std. Deviation		.918	.945	.786
Variance		.842	.892	.618
Minimum		1	2	2
Maximum		5	5	5
Percentiles	25	2.25	3.00	3.00
	50	3.00	3.00	3.00
	75	3.75	4.00	4.00

		Psychological Risk Statement 1	Psychological Risk Statement 2	Psychological Risk Statement 3	Psychological Risk Statement 4	Psychological Risk Statement 5
N	Valid	20	20	20	20	20
	Missing	0	0	0	0	0
Mean		3.10	3.10	4.15	4.30	2.65
Median		3.00	3.00	4.50	5.00	2.00
Mode		3	2[a]	5	5	1
Std. Deviation		.852	1.447	1.040	.923	1.843
Variance		.726	2.095	1.082	.853	3.397
Minimum		2	1	2	2	1
Maximum		5	5	5	5	5
Percentiles	25	2.25	2.00	3.25	4.00	1.00
	50	3.00	3.00	4.50	5.00	2.00
	75	4.00	4.75	5.00	5.00	5.00

a. Multiple modes exist. The smallest value is shown

		Social Risk Statement 1	Social Risk Statement 2	Social Risk Statement 3
N	Valid	20	20	20
	Missing	0	0	0
Mean		2.95	3.60	2.45
Median		3.00	3.50	2.00
Mode		3	3	2[a]
Std. Deviation		1.146	.821	1.234
Variance		1.313	.674	1.524
Minimum		1	2	1
Maximum		5	5	5
Percentiles	25	2.00	3.00	1.25
	50	3.00	3.50	2.00
	75	4.00	4.00	3.00

a. Multiple modes exist. The smallest value is shown

		Time/Convenience Risk Statement 1	Time/Convenience Risk Statement 2	Time/Convenience Risk Statement 3	Time/Convenience Risk Statement 4	Time/Convenience Risk Statement 5	Time/Convenience Risk Statement 6	Time/Convenience Risk Statement 7	Time/Convenience Risk Statement 8
N	Valid	20	20	20	20	20	20	20	20
	Missing	0	0	0	0	0	0	0	0
Mean		4.35	4.45	4.35	4.30	4.35	4.60	4.05	3.15
Median		5.00	5.00	5.00	5.00	5.00	5.00	4.50	3.00
Mode		5	5	5	5	5	5	5	5
Std. Deviation		.875	.826	.875	1.081	.875	.754	1.191	1.531
Variance		.766	.682	.766	1.168	.766	.568	1.418	2.345
Minimum		3	2	2	2	2	3	1	1
Maximum		5	5	5	5	5	5	5	5
Percentiles	25	3.25	4.00	4.00	3.25	4.00	4.25	3.00	2.00
	50	5.00	5.00	5.00	5.00	5.00	5.00	4.50	3.00
	75	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00

APPENDIX B: ROUND TWO RISK STATEMENT RESULTS

		Financial Risk Statement 1	Financial Risk Statement 2	Financial Risk Statement 3	Financial Risk Statement 4	Financial Risk Statement 5
N	Valid	17	17	17	17	17
	Missing	0	0	0	0	0
Mean		4.00	3.82	3.71	3.65	4.24
Median		4.00	4.00	5.00	4.00	5.00
Mode		5	5	5	4	5
Std. Deviation		1.173	1.131	1.572	1.115	.970
Variance		1.375	1.279	2.471	1.243	.941
Minimum		2	2	1	1	3
Maximum		5	5	5	5	5
Percentiles	25	3.00	3.00	2.00	3.00	3.00
	50	4.00	4.00	5.00	4.00	5.00
	75	5.00	5.00	5.00	4.00	5.00

		Performance Risk Statement 1	Performance Risk Statement 2	Performance Risk Statement 3	Performance Risk Statement 4	Performance Risk Statement 5	Performance Risk Statement 6	Performance Risk Statement 7	Performance Risk Statement 8
N	Valid	17	17	17	17	17	17	17	17
	Missing	0	0	0	0	0	0	0	0
Mean		3.47	2.65	2.76	2.94	2.76	3.00	3.76	3.59
Median		3.00	3.00	3.00	3.00	3.00	3.00	4.00	3.00
Mode		3	3	3	3	3	3	3[a]	3
Std. Deviation		1.007	1.115	.970	.827	.903	1.118	.903	.870
Variance		1.015	1.243	.941	.684	.816	1.250	.816	.757
Minimum		2	1	1	2	1	1	2	2
Maximum		5	5	5	5	5	5	5	5
	25	3.00	2.00	2.00	2.00	2.00	2.00	3.00	3.00

Percentiles	50	3.00	3.00	3.00	3.00	3.00	3.00	4.00	3.00
	75	4.00	3.00	3.00	3.00	3.00	3.00	4.50	4.00

a. Multiple modes exist. The smallest value is shown

		Psychological Risk Statement 1	Psychological Risk Statement 2	Psychological Risk Statement 3	Psychological Risk Statement 4	Psychological Risk Statement 5	Psychological Risk Statement 6	Psychological Risk Statement 7	Psychological Risk Statement 8	Psychological Risk Statement 9
N	Valid	17	17	17	17	17	17	17	17	17
	Missing	0	0	0	0	0	0	0	0	0
Mean		3.00	3.12	2.59	3.41	3.35	3.24	3.06	2.29	3.35
Median		3.00	3.00	3.00	3.00	4.00	3.00	3.00	2.00	4.00
Mode		3	3[a]	3	3	4	4	4	2	4
Std. Deviation		.791	1.453	1.228	1.121	1.115	1.033	1.249	1.047	1.367
Variance		.625	2.110	1.507	1.257	1.243	1.066	1.559	1.096	1.868
Minimum		2	1	1	1	1	1	1	1	1
Maximum		5	5	5	5	5	5	5	4	5
Percentiles	25	2.50	2.00	1.50	3.00	3.00	2.50	2.00	1.50	2.00
	50	3.00	3.00	3.00	3.00	4.00	3.00	3.00	2.00	4.00
	75	3.00	4.50	3.50	4.00	4.00	4.00	4.00	3.00	4.50

a. Multiple modes exist. The smallest value is shown

		Physical Risk Statement 1	Physical Risk Statement 2	Physical Risk Statement 3	Physical Risk Statement 4	Physical Risk Statement 5
N	Valid	17	17	17	17	17
	Missing	0	0	0	0	0
Mean		3.24	3.94	3.71	3.82	3.00
Median		3.00	4.00	4.00	4.00	3.00
Mode		3	5	5	5	3

Std. Deviation		.752	1.249	1.213	1.131	1.118
Variance		.566	1.559	1.471	1.279	1.250
Minimum		2	2	2	2	1
Maximum		5	5	5	5	5
Percentiles	25	3.00	2.50	2.50	3.00	2.00
	50	3.00	4.00	4.00	4.00	3.00
	75	4.00	5.00	5.00	5.00	4.00

		Political Risk Statement 1	Political Risk Statement 2	Political Risk Statement 3	Political Risk Statement 4
N	Valid	17	17	17	17
	Missing	0	0	0	0
Mean		2.71	3.35	3.24	3.88
Median		3.00	3.00	3.00	4.00
Mode		3	3	3	4
Std. Deviation		.985	.931	.664	.928
Variance		.971	.868	.441	.860
Minimum		1	2	2	2
Maximum		4	5	4	5
Percentiles	25	2.00	3.00	3.00	3.00
	50	3.00	3.00	3.00	4.00
	75	3.00	4.00	4.00	5.00

		Social Risk Statement 1	Social Risk Statement 2	Social Risk Statement 3
N	Valid	17	17	17
	Missing	0	0	0
Mean		2.82	3.41	2.18
Median		3.00	3.00	2.00
Mode		2	3	1
Std. Deviation		1.380	1.121	1.237
Variance		1.904	1.257	1.529
Minimum		1	1	1
Maximum		5	5	4
Percentiles	25	2.00	3.00	1.00
	50	3.00	3.00	2.00
	75	4.00	4.00	3.50

		Time/Convenience Risk Statement 1	Time/Convenience Risk Statement 2
N	Valid	17	17
	Missing	0	0
Mean		2.88	3.35
Median		3.00	4.00
Mode		1	4
Std. Deviation		1.576	1.367
Variance		2.485	1.868
Minimum		1	1
Maximum		5	5
Percentiles	25	1.00	2.00
	50	3.00	4.00
	75	4.50	4.50

APPENDIX C: ROUND ONE RISK STATEMENTS AND THEIR CORRESPONDING SPSS LABELS

Financial Risk Statements

Label	Statement
FinRS1	Unexpected expenses may arise
FinRS2	Costs associated with international travel are higher than before the pandemic
FinRS3	I will need to spend more on insurance
FinRS4	I will have to spend money on quarantining
FinRS5	Income loss due to the pandemic may have made travelling too much of an investment for this time
FinRS6	Exchange rates are unfavourable for travel
FinRS7	The value for money in travelling has decreased
FinRS8	If I cannot travel it may be hard to obtain a refund for flights and booking

Performance Risk Statements

Label	Statement
PerfRS1	Travel destinations will not have the same atmosphere during this time
PerfRS2	Destination activities will be limited during this time
PerfRS3	Language barriers will be challenging during this time
PerfRS4	The international trip will not meet my expectations during this time
PerfRS5	There will be poor service delivery of experiences during this time
PerfRS6	Employees may lack skills to provide a safe tourist experience during this time
PerfRS7	Tourism services will lack quality during this time
PerfRS8	Poor sanitation and hygiene at accommodations may occur
PerfRS9	Flight cancellations may occur during this time
PerfRS10	Flight lengths are increased during this time

Psychological Risk Statements

Label	Statement
PsyRS1	Travelling during this time may leave me feeling disappointed
PsyRS2	Travelling during this time makes me feel anxious
PsyRS3	It is stressful to keep up with the different regulations and requirements in different countries
PsyRS4	Wearing a mask all the time makes the experience uncomfortable
PsyRS5	Possible compulsory vaccination for travel makes me feel pressured in my decision to vaccinate or not

Physical Risk Statements

Label	Statement
PhyRS1	Travelling during this time may result in contracting the virus
PhyRS2	Being sick away from home is concerning
PhyRS3	Medical systems in host countries may be ineffective

PhyRS4	I may be unable to get timely medical assistance in host countries
PhyRS5	Tourism is harmful to the environment

Social Risk Statements

Label	**Statement**
SocRS1	Travelling may result in my spreading of the virus
SocRS2	Others may not follow guidelines and put me at risk
SocRS3	Travelling during this time may result in being confronted with discrimination

Political Risk Statements

Label	**Statement**
PolRS1	There may be civil unrest in host countries during this time
PolRS2	Governments are unpredictable during this time
PolRS3	There is a lack of governmental communication during this time

Time/Convenience Risk Statements

Label	**Statement**
TicoRS1	Time may be wasted quarantining
TicoRS2	Travelling during this time requires much anticipation and planning for changing dynamics
TicoRS3	I will have to spend time locating a COVID test in the host country in order to return home
TicoRS4	Understanding regulations and expectations is time consuming
TicoRS5	Planning for travel during this time is particularly demanding
TicoRS6	Travelling during this time will require researching medical/travel insurance and their COVID policies
TicoRS7	Changing levels of lockdown at home or at the destination may result in being stranded
TicoRS8	If lockdown should occur, I will miss work

APPENDIX D ROUND TWO RISK STATEMENTS AND THEIR CORRESPONDING SPSS LABELS

Financial Risk Statements Round 2:

Label	Statement
Fin2RS1	Unexpected expenses may arise
Fin2RS2	I will need to spend more on insurance
Fin2RS3	Income loss due to the pandemic may have made travelling too much of an investment for this time
Fin2RS4	The value for money in travelling has decreased
Fin2RS5	There will be additional costs involved in meeting COVID-19 regulations (e.g. PCR tests)

Performance Risk Statements Round 2:

Label	Statement
Perf2RS1	Travel destinations will not have the same atmosphere during this time
Perf2RS2	Language barriers will be challenging during this time
Perf2RS3	The international trip will not meet my expectations during this time
Perf2RS4	There will be poor service delivery of experiences during this time
Perf2RS5	Poor sanitation and hygiene at accommodations may occur
Perf2RS6	Flight lengths are increased during this time
Perf2RS7	The impact on further bookings in terms of cancellations and needing to reschedule
Perf2RS8	Possibility of delays (due to things like a positive PCR result)

Psychological Risk Statements Round 2:

Label	Statement
Psy2RS1	Travelling during this time may leave me feeling disappointed
Psy2RS2	Travelling during this time makes me feel anxious
Psy2RS3	Travelling during this time may result in feeling pressure and discomfort of being coerced into practices not aligned to personal beliefs
Psy2RS4	Travelling during this time increases feelings of fear of being stuck in another (unexpected) country, not being able to return home due to red lists and travel bans to certain areas
Psy2RS5	Travelling now involves a heightened sense of anxiety due to the possibility of falling ill and having to deal with the processes and restrictions involved in dealing with this
Psy2RS6	Travelling now involves feelings of fear at being deported or delayed due to PCR test and document errors
Psy2RS7	Travelling now may involve being at odds with the dominant narratives around COVID-19/vaccinations/protocols
Psy2RS8	Travelling now will result in psychological trauma due to stress and exhaustion
Psy2RS9	Sanitizing/vaccinations/wearing masks in order to travel are constraints that create stress and make travel unappealing

Physical Risk Statement Round 2:

Label	Risk Statement

Phy2RS1	Travelling during this time may result in contracting the virus
Phy2RS2	Being sick away from home is concerning
Phy2RS3	Medical systems in host countries may be ineffective
Phy2RS4	I may be unable to get timely medical assistance in host countries
Phy2RS5	Long flight hours may lead to flight exhaustion

Social Risk Statements Round 2:

Label	**Statement**
Soc2RS1	Travelling may result in my spreading of the virus
Soc2RS2	Others may not follow guidelines and put me at risk
Soc2RS3	Divisions created in families and social friendships around polarizing narratives to do with the entire experience of travelling may make it unappealing

Political Risk Statements Round 2

Label	**Statement**
Pol2RS1	There may be civil unrest in host countries during this time
Pol2RS2	Governments are unpredictable during this time
Pol2RS3	There is a lack of governmental communication during this time
Pol2RS4	Travel requirements and regulations may change without much warning

Time/Convenience Risk Statements Round 2:

Label	**Statement**
Tico2RS1	If lockdown should occur, I will miss work
Tico2RS2	Being pulled into the COVID-19 drama and all it asks and requires is a time and energy drain and fundamentally irritating