tourism

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FINAL REPORT

PILOTING AND REFINEMENT OF THE TOURISM RESILIENCE MODEL

NORTH-WEST UNIVERSITY and UNIVERSITY OF VENDA

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ABBREVIATIONS	
COVID-19	A disease caused by a new strain of coronavirus referred to as 2019 novel coronavirus' or '2019-nCoV'
OECD	Organisation for Economic Cooperation and Development
NDT	National Department of Tourism
TBCSA	Tourism Business Council of South Africa
TRM	Tourism Resilience Model
UNWTO	United Nations World Tourism Organisation
WEF	World Economic Forum
WTTC	World Travel and Tourism Council

DEFINITION OF KEY TERMS	
Resilience	"The capacity of […] systems to deal with stresses by maintaining the stability of the tourism-related regional economy while ensuring the flexibility and diversity necessary for innovation and further development" (Luthe & Wyss, 2014:161)
Tourism demand	An all-inclusive profile of the tourist in terms of their travel motivations, destination choice, consumptive decision-making (including constraints and perceived risk) and travel frequency.
International tourism	"International tourism comprises inbound tourism and outbound tourism, that is to say, the activities of resident visitors outside the country of reference, either as part of domestic or outbound tourism trips and the activities of non-resident visitors within the country of reference on inbound tourism trips" (World Tourism Organisation, 2010:15)
Domestic tourism	"Domestic tourism comprises the activities of a resident visitor within the country of reference, either as part of a domestic tourism trip or part of an outbound tourism trip" (World Tourism Organisation, 2010:15)
Tourism supply	The location-specific tourism value chain mechanisms, attributes and entities geared towards the satisfaction of tourist needs and subjective preferences

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1. Introduction and background

By April 2022, 489 million (Africa - 2.5%) COVID-19 infections, and over 6 million (Africa - 4.1%) deaths globally were attributed to the ongoing COVID-19 pandemic (World Health Organisation – WHO, 2022). While the infection and death rates associated with the COVID-19 pandemic on the African continent may not have been as severe compared to other regions, the impact on tourism was significantly more pronounced. In 2019, the global travel and tourism sector represented 27.4% of global services exports, generating upwards of US$9.2 trillion [10.4% of global GDP], while creating one in every four new employment opportunities globally and accounting for 334 million existing jobs (10.6% of global employment). According to the World Tourism Organisation (UNWTO), globally tourism contracted with 73% in 2020 and 72% in 2021 (UNWTO, 2022). Arrivals to Africa contracted by 69% on 2020 and 74% in 2021. The result was the same for South Africa where arrivals contracted by 73% in 2020 and 78% in 2021 (UNWTO, 2022). As a result of these contractions, worldwide revenue and job losses of up to US$4.5 trillion (-49.1%) and 62 million (-18.5%) in 2020, respectively, can be attributed to the effects of the COVID-19 pandemic - with Africa shedding 7.2 million travel and tourism jobs and costing the continent's economy an estimated US$83 billion[1]. However, it is essential to acknowledge that South Africa's post-COVID-19 tourism recovery is a multifaceted conundrum - as the country must now also grapple with significant contemporary challenges which include extrinsic forces such as increasing global inflationary levels major South Africa's major western source markets, as well as the global challenges emanating from the ongoing war in the Ukraine.

Tourism is widely considered to be a viable vector for sustainable socio-economic development on the African continent due to the integrative nature of its value chain (forward and backward linkages with suppliers and service providers), as well as the economic multiplier effect (tourism receipts, export products, employment creation, local economic development) (Matiza & Slabbert, 2019). However, in light of the COVID-19 pandemic-induced moratoriums on domestic and international travel, tourism demand decreased significantly. The tourism industry received no income or visitors for several months, negatively influencing the value chain and labour market. Several ad hoc strategies were implemented to curb the effect of restrictions on the travel and tourism industry, such as pivoting from international to domestic tourism, allowing limited travel, and providing support to the industry. However, these strategies are not a panacea a quick and complete recovery of South Africa's tourism industry. Added to this, the continuous uncertainty about the management of such a pandemic demands a future view of how to ensure that the South African tourism industry does not face the same challenges and is more prepared to ensure the sustainability and resilience of this industry.

1.1 COVID-19 and tourism resilience: An overview

The on-going COVID-19 pandemic was a deleterious socio-economic shock for global tourism. However, with the

[1] World Travel and Tourism Council. (2021). Global Economic Impact & Trends 2021. London: The World Travel & Tourism Council.

proliferation of vaccines and less arbitrary but effective COVID-19 protocols tourism is on the recovery path. Significant lessons were learnt during the height of the crisis, and one key aspect that emerged as a buzz-word in tourism was *resilience*. Resilience may be characterised as "[…] the ability of a system to respond to and recover from a perturbation" (Espiner, Orchiston & Higham, 2017). A significant proportion of major tourism destinations are recovering to near-pre-COVID levels, driven by the promotion of domestic tourism as a sustainable resilience strategy. Admittedly, the various short-term responses implemented to mitigate the impact of the pandemic on tourism contribute to the heterogeneity in tourism destination resilience - compounded by their inherent mix between domestic and international tourism. This suggests that a 'one size fits all' resilience strategy or policy regime is not possible (Boto-García & Mayorb, 2022). Hence, South Africa requires a tailor-made approach that considers the South African context and its idiosyncrasies.

Contemporary studies on COVID-19 and resilience have established that:

- Tourism resilience is still an emerging field of study (Cheer & Lew, 2018)
- One of the contemporary challenges for the global tourism has been the practical application of resilience theory and the subsequent theoretical frameworks in the real world, more so in an unprecedented crisis such as the COVID-19 pandemic (Ketter, 2022).
- Tourism crisis management and tourism resilience are two distinct processes, with crisis management concerned with recovery and restoration to the previous status quo "bouncing back". Whereas tourism resilience is concerned with adaptability and agility to "future proof" destinations while 'bouncing forward' (Ketter, 2022).
- Tourism demand positively influences recovery trajectory, resilience and post-COVID-19 crisis recovery (Boto-García & Mayor, 2022).
- The vulnerability of tourism destinations to crises Such as COVID-19 may be attributed to a low weight of the domestic tourism market versus international tourism due to inbound tourism dependence (Duro, Perez-Laborda, Turrion-Prats & Fernández-Fernández, 2021)
- Domestic tourism resilience is significant to tourism resilience since the internal heterogeneity in destinations based on province has an influence on both the impact of the pandemic, the domestic/international demand mix, and ultimately the resilience of the different tourism regions (Boto-García & Mayor, 2022; Fernández-Cerezo, 2021), for instance differences in the tourism mixes of the Western Cape versus Mpumalanga province.
- More resilient tourism regions require fewer fiscal interventions and stimulus from national government (Okafor, Khalid & Burzynska, 2022).
- Tourism destinations characterised by low-value, labour-intensive tourism services and products, as well as low tourism output are the most susceptible to external shocks (Romao & Nijkamp, 2019).

- Industry deficiencies such as such as stakeholder in-cohesion and limited reflexiveness and innovation are antecedents to low resilience after major stress events (Bangwayo-Skeete & Skeete, 2020).
- There are concerns that the COVID-19 pandemic has in some instances caused irreversible damage due to its impact on labour availability and confidence, severe liquidity constraints for both tourism enterprises and tourism-dependent economies, thus triggering subsequent socio-economic crises (Lindsay-Smith, Pyke, Gamage, Nguyen & de Lacy, 2022; Wieczorek-Kosmala, 2022).
- Global trends indicate tourisms' re-orientation to regenerative strategies are geared towards tourism growth to include investment into public resources infrastructure, product innovation, market development, as well as business restructuring (Ketter, 2022).
- Four distinct impediments (traps) to resilience in tourism were identified even before the pandemic to include : a) *Rigidity trap* – whereby the existing system is not reflexive and places emphasis on a particular activity or product offering; b) *Lock-in trap* – whereby decision-makers themselves favour and adhere to familiar, tried and tested decisions and processes; c) *Poverty trap* – where there are limited resources to outlay for innovation and new strategies; d) *Isolation trap* – whereby destinations are myopic and inward thinking resulting in the destination's failure to identify and respond to environmental changes (Hartman, 2018).

2. Context/rationale of the study

In 2021, the NDT commissioned a study to gain research-based insights and information that would contribute to the sustainable recovery and 'future-proofing' of both domestic and international tourism in South Africa by developing a reflexive resilience model, with due consideration to the effects of COVID-19 on South Africa's tourism sector. Based on a mixed-method approach, both the supply (qualitative research) and demand (quantitative research) sides of the industry were reviewed in the development of a resilience model for the tourism industry where specific actions and reactions of government, industry role players, and tourists guide the resuscitation of the industry. It is anticipated that the two-phased model that resulted from the prior NDT commissioned study offers South Africa a data-driven demand-oriented recovery approach that may yield immediate results that will direct the decisions taken by the government and the industry to catalyse both domestic and international tourism resilience and recovery. Thus, the models require real-world testing and refinement as a finalisation process prior to implementation.

3. Problem statement

The tourism industry is an economic, social and cultural asset in South Africa. Hence, it is within national interest that the industry becomes more resilient and less susceptible to external shocks. The sustainable growth and development of any tourism industry are dependent on attracting optimal international tourist arrivals and

optimising domestic tourism and thereby ensure resilience. While estimates suggest that tourism recovery from significant shocks such as the COVID-19 pandemic requires at least 19.4 months, South African tourism literally cannot afford this timeline and must be more proactive to bolster the resilience of the industry. It is also evident that recovery might take longer than anticipated due to new variants emerging, the pace of the vaccine rollout in African nations, the effect of social distancing capacity of venues and facilities and concerned tourists about their safety when travelling. The TRM is designed to assist the tourism industry to become more sustainable, more resilient and more innovative, but still needs to be fully understood and validated in the real-world setting.

4. Tourism demand

4.1 International tourism demand

Buoyed by the country's abundant natural and cultural tourism resources, South Africa was between 2014 and 2018, Africa's most competitive travel and tourism destination, accounting for 70% of the Sub-Saharan African region's travel and tourism GDP (World Economic Forum, 2019). Notwithstanding the country's competitive and comparative tourism advantages, South Africa faces challenges as a tourism destination. Before the pandemic, tourism was being touted as an economic recovery trajectory for South Africa; however, even then, there appears to have been an emerging regressive trend in terms of South Africa's competitiveness in tourism. The fact remains that South Africa is the 61st most competitive travel and tourism destination in the world (WEF, 2019). More so, according to the World Economic Forum's Travel and Tourism Competitiveness Index (WEF, 2019), South Africa dropped eight places overall globally between 2017 and 2019, from 48th to 61st in the world. Notably, since 2015 there has also been a discernible regression 4th to 23rd and 25th to 60th in the competitiveness of South Africa's country brand strategy and the effectiveness of the country's marketing and branding activities in attracting tourists, respectively (WEF, 2019).

In 2018, South Africa's Travel and Tourism Gross Domestic Product (GDP) growth contracted by 1.9% year on year (WTTC, 2019). Relatedly, recent international tourist arrivals data from South African Tourism (2019) indicates that South Africa had a significant average international arrivals deficit of 2.3% by the end of Q3 2019 (6.78 million), compared to the same period in 2018 (7.73 million). Noteworthy declines include South Africa's traditional source markets of Germany (-7.4%), France (-9.5%), the United States of America (-0.5%), and the emerging source market of China (-2.1%). Additionally, the COVID-19 pandemic has all but halted international tourism. Given the impending global re-set scenario in tourism, it will be prudent to determine the relationship between the evolving international tourism demand and tourism supply within the South African context to inform a resilience model that will aid in international tourism demand recovery.

4.2 Domestic tourism demand

The World Travel and Tourism Council (2019) reported that a significant proportion of global tourism spend in 2017 (73% or USD$3.9 trillion) was generated from domestic tourism. For instance, in 2017, Brazil's domestic tourism accounted for 94% of the country's tourism receipts, while it was up to 87% in the cases of India, Germany and China, respectively. However, unlike other tourism destination countries that have a predominantly domestic tourism industry-oriented market, the WTTC (2019) reports that domestic tourism in South Africa represents only 54% of the total tourism receipts in the country, which according to Statistics South Africa (2019) equates to just over R100 billion (USD$6 billion) indirectly attributable spend. Thus, South African tourism is significantly more susceptible to the impact of the COVID-19 pandemic due to its more evident reliance on international tourism arrivals compared to other countries - which have been halted due to the COVID-19 pandemic.

The focus on domestic tourism for the recovery of the global tourism sector may primarily be based on the notion that tourists are susceptible to the 'home-is-safer-than-abroad bias' (Wolff & Larsen, 2016; Wolff, Larsena & Øgaard, 2019) whereby, tourists perceive domestic travel and tourism to be *safer* than international tourism. As a result, the propensity for tourists to engage in tourism activity in the face of risk associated with crises such as terrorism, natural disasters and more pertinently, health pandemics is more plausible when considering domestic tourism (Adeloye, Carr & Insch, 2019; Wolff *et al*., 2019). To this end, the OECD (2020) reports that countries such as Switzerland have invested (an estimated USD$42.2 million or R717.4 million) in the sustainable promotion and subsidising of domestic tourism as part of its post-COVID-19 tourism recovery strategy. While, New Zealand, as part of a USD$256.8 million (R4.37 billion) incentive package for tourism recovery, is funding a domestic tourism marketing campaign and transition program aimed at 'pivoting' businesses towards domestic tourism, as well as support the strategic asset protection of New Zealand's domestic tourism offerings and international brand (OECD - 2020). Thus, domestic tourism in South Africa may also be posited as a catalyst for tourism recovery, suggesting that the sustainable harnessing of domestic tourism will feature prominently as a pillar to the tourism-led post-COVID-19 crisis economic recovery of South Africa. This implies that South African tourism practitioners need to focus on promoting domestic tourism as a short-to-medium term measure for resuscitating South African tourism. The challenge, however, is boosting domestic tourism in South Africa by synchronising domestic tourism with the offering in the country to make it more attractive to South Africans and ensure resilience.

Within the context of both international and domestic tourism demand, the critical aspects are the profiling and evaluation of travel behaviour, risk perceptions, the willingness and ability of tourists to travel, inhibitors and constraints to travel, the travel motives of tourists and specific determinants of demand. Moreover, in light of the COVID-19 pandemic, gaps in knowledge relating to evolving international and domestic tourist perceptions of safety and product preferences require urgent attention.

4.3 Tourism supply

Notwithstanding the current significant government initiatives to buoy the tourism sector, the ongoing COVID-19 pandemic and its impact on global travel and tourism is unprecedented and still unfolding (Baldwin & di Mauro, 2020; Huynh, 2020; Ruiz-Estrada *et al*., 2020). The massive financial losses projected for the global tourism industry due to national and international lockdowns, stringent travel restrictions and social distancing protocols implemented to curtail the spread of the virus (Arezki & Nguyen, 2020; Novelli, Burgess, Jones & Ritchie, 2018), indicate the need for a significant and possibly radical paradigm shift in the delivery (supply) of tourism products (Gössling, Scott & Hall, 2020). Moreover, the onset of the COVID-19 pandemic also signalled the evolution of tourist behaviour - as tourists adapt to 'the new normal', suggesting that tourism practitioners and enterprises also need to be cognisant of the changes in tourist behaviour, as well as be proactive and reflexive to meet the evolving contemporary tourist demands and preferences effectively with suitable supply. As a result, the exposure and susceptibility of the tourism sector to external shocks and the resultant crises provides impetus for research into the development of a *resilience model* to sustainably recover and grow demand for South Africa's tourism products by synchronising South Africa's tourism demand with the destination's supply. Critical to the growth and development of the tourism supply-side in South Africa are aspects of risk readiness, crisis recovery and sustainable tourism resilience in the medium to long term and related determinants.

In sum, the development of a resilience model for South African tourism is predicated on optimising tourism (domestic and international) demand and supply (SMMEs and macro businesses) in South Africa. However, due to financial capacity and technical expertise constraints, it is unfortunately quite common for African governments to develop generic policies and strategies without adequately involving/gaining the opinion of all the relevant stakeholders in the consultative process of developing policy and strategy. As a result, this often leads to potential policy and strategy misalignment with specific industry characteristics, challenges, and needs. As a result of the COVID-19 pandemic, there may also be an evolving misalliance between South Africa's tourism demand and tourism supply. Thus, it is important to profile South Africa's local and international tourism demand and an endeavor to more comprehensively synchronize South Africa's overall tourism demand aspects with the country's tourism supply attributes. To date, and to the best of the author's knowledge, no comprehensive tourism industry-oriented study has been conducted in South Africa to provide a cross-sectional and more pertinently longitudinal multi-stakeholder perspective to the *contemporary* tourism demand-supply nexus, and its potential influence on the resilience of tourism to the country.

A palpable information and knowledge gap with regards to South Africa's tourism demand-tourism supply nexus exists, and it appears as though to date, no studies seem to have comprehensively investigated the tourism

demand-tourism supply nexus from a multi-tourism stakeholder perspective in the case of South Africa. More-so, no study seems to have profiled the distinct generic tourism typologies associated with South Africa and comprehensively interrogated the influence of these distinct typologies (supply-side attributes) on tourism demand concurrently. Additionally, within the context of the COVID-19 pandemic, while the (in)direct effects of the ongoing COVID-19 pandemic have been particularly deleterious to South African tourism, there appears to be minimal research evidence of the impact of the COVID-19 pandemic on the demand side of domestic tourism. Hence, while there may be a probable link between perceived risk and the travel behaviour of both domestic and international tourists within the contemporary post-COVID-19 global tourism market, the nexus is yet to be established within the South African tourism context. Moreover, fewer studies seem to have been conducted, thus far, with regards to profiling both the South African domestic tourist, as well as the international traveler considering the pandemic, thus potentially hamstringing South Africa's efforts to reposition itself to meet evolving tourist demand and preferences with innovative and suitable domestic tourism products, respectively. The gaps, as mentioned above, provide the impetus for this research study.

5. Purpose of the study

The primary goal of the project is within the prescripts of the NDT, which is to pilot and refine the respective Tourism Resilience Model using secondary data for phase one and empirical evidence from a stratified sample of tourists from the country's identified tourist source markets for phase 2.

6. Objectives of the study

For Phase 1:

- To analyse secondary data on tourism demand and determine if the South African tourism economy has bounced back better in resilient ways.
- To compare and contrast tourism demand at provincial levels and determine their resilience.
- To determine the regime from the Tourism Resilience Model that needs the most intervention to improve the tourism's resilience against future shocks.

For Phase 2:

- To synchronise domestic tourism and demand for South Africa by modelling domestic tourism demand data to better inform, enhance and support domestic tourism policy-making and marketing strategy formulation.
- To establish the demand-oriented antecedent measures to South Africa's tourism resilience via the TRM.
- To determine the domestic and international tourism-oriented brand dimensions that will most efficiently catalyse tourism resilience.
- To determine the practicality of the TRM by piloting the TRM within the confines of South Africa's Marketing

Prioritisation and Investment Framework.

- To operationalise a finalised TRM for adoption and implementation by the NDT.
- To formulate a monitoring and evaluation framework for the TRM.
- To assess whether a practical user guide may be developed to guide the implementation of TRM.

To achieve the abovementioned objectives, the following research questions were addressed,

RQ1: Has the South African tourism economy bounced back better in ways that demonstrates that it is resilient?
RQ2: How does the domestic tourism compare to the international tourism markets in terms of resilience?
RQ3: Of the three identified regimes in the Tourism Resilience Model, which one needs the most attention in order to build resilience against future shocks?
RQ4: What are the antecedents to the synchronisation of tourism demand and supply, and the enhancement of tourism policy and strategy formulation?
RQ5: What is the demand-oriented antecedent measures to South Africa's tourism resilience via the TRM?
RQ6: Which brand dimensions will most efficiently catalyse both domestic and international tourism resilience?
RQ7: Is the TRM a practical resilience model for South Africa within the scope of South Africa's Marketing Prioritisation and Investment Framework?
RQ8: Can a practical monitoring and evaluation framework be developed for the implementation of the TRM?

The respective TRMs are a result of the study funded by the NDT in 2021. The two-phased model is discussed below per phase to understand the development of that phase.

7. Phase 1 of the Tourism Resilience Model

7.1 Literature review

There are several factors that can be found in literature that determine tourist arrival.

Income - Income in the country of tourists' origin plays an essential role when it comes to traveling. It is one of the most frequently used variables in tourism studies. Even during the last decade, income has continued to be chosen by many researchers as a significant determinant of tourism demand.

Walsh (19965) argues that ceteris paribus, the larger the real per capita income of a country, the more likely its citizens will be able to afford to purchase travel services abroad. A growing trend in real income provides consumers with additional spending or purchasing power. This variable measures how the travelling habits of the people in a specific country of origin respond to their wealth (Eilat & Einav, 2003).

Price - comes a close second to income when choosing possible significant determinants of tourism demand. Also known as tourism or relative prices, they are difficult to measure precisely because of the wide range of products tourists are likely to pay for while traveling. Additionally, tourism prices consist of two main components – transportation costs and the cost of living at the destination (Martin and Witt, 1987). The amount of money spent on local travel is a part of the cost of living at the destination.

The exchange rate is a vital determinant and influences the demand to a great level. While making decisions on their travel destination, tourists are much more aware of the changes in exchange rates than of changes in relative prices. Tourists are in habit of travelling abroad annually and mainly during summer. Everything they spend abroad is from their annual budget. Both relative exchange rates and relative prices of travel services influence the amount of their spending and are therefore considered when deciding whether to take a trip abroad or choose the budget-friendly option and explore their homeland. Since exchange rates are published daily (in newspapers, evening news etc.), the tourists have a much more precise knowledge of the values of exchange rates than they have of the prices in their planned destination while making the decision. The information on price changes is generally not known in advance, so the tourists' only indicator of the destination's price level is what they remember it to be at the last time they visited that particular destination.

Exchange rates vary a lot over time and are therefore constantly affecting the number of tourists visiting a certain country. The fluctuation in exchange rates can affect the tourists' decisions in several different ways. The change can be either favourable or unfavourable. Gerakis (1966) identified the impacts caused by a change in exchange rates in favour of the tourists and described that it makes them spend more on things that they would purchase anyway, buy additional goods and moreover such a change attracts new tourists and cross-border shoppers. Reverse effects resulting from an unfavourable change in exchange rates were depicted by The Economist Intelligence Unit (1975), which identified that people tend to travel less abroad, change their final destination, spend less on the destination's goods and services and/or stay for a shorter period of time. Furthermore, they postpone their trip, use a different type of transport and those who travel for business begin to spend less. Similarly, as in income and prices, many empirical studies have employed various definitions of the exchange rate variable.

As recognized by Crouch (1993), there are three types of exchange rate definitions used in tourism demand literature:

a) Units of the origin country's currency per unit of the destination currency.

b) Units of the origin country's currency per weighted unit of currencies in foreign destinations.

c) Weighted units of alternative destinations' currencies per unit of destination currency.

The use of each definition depends on whether the researcher is interested in identifying the effect of exchange rates on tourism flows between pairs of countries or tourism departures to a larger number of either alternative or all countries. Mainly definitions a) and b) can be found across the tourism demand studies.

The interpretation of changes in relations given by these two definitions is as follows. If the ratio a) increases, it is due to the origin country's currency devaluation concerning the destination's currency. It means that the destination's goods and services become more expensive for tourists resulting in a decline in tourism demand. Crouch (1993) adds that a change in this ratio can also occur if, at the time of devaluation of the origin's currency concerning other currencies there is a smaller reduction in the value of the destination's currency. He further explains that the reason behind this kind of change in ratio a) could have a positive effect on tourism demand. The same reasoning can be applied to the case of multiple destinations in b).

Trade Openness - Including the trade openness variable, also known as the volume of trade, in tourism demand analysis could be particularly useful when a destination's economy is greatly driven by international business. In such destinations, tourist arrivals for business purposes make up a fair share of total arrivals. According to Abbas and Ibrahim (2011) Egypt can be viewed as a country that satisfies the previous assumption. They recognized that the volume of trade has had a significant and positive effect on the international tourism flows to Egypt during the period 1990-2008. Trade openness was measured as the sum of export and import volume between Egypt and the country of tourism's origin divided by the sum of Egypt's GDP and GDP of countries of tourism's origin.

Population Size and Population Segment - It seems reasonable to include this variable among the determinants of tourism demand. We can assume that the larger the population of countries of tourism's origin, the more tourists will these countries generate.

The idea of investigating the influence of different population segments on tourism demand rather than focusing on the effects of total population arose quite recently. Different age groups' consumption patterns vary a lot. Over the past decade, the proportion of older people in developed countries has been steadily rising at the expense of the proportion of younger people (Alvarado and Creedy, 1998). This trend is known as population aging. It can be measured by the share of citizens who are above the retirement age. Their share has been recently rising because life expectancy has been increasing. Since the baby boom after the Second World War fertility rates have dropped significantly and the fact that the babies born then are now near or have already entered retirement certainly adds to the recent population aging trend as well. Retirement represents an important milestone and marks a start of a new and exciting chapter of life. Generally, retirees have more time and money to spend on travelling, which can considerably boost the demand for tourism. Moscardo (2006) calls this type of senior travel a ``third-age tourism" and adds that there is a rising number of companies that specialize in providing tourism services, particularly for seniors.

Marketing - To increase awareness of a particular country as attractive tourism destination tourist organizations around the world spend a lot of money on various promotional activities. Different nationalities and cultures are likely to respond differently to marketing and different destinations vary in their ability to use marketing effectively, thus it is rather difficult to model the impact of destination promotion correctly.

Country Attractiveness - Tastes vary from person to person. Moreover, they change and develop over our Life. Age is just one among other various socio-economic factors that influence travellers' tastes. Sex, marital status and level of education also result in different tastes across the population. They can further change due to rising living standards, advertising or innovation (Song et al., 2009). Since there are so many influencing factors, it is very difficult to measure a variable to indicate tastes.

Another way to capture destination preference or popularity of a particular destination over time is by inclusion of a time trend.

Repeated Visits - People generally don't like taking risks, it could be said that they are risk averse. Although this term is mostly used in relation to behaviour of investors, it aptly describes the reluctance to take risks by tourists, too. If they enjoyed the stay in a certain destination, it is highly likely that they will return to the same place next time as well. Traveling to a different country they are unfamiliar with would represent a certain level of uncertainty (Song et al., 2009).

Furthermore, they tell their friends and family about the lovely time they had and what they liked about the destination in particular. After that the information spreads more and more. This is known as so called Word-of-Mouth (WOM) effect. Recent evolution of technology, more specifically in digital social networking, has encouraged the development of a digital version of WOM (eWOM). Increasing number of travellers look on online tourism review sites for details on accommodation at a particular destination to plan their travel (Sigala et al., 2001). Additionally, results of a survey conducted as a part of the Pew Internet and American Life Project (2006) confirm that the most searched topics on the internet are tourism related.

Some of the most popular travel websites include TripAdvisor and TravelPod. TripAdvisor calls itself the world's largest travel site. It is a place where travellers share insights about accommodation, attractions or restaurants at a destination. It currently contains more than 100 million reviews. TravelPod allows users to create a blog containing photos and stories about their travel experiences.

Both WOM and eWOM can be viewed as a form of marketing. They have same e_ects as promotional activities of national tourist organisations and attract more tourists to a destination. In addition, they are almost always free of charge (Sigala et al., 2001). Numerous studies have been conducted to decide which of these forms of marketing is more effective. Kardon (2007) concludes that tourists are more influenced by WOM than advertising or promotion by marketing departments.

The chance of repeated visits, i.e. habit persistence of tourists, is often proxied by the value of the dependent variable lagged by one time period. If this variable is included in a model of tourism demand, it is expected to have a positive sign. The lagged value accounts not only for habit persistence but also for possible supply constraints in the destinations. Among these constraints are, for example, insufficient hotel and passenger transportation capacity or shortages of staff. (Dwyer et al. 2006).

An outbreak of a disease - Salleh et al. (2007) described and assessed the impacts of SARS (which stands for Severe Acute Respiratory Syndrome) on international tourist arrivals to Malaysia. They investigated the effect of this infectious disease by including a dummy variable for the SARS outbreak in 2003 and estimated it harmed tourism owes from all of the seven Asian-origin countries that were included in their analysis.

Another one-off event that has often been added in a form of a dummy variable to the demand models is a year of the terrorist attack. The tourism industry, unfortunately, attracts the attention of international terrorist groups, because it provides them with a wide variety of ways how to gain the attention of global media. Military bases, government institutions, transportation networks, and crowded places can all become targets.

Terrorist events are responsible for an abrupt change in tourists' decision-making and negatively impact upon global tourism demand. Tourists fear for their safety, and they are discouraged from traveling by heightened security checks resulting in delays in transport systems. However, the apprehension towards traveling doesn't last long. The impact of a terrorist event on tourism is apparent, particularly in the short run and has only a limited effect in the long run (Middleton et al., 2001).

Seasonality - Specific time of the year, like a season or a period of school holidays, can have a significant effect on tourism demand. Typically, if using monthly data, twelve seasonal dummy variables are included in the model and similarly four seasonal dummy variables are incorporated regarding the quarterly data (Shareef et al., 2008).

7.2 Study Background

The COVID-19 pandemic has led to the massive decline in international travel, with most countries closing their boarders as they attempted to contain the spread of the virus. South Africa was not spared. The once busy airports were so much deserted at some point during the COVID-19 lockdowns. While activities in these airports and boarders are slowly getting back, the protracted nature of the pandemic continues to bring uncertainty in the tourism sector. The subdued demand and supply of tourism related products and services has heightened the risk of closure in many businesses and jobs. There is therefore need for tourism authorities to build back better.

The previous study established three regimes, namely response, recovery and resilience (RRR-regime). These three regimes are synonymous with tourism interventions seen in many countries. In South Africa, these responses

are documented in the Tourism Sector Recovery Plan. First was the introduction of national standards for safe tourism operations, inspired by globally recognised biosecurity protocols across the tourism value chain to reduce transmission risk. This was meant to enable safe travel and rebuild traveller confidence, which was at an all-time low in recent times. Several tourism sub-sectors within the tourism value chain became candidates for early resumption and initial steps to allow business travel operations to be used as a proof-point for broader re-opening.

The second intervention at recovery level was that of engaging other departments to build on the work of improving access into South Africa. Partnerships were created with the police to improve tourists' safety and with the Department of Home Affairs to finalise the introduction of e-visa programme for priority markets. Other partnerships with relevant stakeholders were also made to ensure effectiveness in licensing of tour operators and stimulate tourism demand.

The third were the interventions on the demand side, which were split into domestic and international demand. The former was to be catalysed through the phases of economic re-opening with informative and inspirational messaging that encourages safe tourism and domestic vacation experiences. Given the scepticism in international travel and uncertain timing, identifying and promoting the highest-potential inbound target segments, which has less uncertainty, was seen by the TSRP as foundational to the recovery strategy. However, the TSRP acknowledged that the pandemic is forcing a rethink of segmentation and more than ever, traveller psychology will be driven by universal factors.

A switching regression model was developed on which an assessment could be made to determine the pace at which one regime would change to the other. Given the RRR-regime that South Africa has for building the tourism sector back better, the econometric model of the study follows a Markov-Switching Autoregression (MS-AR) as proposed by Hamilton (1989), having followed the works of Lindgren (1978). MS-AR allows the study to consider the three regimes of BBB in SA, and even beyond, and how (frequent) they switch from one state to the other (i.e. from the state brought about by a shock to its preexisting state or better/worse). The quicker the switch, the more resilient will be the tourism sector.

Consequently, the three regime-switching model specification is as follows:

$$\Delta y_t = \alpha_{s_t} + \vartheta_{R1}(y_{R1} - y_{shock}) + \vartheta_{R2}(y_{R2} - y_{R1}) + \vartheta_{R2}(y_{R3} - y_{R2}) + \boldsymbol{\varepsilon_t}$$

where $\varepsilon_t \sim i.i.d\ N(0, \delta^2_{s_t})$ and the variance of the disturbance term is assumed to be state dependent on the each of the three RRR-regime. Thus, R1, R2 and R3 are modelled as switching regimes of the stochastic process generating demand or supply.

We estimate the probability that one regime transitions to another as follows:

	R1	R2	R3
R1	$p_{R1,R1}$	$p_{R1,R2}$	$p_{R1,R3}$
R2	$p_{R2,R1}$	$p_{R2,R2}$	$p_{R2,R3}$
R3	$p_{R3,R1}$	$p_{R3,R2}$	$p_{R3,R3}$

The transitioning probabilities are depended on the immediate previous prevailing regime and independent of the one before the immediate previous prevailing regime such that

$$p_{R1,R1} = \Pr(R1|shock)$$

$$p_{R1,R2} = \Pr(R2|R1) = p_{R2,R1} = p_{R2,R2}$$

$$p_{R1,R3} = \Pr(R3|R2) = p_{R2,R3} = p_{R3,R1} = p_{R3,R2} = p_{R3,R3}$$

The nearer the probability is to one the longer it takes to shift to the next regime and the less resilient will be the tourism sector.

7.3 Piloting Data and Refinement of the RRR-Regime Model

Data to pilot the model was received from South African Tourism. After data cleaning and trials with several variables, it emerged that the variable that is usable is the tourism expenditures from 2013 to 2022. Tourism expenditure typically indicates the health of the tourism sector in any economy. The availability of credible tourism expenditure data therefore positions this study to make analysis that can better inform stakeholders concerning the resilience of the tourism sector as the economy emerges post COVID-19.

It is possible to roll out the model to the following data:

1. Tourist arrivals
    a. International
    b. Domestic
    c. At provincial levels
    d. At destinations of interest
2. Occupancy rates
    a. For accommodation

b. For food and beverages

3. Airline arrivals

Figure 1: Tourism spending trends from 2013 to 2022 (Quarter 1)

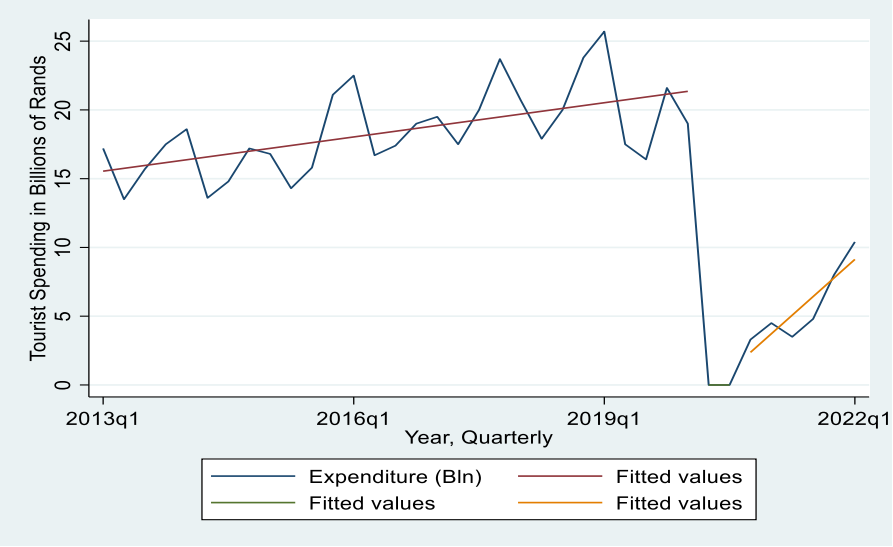


Figure 1 shows the tourism spending trends from 2013 to 2022 based on international data at national level. The general equilibrium path of tourists' expenditures in South Africa has been on the rise from 2013 until it nosedived at the onset of statutory lockdowns caused by COVID-19. The quarterly analysis within this period shows that there are there are particular times in which there is high tourism spending and there are also other times when it is low. The quarters in which tourism expenditures are high are the second, third and last quarters. The second quarter especially accelerates the expenditures from a low base in the first quarter and thus it results in the increase of tourism expenditure at an increasing rate. In the third and fourth quarters, the expenditures increase and a decreasing rate.

There was no tourist expenditures during COVID-19 lockdown. During this period, some of the tourism entreprises received financial support from enterprises to stay afloat with regards to maintaining employment. Then immediatey after the lifting of the lockdown measures, the tourism expenditures kicked in again. The rate of change of tourism spending is visibly higher post, than before, the lockdown measures.

The methodological approach was theoretically based on the potential to have three regimes. These were theoretically based on the institutional responses that were earmarked to halt the decline of either tourism demand and supply, recovery measures such as health regulations and introduction of e-visas to kick-start the tourism demand post COVID-19 lockdowns. Resilience was then to be measured by assessing if the tourism demand has bounced back better than the pre-COVID-19 lockdown levels.

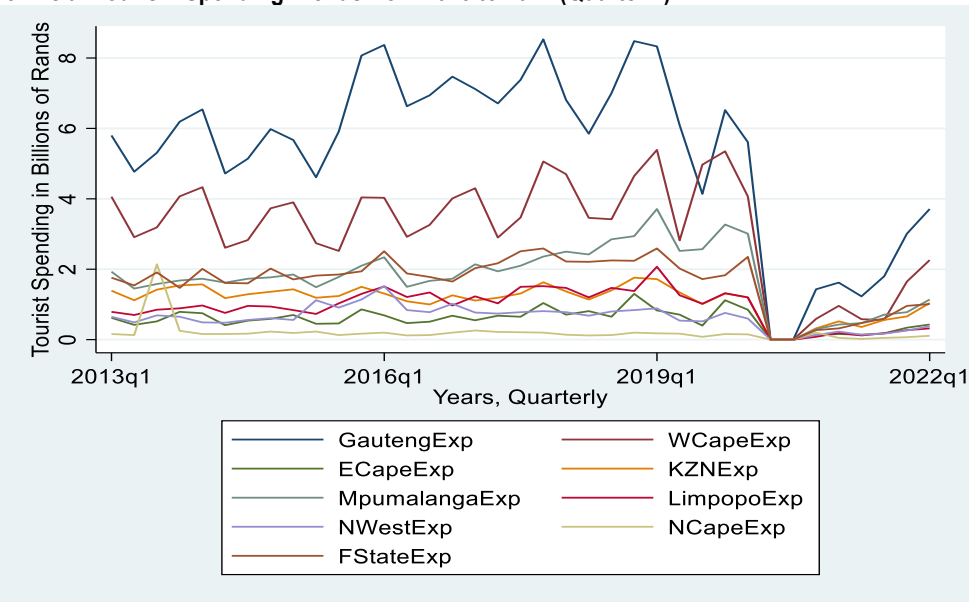
The study employs quarterly tourism expenditure values from 2013 to 2022. This data is separate and exclusive to that which was used for institutional responses to support enterprises in the tourism value chain. The difference in the data used resulted in a refinement of the model, resulted in a slight change on the number of regimes to be analysed. There are tourism expenditures that were realised before COVID-19 lockdowns. These are taken to be regime one (R-1). During the lockdowns, there was no tourism expenditure that was realised and thus no statistical performance can be done for this period. Post-COVID-19, tourism expenditures started again after the structural break caused by the pandemic. This period is taken to be regime two (R-2). Consequently, given the nature of the data, there are two regimes that the model will work with – a regime before and after COVID-19 lockdowns.

Figure 1 showed that the fitted average line of the trend in tourism spending before COVID-19 lockdown is visibly different from the trend after COVID-19. The gradient of the tourism expenditure line post COVID-19 is greater than that before COVID-19. This further provides credence on the preference of a two regime Markov Switching Regression Model.

7.4 Descriptive Statistics of Tourism Expenditure at Provincial Levels

The stylised facts on tourism spending at the provincial level provide its uneven distribution, as shown in Figure 2. The upward equilibrium path is less visble at provincial levels. The quarterly variations are more pronounced for Gauteng and Western Cape provinces and these two are visibly separated from the other provinces in terms of tourism spending trends. The rest of the provinces are bunched together and more statistical analysis is needed to assess if there is a significant different in tourism expenditures between them.

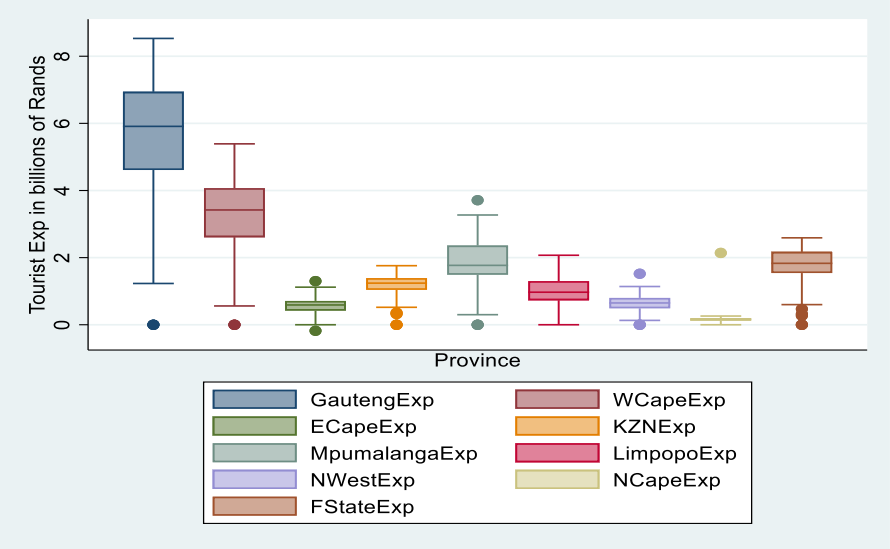
Figure 2: Provincial Tourism Spending Trends from 2013 to 2022 (Quarter 1)



The box plot in Figure 3 shows the distribution of the tourism expenditure values for each province. It provides a five-number descriptive statistics, namely the minimum tourism expenditure value, lower quartile, median, upper quartile and maximum tourism expenditure values. The median expenditure values of each box plot lie outside the box of a comparison box plot except for Mpumalanga and Free State provinces. There is therefore a likely difference on the tourism expenditure trends in most of the provinces except for a view.

Figure 3 also shows that the tourism expenditure values are more dispersed for Gauteng and Western Cape provinces and less dispersed for Eastern Cape, KwaZulu Natal, North West and Nothern Cape provinces. A detailed analysis of variance and comparison of means agaisnt each of provinces can bring more stylised facts on the provincial tourism soending trends.

Figure. 3: Comparison of the Medians in Provincial Tourism Spending Values



The results from the analysis of variance are provided in Tables 1 and 2. The average spending in Table 1 are less than the median provided in the box plots because the former does not remove the outlier of not having any tourism spending during COVID-19 lockdowns. The standard deviations for the tourism expenditure for Gauteng and Western provinces are clearly higher than the rest of the provinces and this was also confirmed through dispersion in Figure 3 above.

Table 1: Average Tourist Expenditure per Province

Province	Average Expenditure in Billions of Rands	Std. dev.	Freq.
Gauteng	5.392	2.359	37
Western Cape	3.144	1.481	37

Eastern Cape	0.571	0.292	37
KwaZulu-Natal	1.131	0.438	37
Mpumalanga	1.787	0.883	37
Limpopo	0.936	0.505	37
North West	0.631	0.325	37
Northern Cape	0.202	0.334	37
Free State	1.660	0.722	37
Total	1.717	1.854	333

The F-statistic from the analysis of variance in Table 2 is 90.33 and the corresponding p-value is 0.000 to indicate rejecting the null hypothesis that the mean change in the tourism expenditures for each province is the same. Thus, there is a statistically significant difference in the average tourism expenditure per province.

Table 2: Analysis of Variance on Tourist Average Expenditure per Province

Source	SS	df	MS	F	Prob > F
Between groups	787.611785	8	98.4514731	90.33	0.0000
Within groups	353.121636	324	1.08988159		
Total	1140.73342	332	3.43594404		

Bartlett's equal-variances test: chi2(8) = 323.8598 Prob>chi2 = 0.000

Although the analysis of variance indicates the differences in the average tourism expenditures in each province, the box plots indicated that there is a potential of some of the provinces having similar medians of tourist expenditure values. A mean comparison for each of the provinces against the other could provide detailed descriptive statistics that could be helpful in identifying similar provinces. Table 3 does this.

Table 3: Comparison of Tourist Average Expenditure per Province

Province	**Contrast**
Western Cape vs Gauteng	-2.248108*** (.242719)
Eastern Cape vs Gauteng	-4.82027*** (.242719)
KwaZulu-Natal vs Gauteng	-4.260811*** (.242719)
Mpumalanga vs Gauteng	-3.604865*** (.242719)
Limpopo vs Gauteng	-4.455946*** (.242719)
North-West vs Gauteng	-4.761081*** (.242719)
Northern Cape vs Gauteng	-5.189189*** (.242719)
Free State vs Gauteng	-3.731622*** (.242719)
Eastern Cape vs Western Cape	-2.572162*** (.242719)

KwaZulu-Natal vs Western Cape	-2.012703*** (.242719)
Mpumalanga vs Western Cape	-1.356757*** (.242719)
Limpopo vs Western Cape	-2.207838*** (.242719)
North-West vs Western Cape	-2.512973*** (.242719)
Northern Cape vs Western Cape	-2.941081*** (.242719)
Free State vs Western Cape	-1.483514*** (.242719)
KwaZulu-Natal vs Eastern Cape	.5594595*** (.242719)
Mpumalanga vs Eastern Cape	1.215405*** (.242719)
Limpopo vs Eastern Cape	.3643243 (.242719)
North-West vs Eastern Cape	.0591892 (.242719)
Northern Cape vs Eastern Cape	-.3689189 (.242719)
Free State vs Eastern Cape	1.088649*** (.242719)
Mpumalanga vs KwaZulu-Natal	.6559459 (.242719)
Limpopo vs KwaZulu-Natal	-.1951351 (.242719)
North-West vs KwaZulu-Natal	-.5002703 (.242719)
Northern Cape vs KwaZulu-Natal	-.9283784** (.242719)
Free State vs KwaZulu-Natal	.5291892 (.242719)
Limpopo vs Mpumalanga	-.8510811* (.242719)
North-West vs Mpumalanga	-1.156216*** (.242719)
Northern Cape vs Mpumalanga	-1.584324*** (.242719)
Free State vs Mpumalanga	-.1267567*** (.242719)
North-West vs Limpopo	-.3051351 (.242719)
Northern Cape vs Limpopo	-.7332432 (.242719)
Free State vs Limpopo	.7243243 (.242719)
Northern Cape vs North-West	-.4281081 (.242719)
Free State vs North-West	1.029459** (.242719)
Free State vs Northern Cape	1.457568*** (.242719)

Standard errors in parenthesis
***p<0.001, **<0.01, *p<0.05

The pairwise comparison of the means show the following:

a. Gauteng has mean tourism expenditure that is significantly higher than all provinces and the level of significant is very high throughout.

b. Western Cape has mean tourism expenditure that is significantly higher than all provinces except for Gauteng, and the level of significant is very high throughout.

c. The mean tourism expenditure in Eastern Cape is not significantly different from that in Limpopo, North West and Northern Cape. The mean tourism expenditure is significantly less than that of Kwazulu-Natal, Mpumalanga and Free State provinces.

d. Kwazulu-Natal has a mean tourism expenditure that is significantly higher than Northern and Eastern Cape, but not significantly different from Mpumalanga, Limpopo Free State and North West.

e. Mpumalanga has mean tourism expenditure that is significantly higher than Limpopo, North West, Northern Cape and Free State. The level of significance is very high for the last three.

f. Limpopo does not have a mean tourism expenditure that is significantly higher than any other province, in spite of partly hosting the National Kruger Park. It has mean tourism expenditures that are not significantly different from KwaZulu Natal, Eastern Cape, North West, Northern Cape and Free State provinces.

g. North West has mean tourism expenditures that are significantly less than most of the provinces.

h. Northern Cape also has mean tourism expenditures that are significantly less than most of the provinces.

i. Free State has a mean tourism expenditure that is significantly higher Eastern Cape, North West and Northern Cape. The level of significance is very high over Eastern and Northern Cape provinces.

7.5 Model Estimations

Table 4 provides the estimates of the Markov Switching Regression Model based on pre- and post-COVID-19 lockdown provincial tourism expenditures. A dynamic model is chosen because the switch from pre-COVID-19 lockdown was abrupt, without smoother changes that are typically modelled by auto-regressive models. The dynamic application of the model resulted in better goodness of fit, as shown in Table 4.

Table 4: Estimation Results from Markov Switching Regression Model at Provincial Level

	Gauteng	Western Cape	Eastern Cape	KwaZulu Natal	Mpumalanga	Limpopo	North West	Northern Cape	Free State
Regime-dependent intercepts									
R-1	1.5979***	0.8172**	0.1709*	0.3495***	0.4779*	0.1258	0.1720*	0.1486***	0.4536***
R-2	6.4360***	3.7806***	0.6804***	1.3139***	2.1470***	1.1539***	0.7599***	2.1400***	1.9927***
Transition Probabilities									
ρ11	0.9524	0.9498	0.9453	0.8444	0.9521	0.9538	0.9524	0.9722	0.9540
ρ12	0.0476	0.0502	0.0547	0.1556	0.0479	0.0462	0.0476	0.0278	0.0460
ρ21	0.0234	0.0237	0.0246	0.0292	0.0235	0.0234	0.0238	0.9999	0.0232
ρ22	0.9766	0.9763	0.9754	0.9708	0.9765	0.9766	0.9762	0.0001	0.9768
Variation									
Sigma	1.2046	0.8078	0.1987	0.2078	0.5360	0.2757	0.2090	0.0654	0.3263
Average duration of Regime									
R-1 (Quarters)	21	20	18	6	21	22	21	36	21
R-2 (Quarters)	43	42	41	34	42	43	42	1	43
Goodness of Fit Test									
AIC	3.7555	2.9566	0.1447	0.3451	2.1364	0.8083	0.2285	-2.0995	1.1464
Log Likelihood	-64.4759	-49.6978	2.3226	-1.3849	-34.5241	-9.9541	0.7728	43.8410	-16.2078
Observations	37	37	37	37	37	37	37	37	37

***p<0.001, **<0.01, *p<0.05
AIC is the Akaike Information Criterion. It is an estimator measuring the relative fitness of a model to the data under analysis

The regime-dependent intercepts refer to the average tourism spending in each of the regimes. R-2 clearly has a higher intercept compared to R-1 for all the provinces, with Gauteng and Western Cape having an intercept greater than 3.5. This confirms the descriptive statistics on the significant difference of these two provinces in terms of attracting tourist expenditures compared to the rest.

The transition probabilities demonstrate that both regimes are incredibly persistent for all provinces except for Northern Cape province and somewhat for KwaZulu Natal province. In the Northern Cape province, the probability of remaining in the higher equilibrium path in R-2 is almost zero. There is no chance of this province bouncing back better, to an equilibrium path than surpasses the path before COVID-19 lockdowns. The duration of only a quarter for R-2 in this province demonstrated that the higher equilibrium path on this regime is not persistent, and thus lack resilience. The Northern Cape province is therefore in need of several interventions to boost the tourism sector. The probability of R-1 transitioning to R-2 is higher for the case of KwaZulu Natal compared to any other province.

Consequently, the duration of R-1 is quite low compared to the rest.

The Gauteng province has a higher equilibrium path on tourism spending both before and post COVID-19, and its R-2 is predicted to persist for 43 quarters (i.e., next 10 years if there is no other disturbance). There is no doubt that this is one of the most resilient provinces given its persistence to remain on a new and higher equilibrium path. However, the province has a high-variance given the high sigma value associated with it. The need to reduce this variance can be a point of intervention in what appears like a no-fault province in terms of tourist receipts.

To assess the resilience of tourism national level, we run the Markov Switching Regression Model at an aggregated level. The results of this are provided in Table 5. The average tourism expenditure path for R-2 is at least four-times the R-1, demonstrating that it is bouncing back better. The transition probabilities show that there is a very high chance of not leaving this equilibrium path and this could last for 42 quarters (i.e. about 11 years).

Whereas the tourism economy demonstrates resilience, the variance is however very high and indicates how sensitive tourism markets are to seasons and potentially other factors too, which tend to happen in particular years and not others. More marketing is needed to receive more tourists in the first quarter of each year. Generally, it is a quarter that comes after people have spent money during the festive season. Yet even the festive season has spending that increases at a decreasing rate compared to the second and third quarters.

Table 5: Estimation Results from Markov Switching Regression Model at National Level

	National Level
Regime-dependent intercepts	
R-1	4.3038***
R-2	18.4450***
Transition Probabilities	
ρ11	0.9531
ρ12	0.0469
ρ21	0.0233
ρ22	0.9767
Variation	
Sigma	3.0941
Average duration of Regime	
R-1 (Quarters)	21
R-2 (Quarters)	42
Goodness of Fit Test	
AIC	5.6444
Log Likelihood	-99.4218
Observations	37

***p<0.001, **<0.01, *p<0.05

A mere search on Google provides evidence that many agents has successfully marketed April, the beginning of the second quarter, to be a great time to visit South Africa. This appears to have been successful because the second quarter has a tourism spending pattern that increases at an increasing rate compared to any other quarter. The first and fourth quarter need to be marketed better as thy cause a huge variation in the receipts from tourists.

In conclusion: The study so far has shown the need to understand the elasticity of tourism demand in South

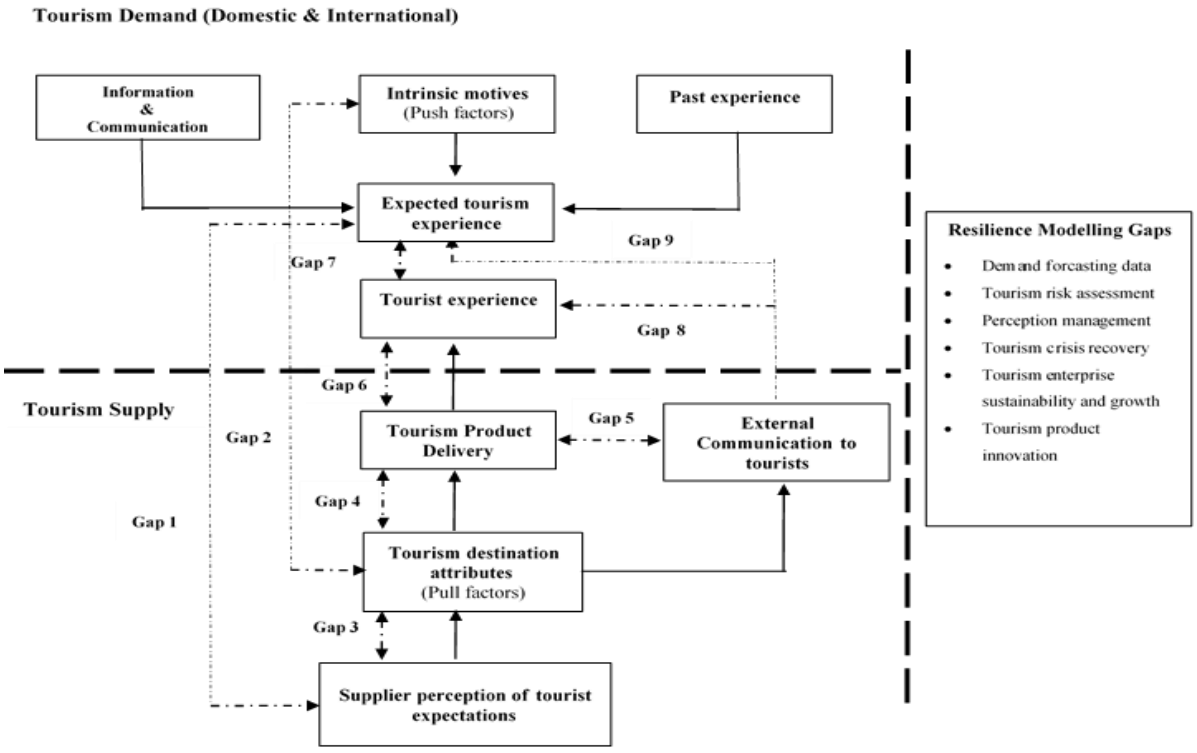
Africa. This is because the model shows the sensitiveness of tourism sector to this demand. Otherwise, there is demonstrated resilience in the tourism sector.

8. Phase 2: of the Tourism Resilience Model

8.1 Operationalisation of the conceptual models for the proposed project (Literature review)

The respective TRMs are a result of the study funded by the NDT in 2021. The conceptual models are illustrated (Figure 5 and Figure 6) and operationalised by the hypotheses address the gaps illustrated in Figure 4. The systems approach (Leiper, 1979) to tourism acknowledges the importance of the tourism demand and supply nexus. However, within the tourism system, gaps occur, which can distort or complicate the system. Considering such gaps, South African tourism must be reflexive in its ability to identify these gaps and effectively manage them. Research catalyses the responsiveness of destinations to global shocks, such as the ongoing COVID-19 pandemic. One effective tool to outline the potential inhibitions within the tourism demand and supply nexus for South Africa is an adapted PZB Gap Model of Parasuraman, Zeithaml and Berry (1985, 1988, 1991), which was further and specifically adapted for development of the TRM (Figure 4).

Figure 4: Gap Model of South African Tourism Supply and Demand



Adapted from: Parasuraman *et al.* (1985, 1988, 1991)

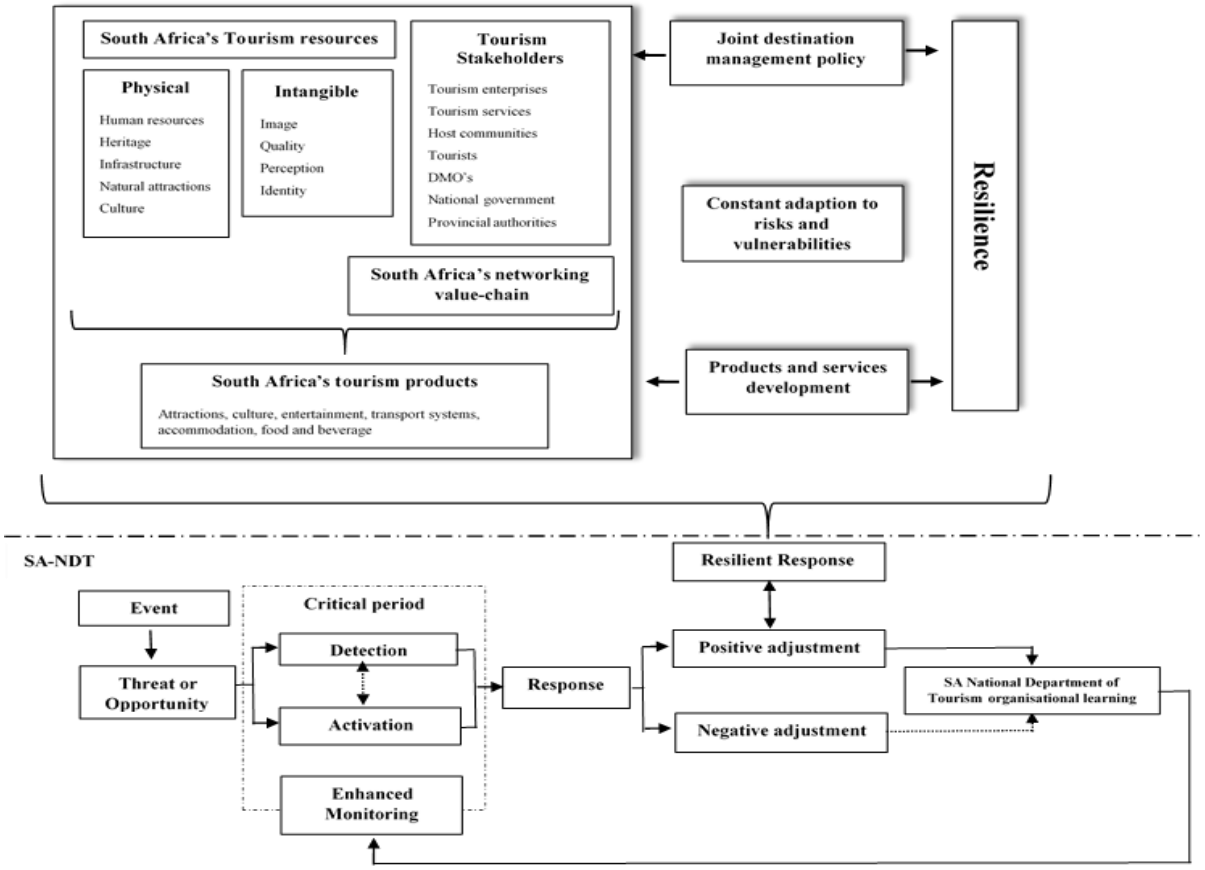
Conventionally, the 'gap model' effectively measures the potential differences that may exist between customer expectations or perceptions and the service product provided or rendered. The existence of 'gaps' within the tourism process may be the source of tourist dissatisfaction, destination avoidance, cognitive dissonance, destination unattractiveness, or deficiency in domestic, regional or international competitiveness in the era of COVID-19. Therefore, South African tourism must explore the following gaps as part of a concerted effort to manage and synchronise tourism demand (both domestic and international) with tourism supply and develop a comprehensive resilience model for South African tourism.

- Gap 1 is the potential difference between domestic and international tourist expectation(s) and South African tourism supplier perceptions of tourist expectations.
- Gap 2 is the potential difference between domestic and international tourist motives (push factors) and tourism destination attributes of South Africa (pull factors).
- Gap 3 is the potential difference between South African tourism supplier perceptions of what domestic and international tourists expect and the destination attributes of South Africa as a tourism destination.
- Gap 4 is the potential difference between the destination attributes of South Africa and the delivery of the tourism product.
- Gap 5 is the potential difference between South Africa's tourism offering and the external communication of the product to domestic and international tourists.
- Gap 6 is the potential difference between the tourism product delivered and the tourism experience of the domestic or international tourist.
- Gap 7 is the potential difference between domestic and international tourists' expectations and the actual tourism experience of South Africa.
- Gap 8 is the potential difference between the external communication (value proposition) by South Africa and the actual experience of the domestic or international tourist.
- Gap 9 is the potential difference between the external communication (value proposition) by South Africa and the expectations of the domestic or international tourist.

The TRM addresses the nine gaps outlined in Figure 4 in the context of both domestic and international tourism. By utilising the respective TRMs, South African tourism would be able to evaluate the inherent challenges of the destination's tourism system and provide decision-makers with empirical data-driven decision support models to assist South Africa to be more responsive to environmental changes and ultimately be more reflexive and resilient in the face of challenges such a global pandemic. This is achievable through a Tourism Resilience Model (TRM) specifically developed for South Africa. Figure 5 illustrates the role of the TRM, regardless of the crisis event which contextualises the TRM.

The TRM as a decision support model that complements the internal processes of the South African NDT associated with tourism recovery and resilience. By adopting a multi-stakeholder approach, the TRM utilises data from the Gap Model of South African Tourism Supply and Demand (Fig 4) and synthesises it to inform the joint destination management policy, as well as the product and services development process to provide the NDT with a resilient response to events and their resultant threats or opportunities.

Figure 5: South Africa as the fundamental unit of analysis of the TRM



Source: Adapted from Amann & James (2015); Fabry & Zeghni (2019)

The TRM conceptual models adopt Supardi, Kudus, Hadi, and Indonesia's (2020), perspective on resilience, suggesting that resilience is a crises management tool or strategy that influences the stability and adaptability of all types of risks during emergencies. Alves, Lok, Luo, and Hao (2020) indicate that resilience requires timely and scalable interventions. One of the most critical factors that can contribute to the recovery and resilience of the tourism industry is the travel decisions made by source markets. It is essential to keep abreast of changing tourist perceptions to ensure appropriate interventions. Hence the significance of the demand-oriented approach to

tourism resilience. Even though a tourism destination is open and ready to welcome tourists, certain subjective restrictions might still be placed on travel. Monitoring tourists' intention to travel, albeit domestically or internationally, will provide answers to recovery. However, in the case of recovering from a pandemic such as COVID-19, this is not a straightforward answer, and several variables will influence travel intentions. The results might also be different between source markets, or in the case of domestic tourism across specific segments. The travel environment remains fluid and, to a certain extent, unpredictable, which creates uncertainties leading to tourists not travelling or choosing other destinations. The key to managing resilience is data that should inform decision-making.

Some key aspects of both models:

Demand can be considered as a core element in the resilience process and strategy. In this regard, it is important first to determine the push travel motives of tourists and their level of awareness, association, and interest in a destination, also known as brand equity (Labelled as International/Domestic Demand Factors) (Aziz & Yasin, 2010; Basaran, 2016; Martín, Herrero & Salmones, 2019). Without a certain level of brand equity and a need to travel, no destination will be an attractive option to choose. Secondly, it is critical to have information related to the perceived country image, the place brand dimensions, the perceived risk levels of travel, and the international tourism risk perceptions (for instance Labelled as Macro I). These aspects can serve as mediators in deciding whether to travel or not travel to a destination. Therefore, a tourist might want to travel and be interested in a destination but may consider the risk levels too high and therefore decide not to travel. In such a case, one should focus on specific strategies and marketing material to showcase what is being done in a country to keep tourists safe. These strategies might differ from one source market to another.

Based on the tourists' perceptions, there are certain aspects that a country can control and adapt, such as the pull factors of a destination and the pharmaceutical and non-pharmaceutical interventions implemented (for instance Labelled as Meso I). If tourists are, for example, scared to travel to a certain destination due to certain restrictions, communication can be changed to influence perceptions. Fourthly, the media and marketing profile is critical in decision-making (for instance Labelled as Macro II). Based on this discussion, the following conceptual models (Figure 5 and Figure 6) and hypotheses apply. Table 6 summarises the constructs included in the respective models.

The model allows for changing variables on a Meso I level. In the first year of development, at a time when COVID-19 was still a major consideration in travelling, the focus was on the assessment of pharmaceutical and non-pharmaceutical interventions by South Africa as a tourism destination.

Table 6: Operationalisation of Model Dimensions and application

Construct	Dimensions	Application	Definition	Relevant sources
DEMAND: The willingness and ability of consumers to buy different amounts of a tourism product at different prices during any one period. The demand for any tourism good or service is influenced by numerous quantifiable and non-quantifiable factors.[1] (Dwyer, Forsyth & Dwyer, 2020)	**Push travel motives**	D-TRM (2023) I-TRM (2022 and 2023)	Tourists travel or need to travel because they are pushed by their internal forces. These forces are intangible, or they express the internal desires of travellers. For example, the need for relaxation, adventure, prestige.	Baloglu & Uysal (1996)
	Level of awareness	D-TRM (2023) I-TRM (2022 and 2023)	The strength of the brand's presence in the mind of the tourist along a continuum.	Aziz & Yasin, (2010); Basaran, (2016); Kladou & Kehagia (2014); Martín, Herrero & Salmones (2019)
	Level of association	D-TRM (2023) I-TRM (2022 and 2023)	A reflection of tourists' perceptions, including perceptions of values, quality, feelings and brand personality.	
	Level of interest	D-TRM (2023) I-TRM (2022 and 2023)	The level of tourist interest or intrigue in the destination and the level of curiosity to inquire or learn more.	
MACRO I: Multi-stakeholder country management policy and the global environment resulting in the organic image and perceptions held of South Africa. These are tourism and non-tourism related dimensions that South Africa has very little to no control over.	**Perceived country image**	I-TRM (2022 and 2023)	A subjective stakeholder attitude towards a nation and its state, comprising specific beliefs and general feelings in functional and normative dimensions.	Buhmann (2016)
	Place brand dimensions	I-TRM (2022 and 2023)	The multi-dimensional cognitive associations that consumers utilize as reference points for information symmetry in consumptive decision-making.	Matiza & Slabbert, (2020a)
	Perceived risk of international travel & tourism activity	I-TRM (2022 and 2023)	Perceived risk of international travel and tourism activity in South Africa.	Matiza & Slabbert, (2020b)
	International tourism risk perception	I-TRM (2022 and 2023)	International tourists' perception of uncertainty and potential adverse outcomes resulting from the consumption of travel and	Matiza (2020)

			tourism offerings based on perceived psychological, social, physical and financial risk, respectively.	
	Domestic brand equity	D-TRM (2022 and 2023)	Dimensions that assess the power of a destination brand to create value with customers	Tran, Nguyen & Tran (2021)
	Perceived risk of domestic travel & tourism activity	D-TRM (2022 and 2023)	Perceived risk of domestic travel and tourism activity in South Africa.	Matiza & Slabbert, (2020b)
	Domestic tourism risk perception	D-TRM (2022 and 2023)	Domestic tourists' perception of uncertainty and potential adverse outcomes resulting from the consumption of travel and tourism offerings based on perceived psychological, social, physical and financial risk, respectively.	Matiza (2020)
MESO: Country and tourism market level that is characterized by consistent adaptation to threats, risk and vulnerabilities of the tourism sector.	**Pull travel factors**	D-TRM (2022 and 2023)	Pull factors include tangible resources that determine the attractiveness of the destination, such as landscapes, beaches, and historical resources. These external characteristics of a destination that attract tourists when making their destination choice.	Baloglu & Uysal (1996)
	Pharmaceutical & non-pharmaceutical Interventions (Plug-in for 2022)	I-TRM (2022)	The perceived effectiveness of pharmaceutical and non-pharmaceutical interventions associated with the COVID-19 pandemic.	Liu, Schroeder, Pennington-Gray & Farajat, (2016)
	Safety & Security (Plug-in for 2023)	I-TRM (2023)	Stable and orderly conditions, namely - being protected and free from injury or danger during tourism activities.	Xiaolong, Litian, Lu, & Rong (2022); Zou & Yu (2022)
	Perceived and stereotypical xenophobia (Plug in for 2023)	I-TRM (2023)	A negative predisposition towards, or even the denigration of, groups and/or individuals based on perceived differences	Zenker, Braun & Gyimothy (2021)

	Vaccination for international tourism (Plug-in for 2023)	I-TRM (2023)	The perceptions towards initiating pharmaceutical interventions associated with the COVID-19 pandemic.	Kock, Josiassen & Assaf, (2019)
	Perceived behavioural control (Plug-in for 2023)	I-TRM (2023)	The self-evaluation of the individual's ability to perform specific behaviours in terms of factors such as ability and resources	Liu, Shi, Li, & Amin (2021)
MACRO II: Multi-stakeholder destination response via various media platforms and marketing strategies to elicit an induced perception of South Africa as a tourism destination.	**Media and marketing profile / International media & marketing profile**	D-TRM	The influence of South Africa's tourism's media and marketing profile - which is where potential domestic or international tourists derive the information which they utilise as heuristic cues in their decision-making.	Fuchs & Reichel (2011)
(Optional) MICRO: Individual tourist factors at the tourist level	**Constraints & ability to pay**	D-TRM	Factors that inhibit individuals from travelling on a continual basis by causing inability to travel. Specifically, constraints "result in the inability to maintain or increase frequency of travel, and/or lead to negative impacts on the quality of the travel experience.	Hung (2014)
INTENTION TO TRAVEL		D-TRM	The intention to travel internationally to South Africa in the near future	Law (2006); Olya & Al-ansi (2018); Wang (2017)

Operational Hypotheses for the D-TRM (Figure 5):

The model tests the following hypotheses.

H1: Domestic demand factors directly influence tourists' intention to travel to South Africa.

H2: Macro I factor(s) mediate the relationship between domestic demand and intention to travel in South Africa.

H3: Meso factor(s) mediate the relationship between domestic demand and intention to travel in South Africa.

H4: There is a bi-directional relationship between South Africa's MACRO I and MESO factors.

H5: South Africa's MACRO II factor **[**media & marketing profile] moderates the relationship between MACRO I and MESO factors and domestic travel demand for South Africa.

H6: South Africa's MICRO factor [constraints & ability to pay] moderates the relationship between MACRO I and MESO factors and domestic travel demand in South Africa.

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Figure 5: Domestic Tourism Resilience Model (D-TRM)

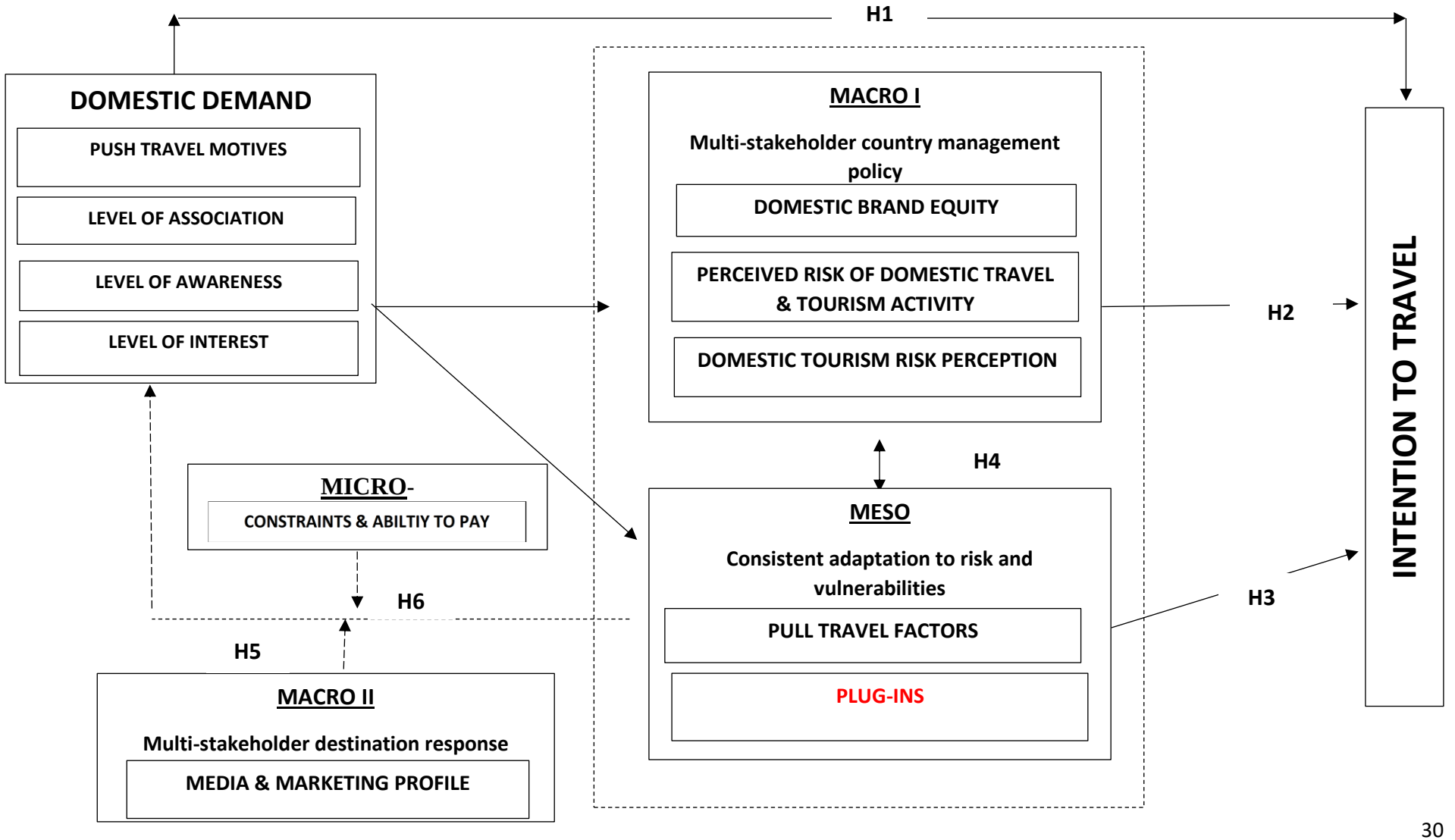
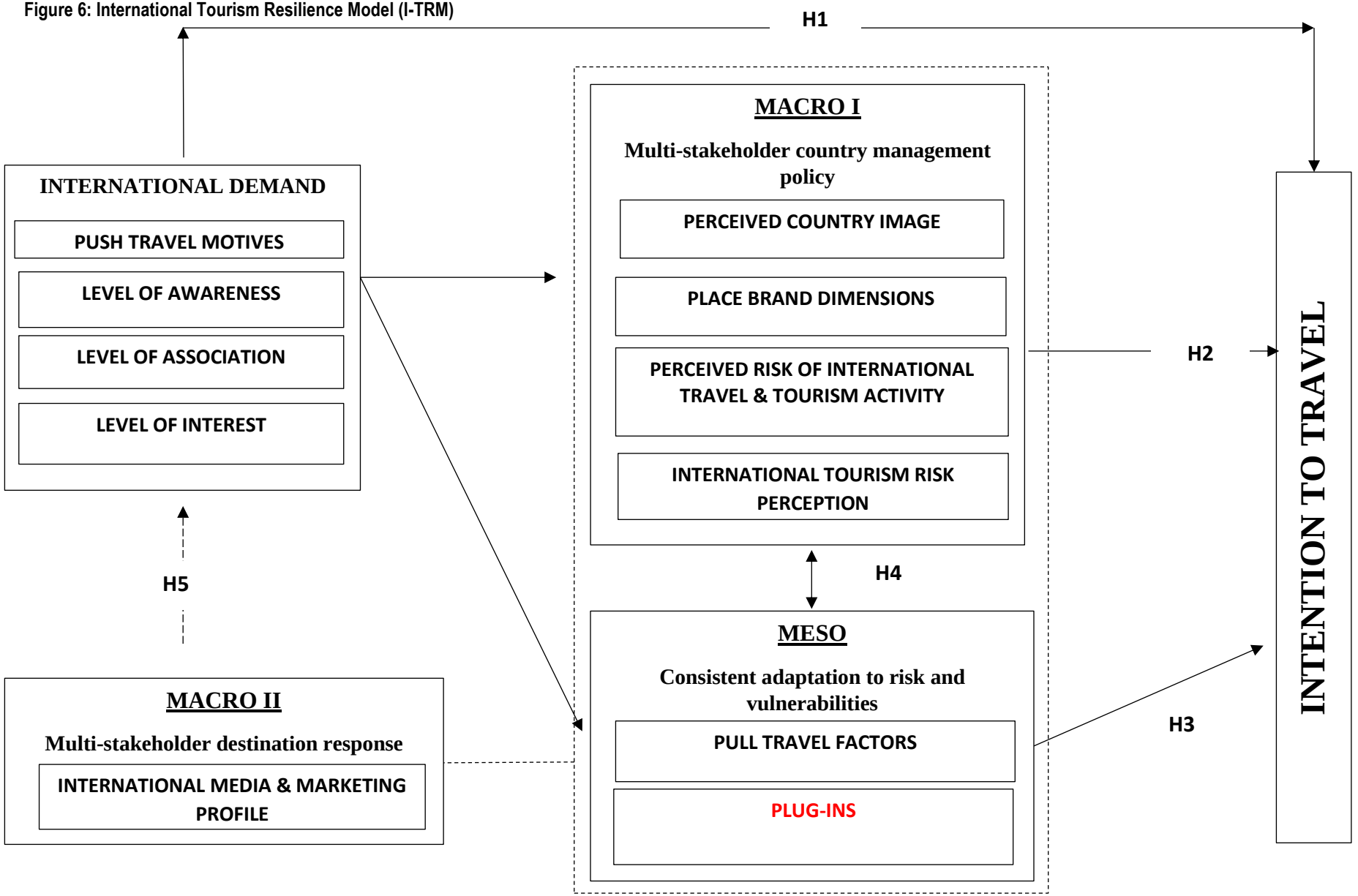


Figure 6: International Tourism Resilience Model (I-TRM)



Operational Hypotheses for the I-TRM (See Figure 6)

The model tests the following hypotheses.

H1: International demand factors directly influence tourists' intention to travel to South Africa.

H2: Macro I factor(s) mediate the relationship between international demand and intention to travel to South Africa.

H3: Meso factor(s) mediate the relationship between international demand and intention to travel to South Africa.

H4: There is a bi-directional relationship between South Africa's MACRO I and MESO factors.

H5: South Africa's MACRO II factor **[**international media & marketing profile] moderates the relationship between MACRO I and MESO factors and international travel demand so South Africa.

8.2 Research methodology

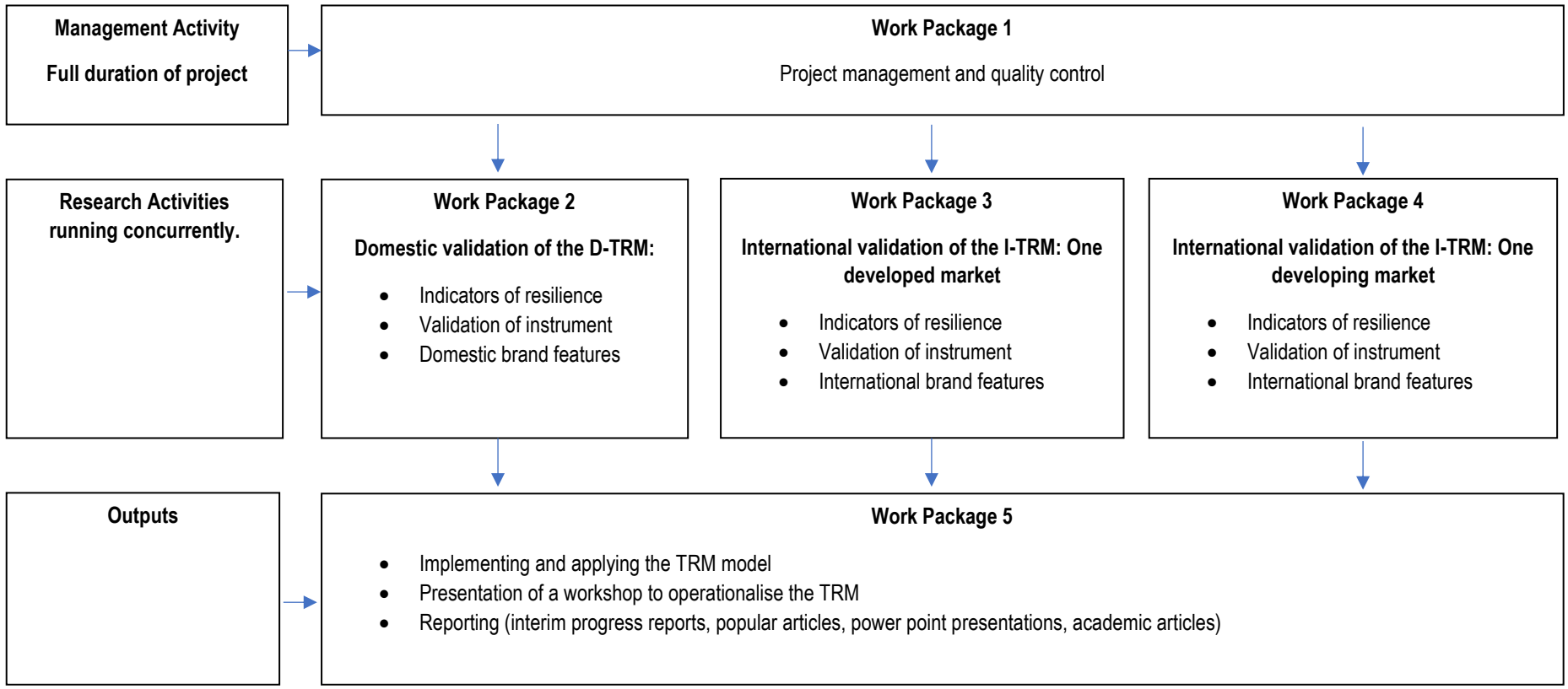
The research project to develop and test the models was conducted as a deductive research study designed to generate quantitative data. The quantitative design provides a more structured approach to piloting the study. The two-phase quantitative pilot stage of the TRM development was designed to generate, measure and analyse quantitative data to establish objective data and knowledge to operationalise and validate the TRM. The chosen design also addressed the objectives of the study, including profiling both domestic and international tourists, generalised tourist motivations, travel decision process, perceptions of South Africa as a domestic and international tourism destination, South Africa's tourism destination attributes, as well as the opportunities and barriers (perceived risk and tourism safety factors) associated with South Africa as a domestic and international tourism destination in light of the COVID-19 pandemic (as a plug-in in the pilot phase).

The project was designed as follows: Project Plan Work Packages (See Figure 7)

Work Package 1 – Project Management and quality control

Throughout the project quality control was done through regular meetings between the researchers as well as the national Department of Tourism. Progress was discussed and changes were made where necessary. This led to efficient and effective research management but also ensured a quality end product.

Figure 7: Project Plan Work Packages



Work Package 2 – Domestic validation of the D-TRM (SA Market)

It was the objectives of work package 2 to:

(1) Do a cross-sectional study (1 survey) in the South African market as per the variables of the TRM

(2) Determine the indicators unique to the local market that will contribute to a resilient tourism industry

(3) Validate the instrument through 1 survey and statistical analysis – refine the model for application

(4) Determine the brand features unique to the local market to optimise local travel

Work Package 3: International validation of the I-TRM (UK, and USA markets)

It was the objectives of work package 3 to:

(1) Cross-sectional study (2 surveys: 2022 and 2023) in the USA market as per the variables of the TRM

(2) Determine the indicators unique to the USA markets that will contribute to a resilient tourism industry

(3) Validate the instrument through 2 surveys and statistical analysis – refine the model for application.

(4) Determine the brand features unique to the USA markets to optimise international travel

Work Package 4: International validation of the I-TRM (Brazilian market)

It was the objectives of work package 4 to:

(1) Cross-sectional study (2 surveys) in the Brazilian market as per the variables of the TRM

(2) Determine the indicators unique to the Brazilian market market that will contribute to a resilient tourism industry

(3) Validate the instrument through 2 survey and statistical analysis – refine the model for application

(4) Determine the brand features unique to the Brazilian market to optimise international travel

Work Package 5: Outputs

It was the objectives of work package 5 to:

(1) Refine the TRM model through statistical analysis if need be

(2) Generate guidelines addressing the implementation, application and interpretation of the TRM

(3) Conduct a workshop to present the usefulness of the model in determining future travel decisions and behaviour

(4) Develop the final report, possible popular and academic articles and other output documents

8.2.1 Study areas, populations and sample sizes

The domestic aspect surveyed South African consumers as potential domestic tourists. These were the target population for the domestic tourism aspect of the study. Non-probability sampling was applied, meaning the study population was not randomly selected. Non-probability sampling is consistent with sampling for online surveys (Nayak & Narayan, 2019). The survey was distributed to a pre-recruited panel of South African consumers, administered by InfoQuest, a South African research firm. To ensure sample validity, the survey sample size was based on the sampling heuristics proposed by Krejcie and Morgan (1970:607), which recommend a minimum

sample of *n*=384 for universal populations over 1 million individuals. The final sample for the domestic survey was n=500.

The target population for the international survey was potential international tourists to South Africa. Purposive-convenience sampling was implemented for the proposed study, meaning the population was not randomly selected. This involved identifying and deliberately selecting key informants with the insights relating to the study for data generation purposes. All possible individuals (as potential international tourists) conveniently available on QuestionPro's global online platform were allowed to participate in the study with samples strictly limited to Brazil, The USA and UK markets. However, the sample size was guided by both probability and non-probability sample procedures. A minimum sample size of *n*=384 for each market would have been suitable for the proposed study considering that the population could not be ascertained before the research. A final sample of *n*=500 was drawn from each market.

8.2.2 The measuring instruments

The questionnaires were in English and were accompanied by a consent letter explaining the purpose of the study. The respective questionnaires were administered online on InfoQuest (Domestic – See Annexure 1) and QuestionPro (International – See Annexure 2).

The domestic demand questionnaire consisted of the following sections,

- Section A solicited socio-demographic information. The socio-demographic information was limited to the respondent's age range, the gender they identify with, educational level, marital status, travel companionship, and their region of residence. Previous tourism studies (Lu & Atadil, 2021) have shown that socio-demographic factors such as age, gender, level of education, and origin are crucial for validating and generalisation the findings related to tourist behaviour studies. Additionally, respondents were asked whether they have travelled for tourism purposes before, and which channels they utilise to gather information about tourism destinations.
- Section B solicited data that explores domestic tourism demand. This data included five items supported by the literature to measure the push travel motives. Section B will also solicit data that explores Domestic Brand Equity (DBE) comprised of four items adapted from the literature respectively on the awareness, association and interest (Aziz & Yasin, 2010; Basaran, 2016; Martín, Herrero & Salmones, 2019) of tourists with regards to South African tourism. Responses were recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'.
- Section C is referred to as MACRO I factors beyond the control of tourism practitioners. Section C measured 16 statements associated with perceived psychological, social, physical and financial risk, respectively. Perceived risk is critical to tourist decision-making and can impact the 8 rationality of tourist decisions and

destination choice (Chew & Jahari, 2014; Deng & Ritchie, 2018). Hence, it is important that the perceived risk associated with travel be determined to better understand tourists and their behaviour towards uncertainty. Items were measured based on items adapted from previous empirical studies (see Adam, 2015; Deng & Ritchie, 2018; Fuchs & Reichel, 2006; Fuchs & Reichel, 2011; Olya & Al-ansi, 2018; Qi et al., 2009; Wang, 2017). Responses were recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'.

- Section C also measured perceived safety associated with travel and tourism-related activity in South Africa. Perceived safety was measured based on eight statements adapted from the extent of the literature (see Adam, 2015; Reisinger & Mavondo, 2005; Rittichainuwat & Chakraborty, 2012). Responses were recorded on a five-point Likert scale of safety, where 1 = 'Very risky' and 5 = 'Very safe'. Section C also encompassed the measurement general perceptions of safety and security in South Africa. Based on six statements adapted from Xiaolong, Litian, Lu, and Rong (2022), responses were recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'.
- Section D measured MESO factors that are local market-specific and more localised factors. Section D first measured pull travel motives of domestic tourists. Ten statements measured South Africa's destination attributes. Items were measured based on items adapted from previous empirical studies (see Filistanova, 2017; Gautam, 2018; Mapingure, du Plessis & Saayman, 2019; Saiprasert, 2011; Seyidov & Adomaitienė, 2016). Responses were recorded on a five-point Likert scale of likelihood, where 1 = 'Extremely unlikely' and 5 = 'Extremely likely'. Section D also measured the perceived effectiveness of pharmaceutical and non-pharmaceutical interventions. Five items drawn and adapted from previous studies (Liu, Schroeder, Pennington-Gray & Farajat, 2016), established the perceived effectiveness of interventions. Responses were recorded on a five-point Likert scale of effectiveness, where 1 = ' Very ineffective' and 5 = 'Very effective'. Section D additionally measured resident ethnocentrism based on six measurement items adapted from Kock, Nørfelt, Josiassen, Assaf and Tsionas (2020). Responses were recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'. Lastly, Section D also measured resident hospitality. Five items are adapted from Kock, Nørfelt, Josiassen, Assaf and Tsionas (2019). Responses were recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'.
- Section E are MACRO II factors as follows. Section E measured the influence of South Africa's destination media profile. 12 statements associated with the influence of South Africa's tourism's media and marketing profile - which is where potential domestic tourists derive the information which they utilise as heuristic cues in their decision-making (Fuchs & Reichel, 2011). Items were measured based on items adapted from previous empirical studies (see Adeola & Evans, 2019; Gong & Tung, 2017; Huong & Lee, 2017; Hyun, 2006; Kapu & Richards, 2016; McCabe, 2014; No & Kim, 2015; Reitsamer & Brunner-Sperdin, 2017; Soliman, 2011). Responses were recorded on a five-point Likert scale of influence, where 1 = 'Not at all influential' and 5 =

'Extremely influential'. Section E also measured perceived behavioural control of tourists. Five items are drawn from the scale developed by Liu, Shi, Li and Amin (2021), with responses recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'.

- Section F measured the travel intentions of domestic tourists. Four items related to the intention to travel domestically within South Africa in the near future based on items adapted from previous empirical studies (see Kim *et al*., 2019; Law, 2006; Olya & Al-ansi, 2018; Wang, 2017). Responses were recorded on a five-point Likert scale of likelihood, where 1 = 'Extremely unlikely' and 5 = 'Extremely likely'.

The international demand questionnaire will consist of the following sections,

- Similar to Section A of the domestic tourism measuring instrument, Section A of the international demand survey solicited socio-demographic information, including the respondent's age range, the gender they identify with, educational level, marital status, travel companionship, and their region of residence. Respondents were also be asked whether they have travelled for tourism purposes before and which channels they utilise to gather information about tourism destinations.
- Section B solicited data that explored international demand. This data included five items supported by the literature to measure the push travel motives, as well as the international Brand Equity (IBE) comprised of four items adapted from the literature respectively on the awareness, association and interest (Aziz & Yasin, 2010; Basaran, 2016; Martín, Herrero & Salmones, 2019) of tourists with regards to South African tourism. Responses were recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'.
- Section C MACRO I factors which are more general global factors. First Section C measured tourists' perceived CI of South Africa. The study adapts Buhmann's (2016) multi-dimensional CI measurement construct. A total of 12 statements have been adapted to measure South Africa's CI based on two dimensions: Functional and Normative CI. Responses were recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'. Section C also measured the influence of South Africa's PB on tourists' decision-making when considering South Africa as a tourism destination. A total of 16 statements were adapted from the contemporary literature (see Adams, Snyder, Crooks & Johnston, 2015; Filistanova, 2017; Lee, 2012; Lee, Han & Lockyer, 2013; Lunt, Smith, Exworthy, Green, Horsefall & Mannion, 2012; Musuva, 2015; Saiprasert, 2011; Singh, 2013; Verissimo, 2012). Responses were recorded on a five-point Likert scale of influence, where 1 = 'Extremely negative influence' and 5 = 'Extremely positive influence'. Section C then measured international tourism risk perception based on 16 items associated with perceived psychological, social, physical and financial risk, respectively (see Adam, 2015; Deng & Ritchie, 2018; Fuchs & Reichel, 2006; Fuchs & Reichel, 2011; Olya & Al-ansi, 2018; Wang, 2017). Responses were recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'. Section C also

measured the perceived risk of international travel and tourism activity in South Africa. Perceived safety will be measured based on nine statements adapted from the extent of the literature (see Adam, 2015; Reisinger & Mavondo, 2005; Rittichainuwat & Chakraborty, 2012). Responses were recorded on a five-point Likert scale of safety, where 1 = 'Very risky' and 5 = 'Very safe'. Section C also encompassed the measurement general perceptions of safety and security in South Africa. Based on six statements adapted from Xiaolong, Litian, Lu, and Rong (2022), responses were recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'. Lastly, Section C measured the perceived and stereotypical xenophobia based on 10 statement items adapted from Zenker, Braun and Gyimothy (2021). Responses were recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'.

- Section D measures MESO factors that are country-specific and more localised factors. Section D first measured pull travel motives of tourists. Ten statements measured South Africa's destination attributes. Items were measured based on items adapted from previous empirical studies (see Filistanova, 2017; Gautam, 2018; Mapingure, du Plessis & Saayman, 2019; Saiprasert, 2011; Seyidov & Adomaitienė, 2016). Responses were recorded on a five-point Likert scale of likelihood, where 1 = 'Extremely unlikely' and 5 = 'Extremely likely'. Section D also measured the perceived effectiveness of pharmaceutical and non-pharmaceutical interventions. Five items drawn from previous studies (Liu, Schroeder, Pennington-Gray & Farajat, 2016), established the perceived effectiveness of interventions. Responses were recorded on a five-point Likert scale of effectiveness, where 1 = ' Very ineffective' and 5 = 'Very effective'.
- Section E measured MACRO II factors which are larger scale country-specific factors within the control of the destination. Section E measured the influence of South Africa's destination media profile. 12 statements associated with the influence of South Africa's international tourism's media and marketing profile - which is where potential international tourists derive the information which they utilise as heuristic cues in their decision-making (Fuchs & Reichel, 2011). Items were measured based on items adapted from previous empirical studies (see Adeola & Evans, 2019; Gong & Tung, 2017; Huong & Lee, 2017; Hyun, 2006; Kapu & Richards, 2016; McCabe, 2014; No & Kim, 2015; Reitsamer & Brunner-Sperdin, 2017; Soliman, 2011). Responses were recorded on a five-point Likert scale of influence, where 1 = 'Not at all influential' and 5 = 'Extremely influential'. Section E also measured perceived behavioural control of tourists. Five items were drawn from the scale developed by Liu, Shi, Li and Amin (2021), with responses recorded on a five-point Likert scale of agreement, where 1 = 'Strongly disagree' and 5 = 'Strongly agree'.
- Section F measured the travel intentions of tourists. Four items related to the intention to travel internationally to South Africa in the near future based on items adapted from previous empirical studies (see Kim *et al*., 2019; Law, 2006; Olya & Al-Ansi, 2018; Wang, 2017). Responses were recorded on a five-point Likert scale of likelihood, where 1 = 'Extremely unlikely' and 5 = 'Extremely likely'.

8.3 Empirical data collection

A domestic online survey of a socio-demographically representative sample of South Africans was conducted to generate the data required for the study, based on a database of pre-recruited South African consumers. The database and the survey was administered, respectively, by InfoQuest, an accredited South African research service provider. The questionnaire was self-administered and conducted remotely. Respondents were invited to participate in the survey by InfoQuest and voluntarily opted to participate. A consent letter preceded the survey, to inform respondents of the purpose of the study, and inform them of their voluntary consent. Responses were automatically catalogued for this specific study by the survey software. An international online survey was conducted to generate the data required for the international demand study. Similar approach was applied as the domestic survey using QuestionPro. The survey of individuals (Brazil, the UK and the USA) as potential international tourists was conducted on the QuestionPro platform.

8.3.1 Research Ethics

The research was conducted with the strictest ethical considerations in mind. The recommendations of the Belmont Report (1979), Nayak and Narayan (2019), and the research ethics code of North-West University were applied for the duration of the proposed research. Ethical clearance for the study was obtained from the North-West University to ensure the research's integrity, quality, and validity. Ethical considerations included:

- Acquiring informed and voluntary consent from participants of the study (See Appendix A),
- Guaranteed confidentiality and anonymity of respondents with no personal, identification or sensitive information being solicited,
- Ensuring non-discrimination against respondents based on their racial orientation, religious or political beliefs or gender.
- Adherence to the prescripts of the POPIA act as outlined by NWU policy.
- Generally, the vulnerable were not targeted with this study.

The entire 2-year study was awarded and conducted the following ethics number: NWU-00565-22-A4.

8.4 Results

8.4.1 Results of the D-TRM Model

Note: The stylised results from the South African domestic market are an illustration of the data that can be extracted from the model and its utility. Part 1 is the descriptive and exploratory aspect of the study, whereby Exploratory Factor Analysis reduces the data by establishing discernable constructs/dimensions that can be easily interpreted and further analysed to establish key practical relationships. Part 2 is the mediation aspect of the model

to establish the influence of intervening factors in potential Domestic tourist's decision-making. Data is extracted for illustrative purposes:

- *Demand factors* – Travel Motives and Domestic Brand Equity
- *Decision factors* – Safety and Security, Perceived Behavioural Control, Ethnocentrism and Perceived Risk, Hospitality, Destination Attributes, Safety of Travel and Tourism Activity, Intervention effectiveness, Destination Media Profile and Destination Marketing
- *Outcome factor* – Intention to Travel

8.4.1.1 Part 1: Socio-demographic Profile

Most respondents were South African citizens, female, and aged between 33 and 44 years of age. Respondents mostly possessed a Bachelor's degree, were single and typically employed in the private sector. Most surveyed individuals indicated that they travelled with family or their partners, earned below the average South African income, and resided in Gauteng. Social media is the most influential channel for domestic tourism-related information. Most of the respondents had travelled more than once in the last two years, were intending to engage in international travel, but were most likely going to engage in domestic tourism. Nearly half the respondents were willing to pay between R11 000 and R20 000 for a one-week domestic holiday.

Table 7: Socio-demographic Profile of Domestic tourists

Demographic	Domestic Tourists – South Africa
	***n*=500**
Citizenship status	South African (97%); Permanent Resident (3%)
Gender	Male (48%); Female (51%): Non-binary (0.4%)
Age	35-44 years old (34%); 25-34 years old (29%); 55+ years old (23%)
Highest Qualification	Bachelor's Degree (30%); Tertiary Diploma (24%)
Marital Status	Single – never married (42%); Married (32%)
Economic Activity	Employed – Private Sector (55%); Employed – Public Sector (25%); Retired (7%)
Travel Companion(s)	Family -Adults and Children (31%); With partner (30%); Alone (16%)
Average Income (R22 500)	Below average income (27%); Same as average (26%); Above average (12%)
Province of Residence	Gauteng (30%); Western Cape (20%); KwaZulu Natal
Tourism in the last 2-years	More than once (63%); Once (24%); None (12%)
Influential channel for domestic tourism information	Social media (33%); The Internet (30%); TV (17%)
International travel in the next year	Yes (71%); No (29%)
Domestic travel in the next year	Yes (95%); No (5%)
Willing to pay for SA trip?	R11 000 – R20 000 (40%); Less than R10 000 (22%); R21 000 – R30 000(18%)

8.4.1.2 Part 2: Factor Analysis

The KMO (>.50) and Bartlett's statistics (p=.000) for all the constructs confirmed the factorability of the data and sample adequacy. Table 3 shows that the PCA/EFA extracted the dimensions required [EV>1; loading coefficient of ≥ 0.5]. All the scales were reliable (α >.60), suggesting internal consistency of the measuring instruments developed for the D-TRM, as follows:

- ***Push Travel Motives*** of South African respondents was a one-factor solution (all items meant to measure motives loaded on the factor). Respondents indicated being motivated by seeking relaxation ($\bar{x}$ = 4.46) and a need to visit and know new places they have not been to ($\bar{x}$ = 4.45).
- ***Brand Equity*** was a one-factor solution (all items meant to measure motives loaded on the factor). Respondents were influenced by enjoying travelling in South Africa ($\bar{x}$ = 4.39) and wanting to visit South African tourist attractions that they had not yet seen ($\bar{x}$ = 4.38).
- ***Safety and Security*** extracted two dimensions, Safety and Security I, with respondents considering South Africa as a safe place to travel in ($\bar{x}$ = 3.53); and Safety and Security II, with respondents acknowledging that they are aware of crime in South Africa ($\bar{x}$ = 4.49).
- ***Perceived Behavioural Control*** extracted one-factor. Respondents felt there is nothing that prevents them from travelling within South Africa if they want to ($\bar{x}$ = 3.70) and that they can afford domestic travel in South Africa, despite the rising cost of living in South Africa ($\bar{x}$ = 3.65).
- ***Resident Ethnocentrism*** in South Africa was a one-factor solution (all items meant to measure motives loaded on the factor), with respondents acknowledging that they should support the South African economy by travelling to holiday destinations in South Africa ($\bar{x}$ = 4.20). Respondents are also aware that every time they decide to spend their holiday in South Africa, they contribute to South Africa's future – making it a little bit brighter ($\bar{x}$ = 4.12).
- ***Perceived risks*** were in three dimensions. (1) *Socio-economic Risk* ($\bar{x}$ = 2.31), with the rating suggesting respondents disagreed that it was a pertinent risk despite acknowledging that travelling domestically may result in unexpected extra expenses ($\bar{x}$ = 2.99). (2) *Psychological Risk* ($\bar{x}$ = 2.54) indicates that domestic tourism's psychological risk was a neutral issue, indicating that the thought of travelling domestically for tourism causes respondents to experience unnecessary tension ($\bar{x}$ = 2.66). (3) *Physical Risk* ($\bar{x}$ = 3.48) suggests the pandemic's residual effect on health risk aspects may be an issue in South Africa, primarily based on proper sanitation and hygiene in the tourist destination being now more important than ever ($\bar{x}$ = 3.99).
- ***Safety of travel and tourism activities*** resulted in a one factor solution ($\bar{x}$ = 3.64). Respondents agreed that travelling by air in South Africa is safe ($\bar{x}$ = 4.01) and self-drive or private transport in South Africa is somewhat safe to safe with a mean value of $\bar{x}$ = 3.88).

- ***Destination attributes I*** resulted in a one factor solution ($\bar{x}$ = 4.04). Respondents considered visits to locations with beaches as likely to extremely likely ($\bar{x}$ = 4.62) and activities that include unique food/cuisine experiences as likely ($\bar{x}$ = 4.21).
- ***Destination attributes II*** resulted in a one factor solution ($\bar{x}$ = 4.20). Respondents considered attendance to festivals, arts events and music concerts as extremely likely ($\bar{x}$ = 4.28) and attending activities related to the enjoyment of natural attractions as extremely likely ($\bar{x}$ = 4.25).
- ***Hospitality*** resulted in one factor with three aspects highly rated ($\bar{x}$ = 4.31). Respondents indicated that they realise the value of tourism to South Africa ($\bar{x}$ = 4.44), they try to be helpful if a tourist asks for help ($\bar{x}$ = 4.33) and they would do their bit to make South Africa a welcoming country for tourists ($\bar{x}$ = 4.33).
- ***Intervention effectiveness*** yielded one factor ($\bar{x}$ = 3.79). It was stated that the digitalisation of travel and tourism services was effective ($\bar{x}$ = 3.98) and South Africa's COVID-19 vaccination program was effective ($\bar{x}$ = 3.93).
- ***Destination media profile*** yielded one factor ($\bar{x}$ = 3.97). It was indicated that social media posts about the destination were quite influential ($\bar{x}$ = 4.08) and the information available on the destination's official tourism website were ($\bar{x}$ = 4.03) also quite influential.
- ***Destination marketing*** yielded one factor ($\bar{x}$ = 3.89). Respondents indicated that the attractive uniqueness of South Africa compared to other regions was quite influential in the creation of perceptions ($\bar{x}$ = 4.09) and the perception of South Africa as an international tourism destination of choice ($\bar{x}$ = 4.00) was also quite influential on what tourists think of South Africa.
- The ***Travel Intention*** of domestic respondents indicate that they were likely to travel in South Africa for tourism ($\bar{x}$ = 4.21). Domestic tourism exploits would likely occur as respondents indicated that they plan to travel in South Africa in the near future ($\bar{x}$ = 4.32), and that they would actively recommend people they know to travel within South Africa ($\bar{x}$ = 4.19).

Table 8: Factor Analysis

Factor	Items	Eigenvalue (EV)	Variance (%)	Factor Loading (>.50)		Cronbach Alpha (α)	Mean ($\bar{x}$)
				Min	Max		
[1]**Push Travel Motives**	PTM1 - PTM5	3.575	71.51	.785	.876	.897	4.34
[2]**Brand Equity**	AWS1-ASW4; ASN1-ASN4; INT1-INT4	7.593	63.28	.712	.867	.944	4.24
[3]**Safety and Security**							
Safety and Security I	SSP1; SSP2; SSP4	2.411	40.18	.786	.924	.844	3.26
Safety and Security II	SSP3; SSP5; SSP6	1.562	26.03	.585	.835	.547	3.98
[4]**Perceived Behavioural Control**	PBC1; PBC2; PBC3; PBC5	2.462	49.24	.678	.772	.748	3.54
[5]**Resident Ethnocentrism**	REM1-REM6	4.012	66.87	.767	.865	.897	4.00
[6]**Perceived risk**							
Socio-economic Risk	PSR4; SCR1-SCR4; FNR1-FNR4	8.067	50.42	.640	.901	.934	2.30
Physical Risk	PHR1-PHR4	2.043	12.77	.666	.859	.813	3.48
Psychological Risk	PSR1-PSR3	1.077	1.077	.815	.951	.904	2.54
[7]**Safety of Travel and Tourism**	SFT1 – SFT8	4.537	56.72	.591	.863	.887	3.64
[8]**Destination Attributes**							
Destination Attributes I	DAI1- DAI6	5.017	50.17	.533	.842	.839	4.04
Destination Attributes II	DAI7 – DAI10	1.042	10.42	.581	.860	.815	4.20
[9]**Hospitality**	HOSP1 – HOSP5	3.340	66.71	.767	.856	.874	4.31
[10]**Intervention Effectiveness**	PNI1 – PNI5	3.054	61.08	.732	.859	.838	3.79
[11]**Destination Media Profile**	DMP1 – DMP6	3.889	64.82	.774	.816	.891	3.97
[12]**Destination Marketing Profile**	DMKT1 - DMKT6	3.729	62.16	.742	.819	.872	3.89
[13]**Travel Intention**	TRV1 -TRV4	3.009	75.22	.873	.904	.890	4.21

[1]Direct Oblimin with Kaiser Normalisation: KMO = .832 and Bartlett's test of Sphericity of (χ^2 (10) = 1564.385, p < .001); [2]Direct Oblimin with Kaiser Normalisation: KMO = .957 and Bartlett's test of Sphericity of (χ^2 (66) = 4413.004, p < .001)
[3]Direct Oblimin with Kaiser Normalisation: KMO = .647 and Bartlett's test of Sphericity of (χ^2 (15) = 958.151, p < .001); [4]Direct Oblimin with Kaiser Normalisation: KMO = .761and Bartlett's test of Sphericity of (χ^2 (15) = 524.930, p < .001)
[5]Direct Oblimin with Kaiser Normalisation: KMO = .899 and Bartlett's test of Sphericity of (χ^2 (15) = 1695.851, p < .001); [6]Direct Oblimin with Kaiser Normalisation: KMO = .925 and Bartlett's test of Sphericity of (χ^2 (120) = 5753.209, p < .001)
[7]Direct Oblimin with Kaiser Normalisation: KMO = .879 and Bartlett's test of Sphericity of (χ^2 (28) = 2057.539, p < .001); [8]Direct Oblimin with Kaiser Normalisation: KMO = .902 and Bartlett's test of Sphericity of (χ^2 (45) = 2132.969, p < .001)
[9]Direct Oblimin with Kaiser Normalisation: KMO = .856 and Bartlett's test of Sphericity of (χ^2 (10) = 1210.355, p < .001); [10]Direct Oblimin with Kaiser Normalisation: KMO = .786 and Bartlett's test of Sphericity of (χ^2 (10) = 1035.404, p < .001)
[11]Direct Oblimin with Kaiser Normalisation: KMO = .896 and Bartlett's test of Sphericity of (χ^2 (15) = 1523.559, p < .001); [12]Direct Oblimin with Kaiser Normalisation: KMO = .876 and Bartlett's test of Sphericity of (χ^2 (15) = 1391.684, p < .001)
[13]Direct Oblimin with Kaiser Normalisation: KMO = .834 and Bartlett's test of Sphericity of (χ^2 (6) = 1158.723, p < .001)

8.4.1.3 Part 3: Mediation Analysis

The D-TRM is geared towards establishing the intervening effect of various factors in the decision-making process of tourists in the event of a crises such as the COVID-19 pandemic, and, more significantly, internal and external micro-shocks. Part 2 of the results illustrates the mediation analysis and that would be conducted to establish the effects. The results are presented in support of the efficacy of the D-TRM.

Tables 9 summarises the direct effect statistics based on linear and multiple regressions. Direct effect testing is critical to establishing statistical assumptions for the data and eliminating potentially insignificant relationships from further analysis to streamline the analysis and interpretation process. Regression analyses determined the predictive relationships in domestic tourist behaviour.

Table 9: Direct effect testing – Domestic tourists

	Unstandardised coefficients		Standardised coefficients		
	B	Std. Error	β	t-value	Sig.
Path c					
X_1(Push Motives) →**Y** (Travel Intention)	.329	.042	.328	7.744	.000***
X_2 (Brand Equity) →**Y** (Travel Intention)	.654	.042	.575	15.689	.000***
Path a					
X_1 (Push Motives) →M_1 (Safety & Security I)	.258	.059	.193	4.383	.000***
X_1 (Push Motives) → M_2 (Safety & Security II)	.030	.039	.035	.776	.438
X_1 (Push Motives) →M_3 (Behavioural Control)	.216	.048	.197	4.492	.000***
X_1 (Push Motives) → M_4 (Resident Ethnocentrism)	.312	.041	.324	7.637	.000***
X_1 (Push Motives) → M_5 (Socio-Economic Risk)	-.178	.056	-.140	-3.157	.002**
X_1 (Push Motives) → M_6 (Physical Risk)	.241	.056	.190	4.324	.000***
X_1 (Push Motives) → M_7 (Psychological Risk)	-.129	.067	-.086	-1.925	.055
X_1 (Push Motives) → M_8 (Safety of Travel & Tourism)	.201	.044	.200	4.546	.000***
X_1 (Push Motives) → M_9 (Destination Attributes I)	.305	.041	.317	7.471	.000***
X_1 (Push Motives) → M_{10} (Destination Attributes II)	.249	.037	.286	6.669	.000***
X_1 (Push Motives) → M_{11} (Hospitality)	.270	.033	.341	8.097	.000***
X_1 (Push Motives) → M_{12} (Interventions)	.233	.045	.228	5.215	.000***
X_1 (Push Motives) → M_{13} (Destination Media Profile)	.297	.042	.304	7.132	.000***
X_1 (Push Motives) → M_{14} (Destination Marketing)	.284	.043	.285	6.641	.000***
Path b					
M_1 (Safety & Security I) → **Y** (Travel Intention)	.383	.029	.511	13.036	.000***
M_2 (Safety & Security II) → **Y** (Travel Intention)	.081	.046	.070	1.775	.077
M_3 (Behavioural Control) → **Y** (Travel Intention)	.549	.033	.599	16.709	.000***
M_4 (Resident Ethnocentrism) → **Y** (Travel Intention)	.670	.036	.643	18.723	.000***
M_5 (Socio-Economic Risk) → **Y** (Travel Intention)	-.172	.048	-.217	-3.567	.000***
M_6 (Physical Risk) → **Y** (Travel Intention)	.045	.036	.057	1.244	.214
M_7 (Psychological Risk) → **Y** (Travel Intention)	-.133	.039	-.200	-3.389	.001**
M_8 (Safety of Travel & Tourism) → **Y** (Travel Intention)	.541	.038	.543	14.419	.000***
M_9 (Destination Attributes I) → **Y** (Travel Intention)	.428	.049	.410	8.697	.000***
M_{10} (Destination Attributes II) → **Y** (Travel Intention)	.312	.054	.271	5.739	.000***
M_{11} (Hospitality) → **Y** (Travel Intention)	.639	.049	.505	13.047	.000***
M_{12} (Interventions) → **Y** (Travel Intention)	.458	.039	.468	11.812	.000***
M_{13} (Destination Media Profile) → **Y** (Travel Intention)	.560	.039	.545	14.504	.000***
M_{14} (Destination Marketing) → **Y** (Travel Intention)	.548	.038	.544	14.460	.000***

Statistically significant at *p < .05, **p < .01, ***p < .001

The statistical models and residuals suggested no violations in linear regression relationships. Additionally, the VIF and Tolerance statistics confirmed the absence of multicollinearity for the predictive relationships analysed in Table 9. As shown in Table 9, all predictive relationship paths reported significant effects except **Patch a:** $\mathbf{X_1}$ (Push Motives) → $\mathbf{M_2}$ (Safety & Security II); $\mathbf{X_1}$ (Push Motives) → $\mathbf{M_7}$ (Psychological Risk); $\mathbf{X_2}$ (Brand Equity) → $\mathbf{M_2}$ (Safety & Security II). **Path b** insignificant predictive paths are: $\mathbf{M_2}$ (Safety & Security II) → **Y** (Travel Intention) and $\mathbf{M_6}$ (Physical Risk) → **Y** (Travel Intention). In practice, when testing the models generated by the model, one may exclude the insignificant relationships from further analysis.

Mediation Analysis of D-TRM Results

Results from the South African domestic market validate the D-TRM. For illustrative purposes we investigate the potential intervening effect of tourist perceptions towards domestic tourism via the measured aspects on the relationship between the domestic tourism demand aspects (*Motives*) and tourist's *Travel Intentions*. It is recommended that NDT apply mediation analysis using PROCESS Marco (v4.2) in SPSS (v28). Tables 10 and 11 summarise the results of a simple and parallel mediation, whereby a single and multiple intervening effects are being tested.

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Table 10: Mediation Analysis – Push Travel Motives

Testing Path	*β*	SE	95% BootCI Lower Limit CI	95% BootCI Upper Limit CI	t-value	Sig.
Push Motives → Safety & Security →Travel Intention						
Path c: R^2=.1075, F(1,498)59.9761, *p*=.000						
Push Motives →Travel Intentions	.3291	.0425	.2456	.4126	7.744	.000***
Path a_1: Push Motives → Safety & Security I	.2583	.0589	.1425	.3740	4.3426	.000***
Path a_2: Push Motives → Safety & Security II	.0299	.0386	-.0459	.1058	.7758	.4382
Path b & c': R^2=.3086, F(3,496)73.8011, *p*=.000						
Path b_1: Safety & Security I →Travel Intentions	.3468	.0289	.2900	.4035	11.9981	.000***
Path b_2: Safety & Security II →Travel Intentions	.0270	.0441	-.0240	.1494	1.4210	.1559
Path c': Push Motives → Travel Intentions	.2377	.0383	.1625	.3129	6.2090	.000***
Indirect Effect: a_1b_1	.0896	.0269	.0402	.1462		
Indirect Effect: a_2b_2	.0019	.0044	-.0060	.0129		
Total	.0911	.0239	.0425	.1374		
VAF = 28%						
Push Motives → Perceived Behavioural Control →Travel Intention						
Path c: R^2=.1075, F(1,498)59.9761, *p*=.000						
Push Motives →Travel Intentions	.3291	.0425	.2456	.4126	7.744	.000***
Path a_1: Push Motives → Perceived Behavioural Control	.2146	.0482	.1217	.3111	4.4918	.000***
Path b & c': R^2=.4049, F(2,497)169.1104, *p*=.000						
Path b_1: Perceived Behavioural Control →Travel Intentions	.5092	.0323	.4458	.5727	15.7621	.000***
Path c': Push Motives → Travel Intentions	.2189	.0354	.1493	.2885	6.1785	.000***
Indirect Effect: a_1b_1	.1102	.0330	.0506	.1805		
VAF = 33%						
Push Motives → Resident Ethnocentrism →Travel Intention						

Testing Path	β	SE	95% BootCI Lower Limit CI	95% BootCI Upper Limit CI	t-value	Sig.
Path c: R^2=.1075, F(1,498)59.9761, *p*=.000						
Push Motives →Travel Intentions	.3291	.0425	.2456	.4126	7.744	.000***
Path a_1: Push Motives → Resident Ethnocentrism	.3120	.0409	.2317	.2317	7.6866	.000***
Path b & c': R^2=.4291, F(2,497)186.8049, *p*=.000						
Path b_1: Resident Ethnocentrism →Travel Intentions	.6245	.0373	.5511	.6978	16.7341	.000***
Path c': Push Motives → Travel Intentions	.1343	.0360	.0636	.2049	3.7346	.000***
Indirect Effect: a_1b_1	.1941	.0328	.1336	.2635		
VAF = 59%						
Push Motives → Perceived Risk →Travel Intention						
Path c: R^2=.1075, F(1,498)59.9761, *p*=.000						
Push Motives →Travel Intentions	.3291	.0425	.2456	.4126	7.744	.000***
Path a_1: Push Motives → Socio-Economic Risk	.1776	.0563	-.2882	-.0671	-3.1566	.000***
Path a_2: Push Motives → Physical Risk	.2414	.0558	.1317	.3510	4.3242	.000***
Path a_3: Push Motives → Psychological Risk	-.1295	.0673	-.2616	.0027	-1.9252	.055
Path b & c': R^2=.2134, F(4,495)35.5772, *p*=.000						
Path b_1: Socio-Economic Risk →Travel Intentions	-.1112	.0467	-.2029	-.0195	-2.3816	.018*
Path b_2: Physical Risk →Travel Intentions	-.0252	.0362	-.0962	.0459	-.6956	.487
Path b_3: Psychological Risk →Travel Intentions	-.1316	.0376	-.2054	-.0578	-3.2021	.001**
Path c': Push Motives → Travel Intentions	.2984	.0420	.2158	.3810	7.0983	.000***
Indirect Effect: a_1b_1	.0198	.0134	-.0006	.0518		
Indirect Effect: a_2b_2	-.0061	.0078	-.0227	.0089		
Indirect Effect: a_3b_3	.0170	.0119	-.0009	.0455		
Total	.0307	.0207	-.0065	.0744		
VAF = 9%						
Push Motives → Travel & Tourism Safety →Travel Intention						
Path c: R^2=.11, F(1,498)59.98, *p*=.000						
Push Motives →Travel Intentions	.33	.04	.25	.14	7.74	.000***
Path a_1: Push Motives → Travel & Tourism Safety	.20	.04	.11	.29	4.55	.000***
Path b & c': R^2=.34, F(2,497)130.73, *p*=.000						
Path b_1: Travel & Tourism Safety →Travel Intentions	.50	.04	.42	.57	13.41	.000***
Path c': Push Motives → Travel Intentions	.23	.04	.11	.30	6.17	.000***
Indirect Effect: a_1b_1	.10	.03	.04	.17		
VAF = 30%						
Push Motives → Destination Attributes →Travel Intention						
Path c: R^2=.11, F(1,498)59.98, *p*=.000						
Push Motives →Travel Intentions	.33	.04	.25	.41	7.74	.000***
Path a_1: Push Motives → Destination Attributes I	.31	.04	.22	.39	7.47	.000***
Path a_2: Push Motives → Destination Attributes II	.25	.04	.18	.32	6.67	.000***
Path b & c': R^2=.41, F(3,496)113.09, *p*=.000						
Path b_1: Destination Attributes I →Travel Intentions	.40	.05	.30	.49	8.02	.000***
Path b_2: Destination Attributes II →Travel Intentions	.29	.05	.18	.40	5.39	.000***
Path c': Push Motives → Travel Intentions	.14	.04	.06	.21	3.68	.000***
Indirect Effect: a_1b_1	.12	.03	.07	.20		
Indirect Effect: a_2b_2	.07	.02	.03	.12		
Total	.19	.04	.12	.29		
VAF = 58%						
Push Motives → Hospitality →Travel Intention						
Path c: R^2=.11, F(1,498)59.98, *p*=.000						
Push Motives →Travel Intentions	.33	.04	.25	.41	7.74	.000***
Path a_1: Push Motives → Hospitality	.27	.03	.20	.34	8.10	.000***
Path b & c': R^2=.28, F(2,497)97.68, *p*=.000						
Path b_1: Hospitality →Travel Intentions	.56	.05	.46	.66	11.00	.000***
Path c': Push Motives → Travel Intentions	.18	.04	.10	.26	4.36	.000***
Indirect Effect: a_1b_1	.15	.03	.09	.22		

Testing Path	β	SE	95% BootCI Lower Limit CI	95% BootCI Upper Limit CI	t-value	Sig.
VAF = 45%						
Push Motives → Interventions →Travel Intention						
Path c: R^2=.11, F(1,498)59.98, *p*=.000						
Push Motives →Travel Intentions	.33	.04	.25	.41	7.74	.000***
Path a_1: Push Motives → Interventions	.23	.04	.15	.32	5.21	.000***
Path b & c': R^2=.27, F(2,497)92.17, *p*=.000						
Path b_1: Interventions →Travel Intentions	.41	.04	.33	.48	10.84	.000***
c': Push Motives → Travel Intentions	.23	.04	.16	.31	5.93	.000***
Indirect Effect: a_1b_1	.09	.03	.05	.15		
VAF = 27%						
Push Motives → Destination media profile →Travel Intention						
Path c: R^2=.11, F(1,498)59.98, *p*=.000						
Push Motives →Travel Intentions	.33	.04	.25	.41	7.74	.000***
Path a_1: Push Motives → Hospitality	.30	.04	.22	.38	7.13	.000***
Path b & c': R^2=.33, F(2,497)120.112, *p*=.000						
Path b_1: Hospitality →Travel Intentions	.50	.04	.43	.58	12.69	.000***
c': Push Motives → Travel Intentions	.18	.04	.10	.26	4.62	.000***
Indirect Effect: a_1b_1	.15	.03	.10	.22		
VAF = 45%						
Push Motives → Destination Marketing →Travel Intention						
Path c: R^2=.11, F(1,498)59.98, *p*=.000						
Push Motives →Travel Intentions	.33	.04	.25	.41	7.74	.000***
Path a_1: Push Motives → Hospitality	.28	.04	.20	.37	6.64	.000***
Path b & c': R^2=.33, F(2,497)121.40, *p*=.000						
Path b_1: Hospitality →Travel Intentions	.49	.04	.42	.57	12.78	.000***
c': Push Motives → Trave3l Intentions	.19	.04	.11	.26	4.90	.000***
Indirect Effect: a_1b_1	.14	.03	.08	.071		
VAF = 42%						

Statistical significance: *p <05, **p < 01, *** p < 001

The findings in Table 10 indicate the outputs from mediation analyses of the data generated by the model. Structural Equation Modelling is an additional analyses approach that may be applied to the data. Table 6 summarises the statistical findings from Table 10 for practical illustration.

Table 11: Parallel mediation summary

Mediation	Total Effect	Indirect Effect	[2]Sig.	[1]VAF %	Effect
Safety and Security as mediator (parallel mediation)					
Push Motives → Safety & Security I →Travel Intention	.3291	.0896	No	28%	Partial mediation
Push Motives → Safety & Security II →Travel Intention	.3291	.0019	No		Partial mediation
Perceived Behavioural Control as mediator (simple mediation)					
Push Motives → Perceived Behavioural Control →Travel Intention	.3291	.1102	Yes	33%	Partial mediation
Resident Ethnocentrism as mediator (simple mediation)					
Push Motives → Resident Ethnocentrism →Travel Intention	.3291	.1941	Yes	59%	Partial mediation
Perceived risk as mediator (parallel mediation) Push Travel Motives→ Risk [Socio-Economic, Psychological, Physical] → Travel Intentions	.3291	.0307	No	9%	N/A
Travel & Tourism Safety as a mediator (simple mediation)					
Push Motives → Travel & Tourism Safety →Travel Intention	.33	.10	Yes	30%	Partial mediation
Destination Attributes as a mediator (parallel mediation)					
Push Motives → Destination Attributes I →Travel Intention	.33	.12	Yes	58%	Partial mediation
Push Motives → Destination Attributes II→ Travel Intention	.33	.07	Yes		Partial mediation
Hospitality as a mediator (simple mediation)					
Push Motives → Hospitality →Travel Intention	.33	.15	Yes	45%	Partial mediation
Interventions as a mediator (simple mediation)					
Push Motives → Interventions →Travel Intention	.33	.09	Yes	27%	Partial mediation
Destination media profile as a mediator (simple mediation)					
Push Motives → Destination Media Profile →Travel Intention	.33	.15	Yes	45%	Partial mediation
Destination marketing profile as a mediator (simple mediation)					
Push Motives → Destination Marketing →Travel Intention	.33	.14	Yes	42%	Partial mediation

1) **VAF** = variance accounted for; VAF> 80% designates full mediation, 20% ≤ VAF ≥ 80% shows partial mediation while VAF <20% as no mediation (Ali & Park, 2016)
2) **Yes** – Indirect effect is significant since the coefficients of the CI: LL and UL does not pass 0. **No** - Indirect effect is not significant since the coefficients of the CI: LL and UL pass 0.

8.4.1.4 Conclusions based on the findings of the model

From Table 6 it can be concluded that:

Domestic tourists are primarily motivated to engage in local travel in the near future and recommend others do the same by seeking relaxation and the need to visit and know new places they have not been to. Correspondingly, South Africa's domestic tourism brand equity is associated with enjoyment and the promise of seeing locations locals have never been to before as a matter of brand interest. While indicating they intend to engage in domestic tourism in the near future and expressing the intention to recommend others to do so. Domestic tourists considered it slightly safer to travel by air than to self-drive. South Africans preferred beach holidays, attending festivals, arts events, music concerts and visiting natural attractions. It was reassuring that locals indicated that they understand the value of tourism to South Africa and that they will assist where possible. This ties in with the hospitality normally shown but locals. The digitisation of travel and tourism services was rated as effective, and thus, there is room for improvement – it is important to ease the decision-making process of tourists. The importance of the online environment is realised and one should capitalise on the potential of this medium and the access it provides to different markets at a very low cost. However, their decision-making is susceptible to:

- The idea that South Africa is generally a safe place to travel in, albeit being keenly aware of crime in the country.
- Their perception that nothing prevents them from travelling within South Africa if they want to, and that they can afford domestic travel in South Africa, despite the rising cost of living in South Africa.
- The acknowledgement that they should support the South African economy by travelling to holiday destinations in South Africa, as it positively contributes to the economy.
- No socio-economic, physical or psychological risk has any practical significance in the current tourism environment.
- The relative perceived safety of air travel and private drive travel and tourism activity in South Africa.
- The attractiveness of destination attributes such as beaches and experiences such as cuisine that South Africa possesses.
- The perceived positive hospitality of locals who realize the value of tourism and are helpful towards tourists visiting their locale.
- The effectiveness of digitalization of certain tourism processes and services, as well as the COVID-19 vaccine interventions put in place to safeguard tourists.
- The influence of social media posts about South Africa and the attractive uniqueness of South Africa compared to other regions destinations.

8.4.1.5 Recommendations based on the conclusions of the model

- Domestic tourists are travel-ready and intervention programs such as the previous Short-left will remind residents of what is available and which places can be visited as a local tourist. Keep a strong presence in the minds of domestic tourists as they are likely to travel in SA. This should, however, be done via social media platforms.
- Sustain the high level of awareness and interest among domestic tourists as the competition fights for the attention of the tourist.
- Domestic tourists are keen on visiting places they have not been to before – creating a platform where tourists can easily access information related to tourism products (One-Stop-Tourist-Shop) especially, the less visited and new attractions, will increase travel.
- Tourism products and coastal provinces should capitalise on the preference for beach holidays as these remain popular amongst domestic tourists but do not underestimate the value of events, festivals and music festivals. These can mediate the effect of seasonality, and the popularity of events is improving again. This gives opportunities for the development of new events and can adhere to the needs of South Africans – food festivals are increasing in popularity, and it seems that domestic tourists might also enjoy more of these types of festivals.
- It is recommended that one foster an understanding among all South Africans that tourists are important and must be taken care of. Tourists create value for all South Africans – this should be promoted on social media platforms and other mediums.
- South Africans are aware of crime, but it is not deterring them from travelling. Although safety is always an important factor, it seems that South Africans will work around the effect and possibility of crime and still travel – it is reassuring to hear that a challenge for South Africa does not have a significant effect on travel plans and thus tourism marketers can focus on the main motive for travelling namely seeking new places to visit.

8.4.2 Results of the I-TRM model

Note: The stylised results from the international tourism market are an illustration of the data that can be extracted from the modified model and its utility. Part 1 is the descriptive and exploratory aspect of the study, whereby Exploratory Factor Analysis reduces establishes discernable constructs/dimensions that can be easily interpreted and further analysed to establish key practical relationships. Part 2 is the mediation aspect of the model to establish the influence of intervening factors in potential international tourist's decision-making. Data is extracted for illustrative purposes for three markets:

Demand factor – Travel Motives

Decision factor – Safety and Security

Outcome factor – Intention to Travel

8.4.2.1 Part 1: Socio-Demographic profile of Brazilian, USA and UK respondents

Table 12 shows that:

Brazil

Most Brazilian respondents were, male, and aged between 33 and 44 years of age. Respondents mostly possessed a Bachelor's degree, were married and typically employed in the private sector. Most surveyed individuals indicated that they travelled with family, earned the average income in Brazil, and would consider visiting South Africa as a tourist someday. Most Brazilians had travelled more than once in the previous two years. The internet is the most influential channel for international tourism-related information relating to South Africa. Most of the respondents intended to engage in international travel but were most likely to engage in domestic and international tourism in the next year. Most respondents were willing to pay between USD3000 and USD11000 for a one-week holiday in South Africa.

United Kingdom

Most UK respondents were, female, and aged between 33 and 44 years of age. Interestingly, a corresponding percentage were over the age of 55 years old. Respondents mostly possessed a High School Diploma, were married and typically employed in the private sector. Most surveyed individuals indicated that they travelled with their partner, earned the average income in the UK, and would consider visiting South Africa as a tourist someday. Most UK respondents had not travelled in the previous two years. The internet is the most influential channel for international tourism-related information relating to South Africa. Most of the respondents intended to engage in international travel but were most likely to engage in domestic and international tourism in the next year. Most respondents were willing to pay USD3 000 for a one-week holiday in South Africa.

United States of America

Most US respondents were, female, and aged between 33 and 44 years of age. Interestingly, a corresponding percentage were also over the age of 55 years old. Respondents mostly possessed a High School Diploma, were married and typically employed in the private sector. Most surveyed individuals indicated that they travelled with their partner, earned the average income in the US, and would consider visiting South Africa as a tourist someday. Most US respondents had not travelled in the previous two years. The internet is the most influential channel for international tourism-related information relating to South Africa. Most respondents did not intend to engage in international travel in the next year but were most likely to engage in domestic tourism in the next year. Most respondents were willing to pay USD3 000 for a one-week holiday in South Africa.

Table 12: Socio-demographic Profile

Socio-Demographic Variable	Brazil - *n*=500	UK – *n*=500	USA – *n*=500
Gender	• Male (51%) • Female (49%)	• Female (69%) • Male (31%)	• Female (76%) • Male (23%)
Age	• 35-44 (41%) • 25-34 (37%) • 55+ (17%)	• 35-44(35%) • 55+ (35%)	• 35-44(36%) • 55+ (35%)
Highest Qualification	• Bachelors (38%) • High School Diploma (25%)	• High School Diploma (31%) • Bachelors (31%)	• High School Diploma (41%) • Bachelors (25%)
Marital Status	• Married (54%) • Single (26%)	• Married (43%) • Single (30%)	• Married (45%) • Single (30%)
Economic Activity	• Employed- Private Sector (62%) • Employed- Public Sector (12%)	• Employed- Private Sector (40%) • Employed- Public Sector (25%)	• Employed- Private Sector (27%) • Employed- Public Sector (25%)
Travel Companion(s)	• Family -Adults & Children (49%) • With Partner (21%)	• With Partner (38%) • Family -Adults & Children (25%)	• With Partner (33%) • Family -Adults & Children (31%)
Average Income	• Same as average (34%) • Above average (29%)	• Same as average (34%) • Below average (28%)	• Same as average (36%) • Below average (27%)
Travel & Tourism to SA	• I would consider visiting South Africa as a tourist some day in the future (57%) • I would never travel to South Africa for tourism (16%)	• I would consider visiting South Africa as a tourist some day in the future (52%) • I would never travel to South Africa for tourism (21%)	• I would consider visiting South Africa as a tourist some day in the future (45%) • I would never travel to South Africa for tourism (36%)
Tourism in the last 2-years	• More than once (44%) • Once (32%)	• None have not travelled(36%) • More than once (35%)	• None have not travelled(48%) • More than once (26%)
Influential channel for international tourism information	• Internet (45%) • Social Media (20%)	• Internet (34%) • TV (21%) • W-O-M (19%)	• Internet (28%) • TV (22%) • Social media (20%)
International travel in the next year	• Yes (81%) • No (19%)	• Yes (69%) • No (31%)	• Yes (41%) • No (59%)
Domestic travel in the next year	• Yes (84%) • No (16%)	• Yes (75%) • No (25%)	• Yes (67%) • No (33%)
Willing to pay for SA trip?	• USD$3 001 – USD$4 000 (19%) • USD$4 001 – USD$5 000 (19%)	• Less than USD$3 000 (32%) • USD$3 001 – USD$4 000 (30%)	• Less than USD$3 000 (28%) • USD$4 001 – USD$5 000 (20%)

8.4.2.2 Part 2: Factor analysis

The KMO (>.50) and Bartlett's statistics (p=.000) for all the constructs confirmed the factorability of the data and sample adequacy. Table 13 shows that the PCA/EFA extracted the dimensions required [EV>1; loading coefficient of ≥ 0.5]. All the scales were reliable (α >.60), suggesting internal consistency of the measuring instruments developed for the I-TRM, as follows:

Push Travel Motives of Brazilian, UK and US respondents was a one-factor solution (all items meant to measure motives loaded on the factor). Brazilian respondents indicated being motivated by exploring and experiencing different activities and cultures ($\bar{x}$ = 4.01) and a need to visit and know new places they have not been to ($\bar{x}$ = 4.01). UK respondents indicated being motivated by the need to visit and know new places they have not been to ($\bar{x}$ = 3.97), while US respondents were primarily motivated by having an adventure ($\bar{x}$ = 3.83).

Safety and Security extracted two dimensions across all three markets. Safety and Security I, saw Brazilian ($\bar{x}$ = 3.57) and UK ($\bar{x}$ = 3.12) respondents considering South Africa as a safe place to visit. Whereas US respondents considered South Africa is just as safe as other destinations ($\bar{x}$ = 3.19). Safety and Security II, saw Brazilian ($\bar{x}$ = 3.38) and US ($\bar{x}$ = 3.38) respondents indicating that they would remind others to pay attention to safety in South Africa. While UK rated acknowledging that they are aware of crime in South Africa ($\bar{x}$ = 3.50) highest.

The ***Travel Intention*** of Brazilian ($\bar{x}$ = 3.65) and US ($\bar{x}$ = 2.84) respondents indicated that they were likely to actively recommend people they knew to visit South Africa for tourism. UK respondents rated that whenever presented with a have a chance to travel; they will travel to South Africa ($\bar{x}$ = 3.98).

The I-TRM is geared towards establishing the intervening effect of various factors in the decision-making process of tourists in the event of a crises such as the COVID-19 pandemic, and, more significantly, internal and external micro-shocks. Part 2 of the results illustrates the mediation analysis and that would be conducted to establish the effects. The results are presented in support of the efficacy of the I-TRM.

Table 13: Factor Analysis

Factor	Items	Eigenvalue (EV)	Variance (%)	Factor Loading (>.50)		Cronbach Alpha (α)	Mean ($\bar{x}$)
				Min	Max		
Brazil Market							
[1]Push Travel Motives	PTM1 - PTM5	3.804	70.07	.846	.902	.921	3.95
[2]Safety and Security							
Safety and Security I	SSP1; SSP2; SSP4	2.810	46.84	.690	.903	.802	3.45
Safety and Security II	SSP3; SSP5; SSP6	1.434	23.90	.730	.876	.748	3.27
[3]Travel Intention	TRV1 -TRV4	3.174	79.35	.880	.897	.913	3.56
United Kingdom Market							
[1]Push Travel Motives	PTM1 - PTM5	3.716	74.34	.823	.902	.913	3.84
[2]Safety and Security							
Safety and Security I	SSP1; SSP2; SSP4	2.368	39.47	.810	.892	.832	2.94
Safety and Security II	SSP3; SSP5; SSP6	1.793	29.88	.704	.835	.692	3.58
[3]Travel Intention	TRV1 -TRV4	3.142	78.56	.882	.906	.909	2.79
US Market							
[1]Push Travel Motives	PTM1 - PTM5	3.912	78.43	.836	.992	.931	3.72
[2]Safety and Security							
Safety and Security I	SSP1; SSP2; SSP4	2.737	45.61	.798	.917	.840	3.08
Safety and Security II	SSP3; SSP5; SSP6	1.5793	26.32	.741	.873	.748	3.36
[3]Travel Intention	TRV1 -TRV4	3.348	83.69	.801	.932	.935	2.74

8.4.2.3 Part 3: Mediation Analysis

Tables 14 summarises the direct effect statistics based on linear and multiple regressions. Direct effect testing is critical to establishing statistical assumptions for the data and eliminating potentially insignificant relationships from further analysis to streamline the analysis and interpretation process. Regression analyses determined the predictive relationships in international tourist behaviour.

Table 14: Direct effect testing – International tourists

	Unstandardised coefficients		Standardised coefficients		
	B	Std. Error	β	t-value	Sig.
Brazilian Market					
Path c					
X(Push Motives) →**Y** (Travel Intention)	.500	.039	.494	12.686	.000***
Path a					
X (Push Motives) →$\mathbf{M_1}$ (Safety & Security I)	.478	.037	.505	13.067	.000***
X (Push Motives) → $\mathbf{M_2}$ (Safety & Security II)	.189	.040	.209	4.774	.000***
Path b					
$\mathbf{M_1}$ (Safety & Security I) → **Y** (Travel Intention)	.704	.038	.659	18.751	.000***
$\mathbf{M_2}$ (Safety & Security II) → **Y** (Travel Intention)	.047	.039	.042	1.201	.230
UK Market					
Path c					
X(Push Motives) →**Y** (Travel Intention)	.441	.049	.367	9.055	.000***
Path a					
X (Push Motives) →$\mathbf{M_1}$ (Safety & Security I)	.320	.042	.321	7.563	.000***
X (Push Motives) → $\mathbf{M_2}$ (Safety & Security II)	.173	.036	.211	4.813	.000***
Path b					
$\mathbf{M_1}$ (Safety & Security I) → **Y** (Travel Intention)	.721	.042	.612	17.102	.000***
$\mathbf{M_2}$ (Safety & Security II) → **Y** (Travel Intention)	.147	.051	.103	2.881	.004**
USA Market					
Path c					
X(Push Motives) →**Y** (Travel Intention)	.504	.045	.446	11.123	.000***
Path a					
X (Push Motives) →$\mathbf{M_1}$ (Safety & Security I)	.450	.035	.501	12.922	.000***
X (Push Motives) → $\mathbf{M_2}$ (Safety & Security II)	.227	.035	.277	6.440	.000***
Path b					
$\mathbf{M_1}$ (Safety & Security I) → **Y** (Travel Intention)	.615	.043	.649	18.941	.000***
$\mathbf{M_2}$ (Safety & Security II) → **Y** (Travel Intention)	.115	.047	.084	2.448	.015*

Statistically significant at *p < .05, **p < .01, ***p < .001

The statistical models and residuals suggested no violations in linear regression relationships. Additionally, the VIF and Tolerance statistics confirmed the absence of multicollinearity for the predictive relationships analysed in Table 14. As shown in Table 14, all predictive relationship paths reported significant effects except Path b: **$\mathbf{M_2}$ (Safety & Security II) → Y (Travel Intention)**. In practice, when testing the models generated by the I-TRM, one may exclude the insignificant relationships from further analysis.

Parallel Mediation Analysis of I-TRM Results

Results from the international markets validate the I-TRM. For illustrative purposes, we investigate the potential intervening effect of tourist perceptions towards international tourism via aspects such as *Perceived Safety and Security*, on the relationship between the international tourism demand (*Motives*) and tourist's *Travel Intentions*. It is recommended that NDT apply mediation analysis using PROCESS Marco Model 4 (v4.2) in SPSS (v28). Table 15 summarises the results of a parallel mediation, whereby multiple intervening effects are being tested.

Table 15: Parallel Mediation Analysis

Testing Path	β	SE	95% BootCI		t-value	Sig.
			Lower Limit CI	Upper Limit CI		
Brazilian Market						
Push Motives → Safety & Security →Travel Intention						
Path c: R^2=.2442, F(1,498)160.9236, *p*=.000						
Push Motives →Travel Intentions	.4995	.0394	.4221	5769	12.6856	000 ***
Path a_1: Push Motives → Safety & Security I	.4779	.0366	.4060	.5497	13.0666	.000 ***
Path a_2: Push Motives → Safety & Security II	.1894	.039	.1115	.2674	4.7737	.000 ***
Path b & c': R^2=.4853, F(3,496)155.8624, *p*=.000						
Path b_1: Safety & Security I →Travel Intentions	.5964	.0414	.5150	.6777	14.4067	.000 ***
Path b_2: Safety & Security II →Travel Intentions	.0363	.0382	-.0378	.1112	95.02	.343
Path c': Push Motives → Travel Intentions	.2077	.0378	.1334	.2819	5.4960	.000 ***
Indirect Effect: a_1b_1	.2850	.0340	.2197	.3513		
Indirect Effect: a_2b_2	.0069	.0086	-.0093	.0256		
Total	.2918	.0331	.2271	.3577		
VAF = 58%						
UK Market						
Push Motives → Safety & Security →Travel Intention						
Path c: R^2=.1414, F(1,498)81.9955, *p*=.000						
Push Motives →Travel Intentions	.4414	.0487	.3456	.5372	9.0551	.000 ***
Path a_1: Push Motives → Safety & Security I	.3196	.0423	.2366	.4026	7.5626	.000 ***
Path a_2: Push Motives → Safety & Security II	.1732	.0360	.1025	.2438	4.8133	.000 ***
Path b & c': R^2=.4011, F(3,496)110.7469, *p*=.000						
Path b_1: Safety & Security I →Travel Intentions	.6439	.0441	.5574	.7305	14.6147	.000 ***
Path b_2: Safety & Security II →Travel Intentions	.0802	.0518	-.0214	.1819	1.5503	.122
Path c': Push Motives → Travel Intentions	.2217	.0446	.1341	.3094	4.9698	.000 ***
Indirect Effect: a_1b_1	.2058	.0343	.1366	.2724		
Indirect Effect: a_2b_2	.0139	.0111	-.0061	.0385		
Total	.2197	.0366	.1460	.2911		
VAF = 50%						
US Market						
Push Motives → Safety & Security →Travel Intention						
Path c: R^2=.1990, F(1,498)123.7113, *p*=.000						
Push Motives →Travel Intentions	.5037	.0453	.4147	.5920	11.1226	.000 ***
Path a_1: Push Motives → Safety & Security I	.4504	.0349	.3819	.5188	12.9218	.000 ***
Path a_2: Push Motives → Safety & Security II	.2274	.0353	.1580	.2967	6.4397	.000 ***
Path b & c': R^2=.4700, F(3,496)146.6090, *p*=.000						
Path b_1: Safety & Security I →Travel Intentions	.7377	.0480	.6434	.8320	15.3700	.000 ***

Testing Path	β	SE	95% BootCI		t-value	Sig.
			Lower Limit CI	Upper Limit CI		
Path b_2: Safety & Security II →Travel Intentions	0866	.0474	-.0065	.1796	1.8271	.000 ***
Path c': Push Motives → Travel Intentions	.1518	.0433	.0067	.2369	3.5042	.000 ***
Indirect Effect: a_1b_1	.3322	.0360	.2625	.4051		
Indirect Effect: a_2b_2	.0197	.0117	-.0014	.0454		
Total	.3117	.0306	.2540	.3717		
VAF = 62%						

Statistical significance: *p <05, **p < 01, *** p < 001

8.4.2.4 Conclusions based on the findings in the model

Table 15 summarises the result of the parallel mediation with *Safety and Security*.

Potential Brazilian tourists are primarily motivated to travel by the prospect of exploring and experiencing different activities and cultures and the need to visit and know new places they have yet to go. However, they are more likely to recommend others to visit South Africa than to visit themselves. As a result, while they consider South Africa a safe destination, they are mindful of advising others to pay attention to their safety when visiting South Africa.

Correspondingly, potential UK tourists are motivated by the need to visit and know new places they have not been to. Still, unlike potential Brazilian tourists, UK citizens were more likely to travel to South Africa whenever presented with a chance to travel to the country. UK tourists also generally considered South Africa be safe but indicated that they were keenly aware of crime existing in the country.

Potential US tourists appear to be very different from Brazilian and UK respondents, being primarily adventure-seeking. Still, they are more likely to actively recommend people they know to visit South Africa for tourism. Regarding safety and security, Americans consider South Africa as just as safe as other destinations but recommend that others pay attention to safety while in South Africa.

Overall, regarding safety and security in their consumptive decision-making, potential tourists from the US (typically) market appear to be the most susceptible to safety and security considerations compared to Brazilians in, second and last UK citizens. The VAF of at least 50% in all the surveyed markets indicates that safety and security is a consideration in tourists' motives and travel intentions regarding tourism to South Africa. Although *Safety and Security* has a generally positive effect on travel intentions, the I-TRM indicates that there are differences in perceptions-based on country of origin. The NDT and other key stakeholders in government and quasi-government entities associated with safety and security in South Africa must actively monitor this dimension since the security of tourists has been in the spotlight recent events.

8.4.2.5 Implementation of the model

To ensure the use and application of the model it is needed to facilitate workshops. These workshops should ideally be attended by stakeholders involved in the marketing of South Africa as a tourism destination, those responsible for the marketing of provinces and those employed by destination management organisations. It is recommended that the model is implemented for between 3 and 4 years with an annual survey to significant or selected source markets. The workshop will follow a case study approach according to the following structure:

Step 1: Explain the background to and the need for a tourism resilience model to forecast reactions and behaviour in the travel decision-making process.

Step 2: Explain the scientific development and rationalisation of the model.

Step 3: Discuss the importance of certain data points in the model with reference to the standardised items and the plug-in items. This if followed with discussions around the selection of a target market to participate in the study.

Step 4: Discuss the ideal methodology according to which the data should be gathered.

Step 5: Showcase the importance of certain statistical analysis and the necessity thereof to gather in depth knowledge from tourists based on a practical example.

Step 6: Interpret the output of the statistical analysis and convert that to conclusion, recommendations and action steps based on a practical example.

Step 7: Complete a case study related to the model to reflect the competence and confidence levels of respondents in applying the model.

The success of the application of the model is:

- Quality data driven.
- Annual completion for between 3 and 4 years.
- Sound interpretation of statistical output in the context of the tourism environment

See the slides below showcasing the idea of the workshop to be expanded to provincial level. This was already applied on the 23 of March to invited stakeholders. These slides will be adapted according to the audience attending the workshop See Annexure 3.

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ANNEXURE 1

DOMESTIC TOURISM DEMAND QUESTIONNAIRE

SECTION A: SOCIO-DEMOGRAPHIC PROFILE

Instructions: Please indicate the suitable response by means of an X.

1. Which gender do you identify with?

_____

2. In which age group are you?

18-24	1	25-34	2	35-44	3	45-54	4	55+	5

3. Highest qualification?

Non-formal education	1	High School Diploma	2	Certificate	3
Tertiary Diploma	4	Bachelor's Degree	5	Post graduate Degree	6

4. What is your marital status?

Single (never married)	1	Married	2	Domestic partnership	3
Widowed	4	Divorced	5	Separated	6

5. Economic activity?

Student	1	Unemployed	2	Employed in the private sector	3
Employed in the public sector	4	Retired	5	Rather not say	6

6. Who do you usually travel with?

Alone	1	With my partner	2	Family (Adults & children)	3	Work colleagues	7
With my children	4	With my friends	5	Friends and family	6		

7. According to Statistics South Africa, the average monthly gross income in South Africa is R22 500.00/month. Which best describes your income in relation to this amount?

Much below average income	1
Below average income	2
Same as average income	3
Above average income	4
Much above average income	5
Rather not say	6

8. Which is your Province of residence?

Limpopo	1
Free State	2
North-West	3
Northern Cape	4
Western Cape	5

Eastern Cape	6
Gauteng	7
Mpumalanga	8
Kwazulu-Natal	9

9. How many times have you travelled for tourism purposes in the last two years?

None, I am yet to travel as a tourist (business or leisure)	1
Once	2
More than once	3

10. Which one of the following channels would be the most influential to your decision to engage in domestic tourism in the near future?

Television	1
Print media (newspaper/magazine)	2
The internet	3
Social media (Facebook, Twitter, Instagram)	4
Previous visits (Websites)	5
Word-of-mouth (friends, family, work colleagues)	6
Travel/trade shows	7

11. Do you plan to travel internationally in the next year?

Yes	1
No	2

12. Do you plan to travel domestically in the next year?

Yes	1
No	2

SECTION B: DOMESTIC DEMAND

Instructions: Please indicate your choice by means of an X.

	13. To what extent do you agree with each of the following regarding why you would visit local destination and attractions.	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
PTM1	Learn and expand my knowledge	1	2	3	4	5
PTM2	Explore and experience different activities and cultures	1	2	3	4	5
PTM3	Get to visit and know new places I have not been to	1	2	3	4	5
PTM4	Seek relaxation (fun and enjoyment)	1	2	3	4	5
PTM5	Have an adventure	1	2	3	4	5
	To what extent do you agree with each of the following regarding South Africa.					

AWS1	South Africa is a reputable tourism destination	1	2	3	4	5
AWS2	South Africa is well-known to me as a tourism destination	1	2	3	4	5
AWS3	South Africa is a tourism destination that comes to my mind quickly	1	2	3	4	5
AWS4	I want to visit South African tourist attractions that I have not yet seen	1	2	3	4	5
ASC1	I would enjoy travelling in South Africa	1	2	3	4	5
ASC2	South Africa as a tourism destination suits my personality	1	2	3	4	5
ASC3	I would be proud to tell people about travelling locally for tourism	1	2	3	4	5
ASC4	I can easily associate with South Africa	1	2	3	4	5
INT1	I want to be up to date about South Africa as a tourism destination	1	2	3	4	5
INT2	I regularly read news/information about South Africa	1	2	3	4	5
INT3	I enjoy talking about South Africa as a tourist destination	1	2	3	4	5
INT4	I support the efforts of South Africa to re-build the tourism industry	1	2	3	4	5

SECTION C: MACRO I

Instructions: Please indicate your choice by means of an X.

	14. To what extent do you agree with each of the following statements regarding your views on domestic travel and tourism within the next year?	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
PSR1	The thought of travelling domestically for tourism causes me to experience unnecessary tension	1	2	3	4	5
PSR2	The thought of travelling domestically for tourism makes me worry	1	2	3	4	5
PSR3	The thought of travelling domestically for tourism makes me feel uncomfortable	1	2	3	4	5
PSR4	I will not travel domestically since it is not good for me and my image	1	2	3	4	5
PHR1	I will not travel domestically if the standards of health care in the destination concern me	1	2	3	4	5
PHR2	Proper sanitation and hygiene in the tourist destination are now more important than ever	1	2	3	4	5
PHR3	I would not travel to a domestic tourism destination if one of its neighbouring provinces was facing a health-related crisis	1	2	3	4	5
PHR4	The risk of infectious diseases could influence my decision to travel in South Africa	1	2	3	4	5
SCR1	People who are close to me would disapprove of my travelling domestically in the near future	1	2	3	4	5
SCR2	I might be disappointed if I took a trip to a local tourist destination since the world has changed	1	2	3	4	5
SCR3	People who are important to me (family/close friends/colleagues) would disapprove of my visiting domestic tourism destinations in the near future	1	2	3	4	5
SCR4	If I travel domestically, it will negatively affect my image in society	1	2	3	4	5
FNR1	By travelling locally, I would not receive good value for money	1	2	3	4	5
FNR2	Domestic travel will negatively impact my financial situation	1	2	3	4	5
FNR3	Travelling domestically may result in unexpected extra expenses	1	2	3	4	5
FNR4	Travelling locally for domestic tourism may be more expensive than travelling outside of South Africa	1	2	3	4	5

	15. In light of the COVID-19 pandemic, how safe would you perceive undertaking the following activities in South Africa?	Very risky	Risky	Somewhat safe	Safe	Very Safe
SFT1	Localised travel within South Africa	1	2	3	4	5
SFT2	Visiting South African attractions most popular with international tourists	1	2	3	4	5
SFT3	Visiting South African attractions most popular with locals	1	2	3	4	5
SFT4	Travelling by air in South Africa	1	2	3	4	5
SFT5	Self-drive or private transport in South Africa	1	2	3	4	5
SFT6	Public transport in South Africa (train, bus, taxi)	1	2	3	4	5
SFT7	Travelling in groups in South Africa (bus tours, cruises)	1	2	3	4	5
SFT8	Interacting with tourists of other nationalities while visiting South Africa	1	2	3	4	5

	16. SAFETY & SECURITY PERCEPTION To what extent do you agree with each of the following statements regarding your views on travel and tourism to South Africa?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
SSP1	South Africa is a safe place to travel in	1	2	3	4	5
SSP2	South Africa is just as safe as other destinations	1	2	3	4	5
SSP3	Others tell me that travel and tourism in South Africa is dangerous	1	2	3	4	5
SSP4	I do not need to worry about security issues when travelling in South Africa	1	2	3	4	5
SSP5	I will remind others to pay attention to safety in South Africa	1	2	3	4	5
SSP6	I am aware of crime in South Africa	1	2	3	4	5

SECTION D: MESO

Instructions: Please indicate your choice by means of an X.

	17. How likely are you to engage in the following tourism activities in South Africa within the next year? Travel to…	Extremely unlikely	Unlikely	Neutral	Likely	Extremely likely
DAI1	Attend festivals, arts events, music concerts	1	2	3	4	5
DAI2	Visit museums, monuments, and historical locations and artefacts	1	2	3	4	5
DAI3	Engage in entertainment activities (sports, theme parks, water parks, casinos, resorts)	1	2	3	4	5
DAI4	Experience unique food/cuisine experiences (wine, traditional, western, Asian)	1	2	3	4	5
DAI5	Engage in outdoor activities (Quad-biking, hiking, bungee jumping, rafting)	1	2	3	4	5

DAI6	Visit locations with beaches (Durban, Cape Town, Port Elizabeth)	1	2	3	4	5
DAI7	Travel to places that offer a variety of unique of flora and fauna	1	2	3	4	5
DAI8	Visit national parks, conservancies and nature reserves	1	2	3	4	5
DAI9	Enjoy various natural attractions (mountains, lakes, rivers)	1	2	3	4	5
DAI10	Experience great weather in the region	1	2	3	4	5

	18. RESIDENT HOSPITALITY **To what extent do you agree with each of the following statements regarding your views on travel and tourism to South Africa?**	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
HOSP1	I try to be helpful if a tourist asks me for help	1	2	3	4	5
HOSP2	I happily interact with tourists	1	2	3	4	5
HOSP3	If I have the opportunity, I am hospitable toward tourists	1	2	3	4	5
HOSP4	I would do my bit to make South Africa a welcoming country for tourists	1	2	3	4	5
HOSP5	I realise the value of tourism to South Africa	1	2	3	4	5

	19. RESIDENT ETHNOCENTRISM **To what extent do you agree with each of the following statements regarding your views on travel and tourism to South Africa?**	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
REM1	I should support the South African economy by travelling to holiday destinations in South Africa	1	2	3	4	5
REM2	I should feel a duty to book a national holiday	1	2	3	4	5
REM3	I should back up the South African economy by booking a holiday in South Africa	1	2	3	4	5
REM4	Every time I decide to spend my holiday in South Africa, I contribute to South Africa's future – making it a little bit brighter	1	2	3	4	5
REM5	It comes down to me to spend my holiday in South Africa and contribute to my country's tourism	1	2	3	4	5
REM6	I should spend my holiday in South Africa because this secures jobs in the South African tourism industry	1	2	3	4	5

	20. INTERVENTION EFFECTIVENESS **Please indicate how effective you believe the following interventions have been effective in protecting tourists travelling in South Africa**	Very ineffective	Ineffective	Somewhat effective	Effective	Very effective
PNI1	South Africa's COVID-19 vaccination program	1	2	3	4	5
PNI2	The digitalisation of travel and tourism services (online booking, automated check-in systems)	1	2	3	4	5
PNI3	Online travel advisories about how to stay safe prior to and during travel in South Africa	1	2	3	4	5
PNI4	Isolation and quarantine procedures and protocols (screening at airports)	1	2	3	4	5
PNI5	Vaccination of hospitality and tourism staff	1	2	3	4	5

SECTION E: MACRO II

Instructions: Please indicate your choice by means of an X.

	21. PERCEIVED BEHAVIOURAL CONTROL **To what extent do you agree with each of the following statements regarding your views on travel and tourism to South Africa?**	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
PBC1	I can afford domestic travel in South Africa, despite the rising cost of living in South Africa	1	2	3	4	5
PBC2	I am not worried about travel safety in South Africa	1	2	3	4	5
PBC3	If I have the choice, I rather travel within South Africa, although this option might be more expensive than travelling to other destinations	1	2	3	4	5
PBC4	Before travelling domestically, I would familiarise myself with the infrastructure available to be better prepared for personal health-related emergencies [because of the lessons learnt from the COVID-19 pandemic before travelling]	1	2	3	4	5
PBC5	I feel there is nothing that prevents me from travelling within South Africa when I want to	1	2	3	4	5

	22. To what extent do you believe the following factors are influential or would be influential to your perception [*what you think*] of South Africa as a domestic tourism destination?	Not at all influential	Slightly influential	Somewhat influential	Quite influential	Extremely influential
DMP1	The destination's tourism offering on travel and tourism websites	1	2	3	4	5
DMP2	Social media posts about the destination (Facebook, Instagram, Snapchat, Twitter, YouTube)	1	2	3	4	5
DMP3	The information available on the destination's official tourism website	1	2	3	4	5
DMP4	Coverage of the destination in the media (News, documentaries)	1	2	3	4	5
DMP5	The image of the destination shown in entertainment content (Movies, series, reality shows)	1	2	3	4	5
DMP6	Destination product placement in adverts	1	2	3	4	5
DMKT1	Government initiatives to promoting a domestic tourism	1	2	3	4	5
DMKT2	Generally sufficient information about South Africa as a domestic tourism destination	1	2	3	4	5
DMKT3	The value for money that I receive from South African domestic tourism products	1	2	3	4	5
DMKT4	The attractive uniqueness of South Africa compared to other regions destinations	1	2	3	4	5
DMKT5	Positive marketing promotions related to domestic tourism in South Africa	1	2	3	4	5
DMKT6	Perception of South Africa as an international tourism destination of choice	1	2	3		5

SECTION F: TRAVEL INTENTION

Instructions: Please indicate by means of an X.

		Extremely unlikely	Unlikely	Neutral	Likely	Extremely likely
TRV1	I plan to travel in South Africa in the near future	1	2	3	4	5
TRV2	I would choose South Africa as a preferred choice for my next vacation	1	2	3	4	5
TRV3	Whenever I have a chance to travel, I will travel in South Africa	1	2	3	4	5
TRV4	I would actively recommend people I know to travel within South Africa	1	2	3	4	5

23. If you have travelled or could travel domestically, what would be your preferred local destination(s)?

_____

24. If you were to travel domestically (within South Africa) with your family for seven days, how much would you be willing to spend for the whole trip?

Less than R10 000	1	R11 000 – R20 000	2	R21 000 – R30 000	3
R31 000 – R40 000	4	R41 000 – R50 000	5	More than R51 000	6

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Any recommendations regarding this research or opinions you would like to provide?

THANK YOU FOR YOUR PARTICIPATION, WE VALUE YOUR OPINION

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ANNEXURE 2

INTERNATIONAL DEMAND QUESTIONNAIRE

SECTION A: SOCIO-DEMOGRAPHIC PROFILE

Instructions: Please indicate the suitable response by means of an X.

1. Which gender do you identify with?

_____

2. In which age group are you?

18-24	1	25-34	2	35-44	3	45-54	4	55+	5

2Highest qualification?

Non-formal education	1	High School Diploma	2	Certificate	3
Tertiary Diploma	4	Bachelor's Degree	5	Postgraduate Degree	6

3. What is your marital status?

Single (never married)	1	Married	2	Domestic partnership	3
Widowed	4	Divorced	5	Separated	6

4. Economic activity?

Student	1	Unemployed	2	Employed in the private sector	3
Employed in the public sector	4	Retired	5	Rather not say	6

5. Who do you usually travel with?

Alone	1	With my partner	2	Family (Adults & children)	3	Work colleagues	7
With my children	4	With my friends	5	Friends and family	6		

6. Which best describes your monthly income in relation to the national average monthly income in your home country?

Much below average income	1
Below average income	2
Same as average income	3
Above average income	4
Much above average income	5
Rather not say	6

7. Which is your <u>country</u> of residence?

_____

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8. Which statement best describes you in relation to travel and tourism to South Africa?

I have travelled to South Africa before (business or leisure)	1
I would consider visiting South Africa as a tourist some day in the future	2
I have considered visiting South Africa as a tourist before, but I decided not to	3
I would never travel to South Africa for tourism	4

9. How many times have you travelled internationally for tourism purposes?

None, I am yet to travel as a tourist (business or leisure)	1
Once	2
More than once	3

10. Which one of the following channels would be the most influential to your decision to engage in international tourism in the near future?

Television	1
Print media (newspaper/magazine)	2
The internet	3
Social media (Facebook, Twitter, Instagram)	4
Previous visits (Websites)	5
Word-of-mouth (friends, family, work colleagues)	6
Travel/trade shows	7

11. Do you plan to travel internationally in the near future?

Yes	1
No	2

12. Do you plan to travel domestically in the near future?

Yes	1
No	2

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SECTION B: INTERNATIONAL DEMAND

Instructions: Please indicate your choice by means of an X.

	13. To what extent do you agree with each of the following regarding why you would visit South Africa.	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
PTM1	Learn and expand my knowledge	1	2	3	4	5
PTM2	Explore and experience different activities and cultures	1	2	3	4	5
PTM3	Get to visit and know new places I have not been to	1	2	3	4	5
PTM4	Seek relaxation (fun and enjoyment)	1	2	3	4	5
PTM5	Have an adventure	1	2	3	4	5
	To what extent do you agree with each of the following regarding South Africa.					
AWS1	South Africa is a reputable tourism destination	1	2	3	4	5
AWS2	South Africa is well-known to me as a tourism destination	1	2	3	4	5
AWS3	South Africa is a tourism destination that comes to my mind quickly	1	2	3	4	5
AWS4	I want to visit South African tourist attractions that I have not yet seen	1	2	3	4	5
ASC1	I would enjoy visiting South Africa	1	2	3	4	5
ASC2	South Africa as a tourism destination suits my personality	1	2	3	4	5
ASC3	I would be proud to tell people about visiting South Africa for tourism	1	2	3	4	5
ASC4	I can easily associate with South Africa	1	2	3	4	5
INT1	I want to be up to date about South Africa as a tourism destination	1	2	3	4	5
INT2	I regularly read news/information about South Africa	1	2	3	4	5
INT3	I enjoy talking about South Africa as a tourist destination	1	2	3	4	5
INT4	I support the efforts of SA to re-build the tourism industry	1	2	3	4	5

SECTION C: MACRO I FACTORS

Instructions: Please indicate your choice by means of an X.

	14. COUNTRY IMAGE To what extent do you agree with each of the following regarding your views of South Africa as a country considering the COVID-19 pandemic? South Africa….	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
FCI1	Has an economy that is highly innovative and fit for the post-COVID future	1	2	3	4	5
FCI2	Has a well-functioning infrastructure	1	2	3	4	5
FCI3	Provides for the safety of citizens and visitors	1	2	3	4	5
FCI4	Holds a strong position in the global economy	1	2	3	4	5
FCI5	Has a globally influential culture	1	2	3	4	5
FCI6	Has a very stable political system	1	2	3	4	5
NCI1	Is very active in protecting the environment	1	2	3	4	5

NCI2	Has a strong commitment to social issues (e.g., development aid, civil rights)	1	2	3	4	5
NCI3	Is a socially responsible member of the international community	1	2	3	4	5
NCI4	Respects the values of other nations and peoples	1	2	3	4	5
NCI5	Takes responsibility for helping during international crises	1	2	3	4	5
NCI6	Is a welcoming country	1	2	3	4	5

	15. PLACE BRAND DIMENSIONS **Considering the COVID-19 pandemic, what kind of influence does each of the following have on your views of South Africa as a tourism destination?**	**Extremely negative influence**	**Negative influence**	**Somewhat influential**	**Positive influence**	**Extremely positive influence**
GOV1	The political situation in South Africa	1	2	3	4	5
GOV2	Policing and safety from crime in South Africa	1	2	3	4	5
GOV3	The relations between South Africa and my own country	1	2	3	4	5
GOV4	Control and policy measures by the South African government to manage the COVID-19 pandemic	1	2	3	4	5
IMM1	Ease of immigration visa procedures when travelling to South Africa	1	2	3	4	5
IMM2	Visa policy of South Africa towards my home country	1	2	3	4	5
IMM3	Quality of life in South Africa	1	2	3	4	5
IMM4	Availability of efficient basic service utilities in South Africa (water, electricity)	1	2	3	4	5
INF1	Access to affordable medical treatment	1	2	3	4	5
INF2	World-class health infrastructure (private health sector)	1	2	3	4	5
INF3	Technologically advanced health systems	1	2	3	4	5
INF4	Access to high quality of medical services	1	2	3	4	5
PEO1	Lower vaccination acceptance levels compared to developed countries	1	2	3	4	5
PEO2	Friendliness and helpfulness of South Africans	1	2	3	4	5
PEO3	Common language with South Africa (English, Dutch)	1	2	3	4	5
PEO4	Acceptance of foreigners by South Africans	1	2	3	4	5

	16. INTERNATIONAL TOURISM RISK PERCEPTION **To what extent do you agree with each of the following statements regarding your views on travel and tourism to South Africa?**	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
PSR1	The thought of travelling to South Africa for tourism causes me to experience unnecessary tension	1	2	3	4	5
PSR2	The thought of travelling to South Africa for tourism makes me worry	1	2	3	4	5
PSR3	The thought of travelling to South Africa for tourism makes me feel uncomfortable	1	2	3	4	5
PSR4	I will not travel to South Africa since it is not good for me and my image	1	2	3	4	5
PHR1	I will not travel to South Africa if the standards of health care in the country concern me	1	2	3	4	5
PHR2	Proper sanitation and hygiene in South Africa are now more important than ever	1	2	3	4	5
PHR3	I would not travel to South Africa if one of its neighbouring countries was facing a health-related crisis	1	2	3	4	5

PHR4	The risk of infectious diseases could influence my decision to travel to South Africa	1	2	3	4	5
SCR1	People who are close to me would disapprove of my travelling to South Africa in the near future	1	2	3	4	5
SCR2	I might be disappointed if I took a trip to South Africa since the world has changed	1	2	3	4	5
SCR3	People who are important to me (family/close friends/colleagues) would disapprove of my visiting South Africa in the near future	1	2	3	4	5
SCR4	If I travel to South Africa, it will negatively affect my image in society	1	2	3	4	5
FNR1	By travelling to South Africa, I would not receive good value for money	1	2	3	4	5
FNR2	International travel to South Africa will negatively impact my financial situation	1	2	3	4	5
FNR3	Travelling to South Africa may result in unexpected extra expenses	1	2	3	4	5
FNR4	Travelling to South Africa may be more expensive than travelling to other tourism destinations	1	2	3	4	5

	17. PERCEIVED RISK OF INTERNATIONAL TRAVEL AND TOURISM ACTIVITY IN SOUTH AFRICA **Considering the COVID-19 pandemic, how safe would you perceive undertaking the following activities in South Africa in the next year?**	**Very risky**	**Risky**	**Somewhat safe**	**Safe**	**Very Safe**
SFT1	International travel to South Africa	1	2	3	4	5
SFT2	Localised travel within South Africa	1	2	3	4	5
SFT3	Visiting South African attractions most popular with international tourists	1	2	3	4	5
SFT4	Visiting South African attractions most popular with locals	1	2	3	4	5
SFT5	Travelling by air to South Africa	1	2	3	4	5
SFT6	Travelling by air within South Africa	1	2	3	4	5
SFT7	Self-drive or private transport in South Africa	1	2	3	4	5
SFT8	Public transport in South Africa (train, bus, taxi)	1	2	3	4	5
SFT9	Travelling in groups in South Africa (bus tours, cruises)	1	2	3	4	5
SFT10	Interacting with tourists of other nationalities while visiting South Africa	1	2	3	4	5

	18. SAFETY & SECURITY PERCEPTION **To what extent do you agree with each of the following statements regarding your views on travel and tourism to South Africa?**	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
SSP1	South Africa is a safe place to visit	1	2	3	4	5
SSP2	South Africa is just as safe as other destinations	1	2	3	4	5
SSP3	Others tell me that South Africa is dangerous	1	2	3	4	5
SSP4	I do not need to worry about security issues when travelling in South Africa	1	2	3	4	5
SSP5	I will remind others to pay attention to safety in South Africa	1	2	3	4	5
SSP6	I am aware of crime in South Africa	1	2	3	4	5

SECTION D: MESO FACTORS

	20. PHARMACEUTICAL & NON-PHARMACEUTICAL INTERVENTIONS Please indicate how effective you believe the following interventions have been effective in protecting tourists travelling to South Africa	Very ineffective	Ineffective	Somewhat effective	Effective	Very effective
PNI1	South Africa's COVID-19 vaccination program	1	2	3	4	5
PNI2	The digitalisation of travel and tourism services (online booking, automated check-in systems)	1	2	3	4	5
PNI3	Online travel advisories about how to stay safe prior to and during travel to South Africa	1	2	3	4	5
PNI4	Isolation and quarantine procedures and protocols (screening at airports)	1	2	3	4	5
PNI5	Vaccination of hospitality and tourism staff	1	2	3	4	5

Instructions: Please indicate your choice by means of an X.

	19. PULL TRAVEL MOTIVES How likely are you to engage in the following international tourism activities in South Africa? I would travel to South Africa to…	Extremely unlikely	Unlikely	Neutral	Likely	Extremely likely
DAI1	Attend festivals, arts events, music concerts	1	2	3	4	5
DAI2	Visit museums, monuments, and historical locations and artefacts	1	2	3	4	5
DAI3	Engage in entertainment activities (sports, theme parks, water parks, casinos, resorts)	1	2	3	4	5
DAI4	Experience unique food/cuisine experiences (wine, traditional, western, Asian)	1	2	3	4	5
DAI5	Engage in outdoor activities (Quad-biking, hiking, bungee jumping, rafting)	1	2	3	4	5
DAI6	Visit locations with beaches (Durban, Cape Town, Port Elizabeth)	1	2	3	4	5
DAI7	Travel to places that offer a variety of unique of flora and fauna	1	2	3	4	5
DAI8	Visit national parks, conservancies and nature reserves	1	2	3	4	5
DAI9	Enjoy various natural attractions (mountains, lakes, rivers)	1	2	3	4	5
DAI10	Experience great weather in the country	1	2	3	4	5

	21. PERCEIVED AND STEREOTYPICAL XENOPHOBIA To what extent do you agree with each of the following statements regarding your views on travel and tourism to South Africa?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
PXN1	I doubt that the locals would be welcoming to tourists like me	1	2	3	4	5

PXN2	I would not feel comfortable in the culture	1	2	3	4	5
PXN3	I would probably feel uneasy to engage with locals in South Africa	1	2	3	4	5
PXN4	There would be many misunderstandings between the locals and myself	1	2	3	4	5
PXN5	I would be suspicious of the locals I encounter in South Africa	1	2	3	4	5
SXN1	Locals would meet me with some reservation	1	2	3	4	5
SXN2	Locals will be suspicious of me	1	2	3	4	5
SXN3	Locals will not feel comfortable with my culture	1	2	3	4	5
SXN4	Locals would probably feel uneasy to engage with me as a tourist	1	2	3	4	5
SXN5	There have been many misunderstandings between locals and foreigners in South Africa	1	2	3	4	5

	22. VACCINATION FOR INTERNATIONAL TOURISM **To what extent do you agree with each of the following statements regarding your views on travel and tourism to South Africa?**	**Strongly disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly agree**
VCT1	When travelling to South Africa, I would get a vaccination against COVID-19	1	2	3	4	5
VCT2	Getting a vaccination against COVID-19 is a must when travelling to South Africa	1	2	3	4	5
VCT3	I would feel bad if I travelled to other countries, like South Africa, without being vaccinated against COVID-19	1	2	3	4	5
VCT4	I would avoid tourist destinations with low vaccination rates compared to my home country	1	2	3	4	5
VCT5	I would only visit international destinations that strictly require proof of vaccination against COVID-19 from international tourists	1	2	3	4	5
VCT6	I would only visit international destinations that do not require proof of vaccination against COVID-19 from international tourists	1	2	3	4	5

SECTION E: MACRO II FACTORS

Instructions: Please indicate your choice by means of an X.

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	24. PERCEIVED BEHAVIOURAL CONTROL To what extent do you agree with each of the following statements regarding your views on travel and tourism to South Africa?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
PBC1	I can afford international travel to South Africa, despite the rising cost of living in my home country	1	2	3	4	5
PBC2	I am not worried about travel safety in South Africa	1	2	3	4	5
PBC3	If I have the choice, I rather travel long-haul to South Africa, although this option might be more expensive than travelling to other destinations	1	2	3	4	5
PBC4	Before travelling to South Africa, I would familiarise myself with the infrastructure available to be better prepared for personal health-related emergencies [because of the lessons learnt from the COVID-19 pandemic before travelling]	1	2	3	4	5
PBC5	I feel there is nothing that prevents me from travelling to South Africa when I want to	1	2	3	4	5

SECTION F: TRAVEL INTENTION

Instructions: Please indicate your choice by means of an X.

	25. TRAVEL INTENTION Considering the COVID-19 pandemic…	Extremely unlikely	Unlikely	Neutral	Likely	Extremely likely
TRV1	I plan to travel to South Africa in the near future	1	2	3	4	5
TRV2	I would choose South Africa as a preferred choice for my next vacation	1	2	3	4	5
TRV3	Whenever I have a chance to travel, I will travel to South Africa	1	2	3	4	5
TRV4	I would actively recommend people I know to visit South Africa	1	2	3	4	5
DMP2	Social media posts about South Africa (Facebook, Instagram, Snapchat, Twitter, YouTube)	1	2	3	4	5
DMP3	The information available on South Africa's official tourism website	1	2	3	4	5
DMP4	Coverage of South Africa in the media (News, documentaries)	1	2	3	4	5
DMP5	The image of South Africa shown in entertainment content (Movies, series, reality shows)	1	2	3	4	5
DMP6	South Africa's product placement in adverts	1	2	3	4	5
DMKT1	The South African government's initiatives to promote tourism	1	2	3	4	5
DMKT2	Generally sufficient information about South Africa as a tourism destination	1	2	3	4	5
DMKT3	The value for money that I would receive from South African tourism products	1	2	3	4	5
DMKT4	The attractive uniqueness of South Africa compared to other destinations	1	2	3	4	5
DMKT5	Positive marketing promotions related to tourism to South Africa	1	2	3	4	5
DMKT6	Perception of South Africa as an international tourism destination of choice	1	2	3	4	5

26. If you were to travel to South Africa, with your travel companion(s) for seven days, how much would you be willing to spend for the whole trip?

Less than USD$3 000	1	USD$3 001 – USD$4 000	2	USD$4 001 – USD$5 000	3
USD$5 001 – USD$6 000	4	USD$6 001 – USD$7000	5	More than USD$7 000	6

Any recommendations regarding this research or opinions you would like to provide?

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THANK YOU FOR YOUR PARTICIPATION, WE VALUE YOUR OPINION

ANNEXURE 3

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BACKGROUND

Post-COVID Challenges…

- War in Ukraine - geopolitical constraints
- Heightened sensitivity to safety and security
- Global financial crisis
- Global energy crisis
- Over-tourism due to pent-up demand
- Sustainable tourism debate – carbon footprint of air travel

THE PROBLEM

- A crisis is the outcome of a shock or disaster – for example, the COVID-19 pandemic may be considered a crisis for tourism destinations
- Most tourism destination countries were unprepared for the sheer scale of COVID-19 and the current post-COVID scenario
- Resilience in a tourism or destination context remains in its infancy requiring bespoke interventions

RATIONALE FOR THE MODEL

To develop a tourism resilience model (TRM) for South African tourism as a decision support mechanism in policy and strategy formulation for the sustainable recovery of the sector.

- Approach to sustainable tourism recovery and resilience
- Synchronisation of tourism demand and supply post-COVID-19 to develop an integrated resilience model for the South African tourism sector
- Insights that will support South Africa's tourism recovery with data-driven, empirical evidence-based recommendations
- Sustainable recovery and 'future-proofing' of both domestic and international tourism in South Africa by developing a reflexive resilience model

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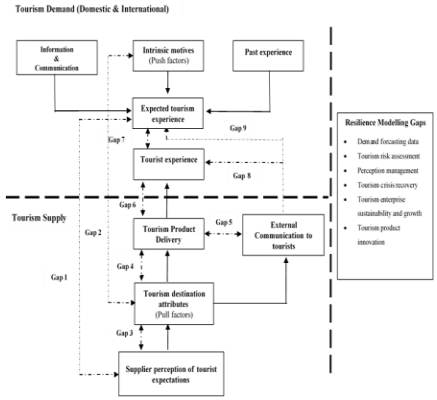
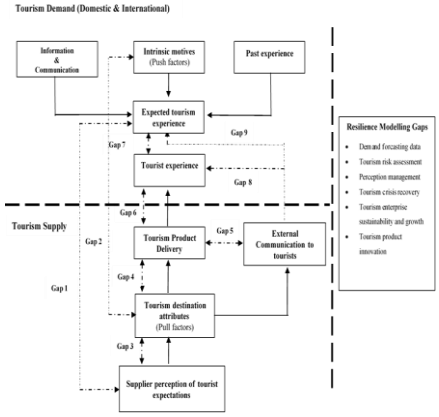
RESILIENCE GAP ANALYSIS



Adapted from: Parasuraman *et al.* (1985, 1988, 1991)

- **Gap 1** is the potential difference between tourist expectation(s) and South African tourism supplier perceptions of tourist expectations. e.g. Enhanced safety expected by tourists versus what the supplier can offer
- **Gap 2** is the potential difference between tourist motives (push factors) and tourism destination attributes of South Africa (pull factors). e.g. increased demand for nature-based tourism products post COVID
- **Gap 3** is the potential difference between South African tourism suppliers' perceptions of what tourists expect and the destination attributes of South Africa as a tourism destination. e.g. water safety and beaches post the KZN floods
- **Gap 4** is the potential difference between the destination attributes of South Africa and the delivery of the tourism product. e.g. load shedding stopping ariel cableway services at Table Mountain

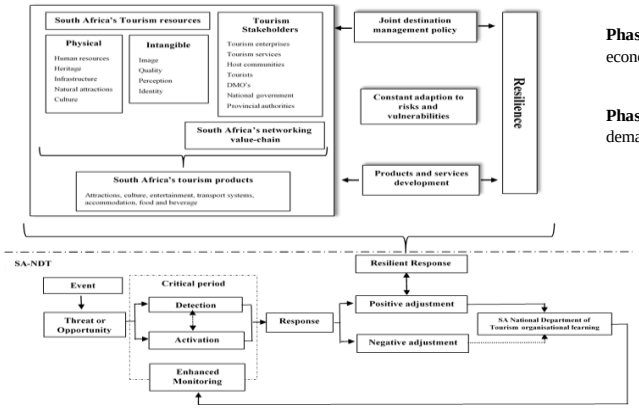
RESILIENCE GAP ANALYSIS



Adapted from: Parasuraman *et al.* (1985, 1988, 1991)

- **Gap 5** is the potential difference between South Africa's tourism offering and the external communication of the product to tourists. e.g. conflicting media reports about the safe re-opening of Durban beaches due to water safety concerns
- **Gap 6** is the potential difference between the tourism product delivered and the tourism experience of the tourist.
- **Gap 7** is the potential difference between tourists' expectations and the actual tourism experience of South Africa.
- **Gap 8** is the potential difference between the external communication (value proposition) by South Africa and the actual experience of the tourist.
- **Gap 9** is the potential difference between the external communication (value proposition) by South Africa and the expectations of the tourist

The TWO-PHASE TRM in Context



Source: Adapted from Amann & James (2015); Fabry & Zeghni (2019)

Phase I – *Enhanced monitoring* based on econometric modelling

Phase II – *Resilient response* based on demand-decision modelling

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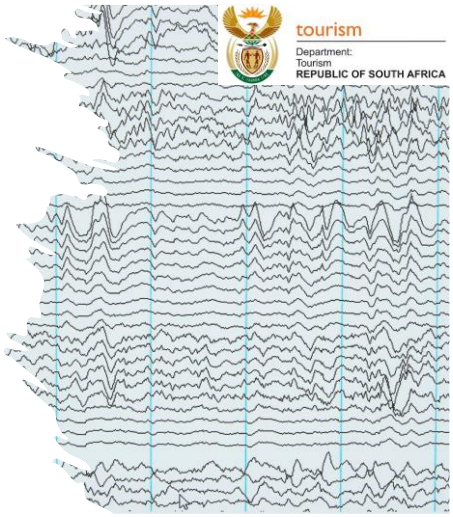
CONSIDERATIONS

- Development of 2 models
- Some level of standardization
- Data is king
- Not a once-off application
- Target market-driven
- Scientific development
- Make provision for the significant events happening (Plug-ins)
- Quadrant implication and strategies
- Main aim: To improve intention to travel



Construct	Dimensions	Definition	Relevant sources
INTERNATIONAL DEMAND: The willingness and ability of consumers to buy different amounts of a tourism product at different prices during any one period. The demand for any tourism good or service is influenced by numerous quantifiable and non-quantifiable factors.[1] (Dwyer, Forsyth & Dwyer, 2020)	**Push travel motives**	Tourists travel or need to travel because they are pushed by their internal forces. These forces are intangible, or they express the internal desires of travellers. For example, the need for relaxation, adventure, prestige.	Baloglu & Uysal (1996)
	Level of awareness	The strength of the brand's presence in the mind of the tourist along a continuum.	Aziz & Yasin, (2010); Basaran, (2016); Kladou & Kehagia (2014); Martín, Herrero & Salmones (2019)
	Level of association	A reflection of tourists' perceptions, including perceptions of values, quality, feelings and brand personality.	
	Level of interest	The level of tourist interest or intrigue in the destination and the level of curiosity to inquire or learn more	
MACRO I: Multi-stakeholder country management policy and the global environment resulting in the organic image and perceptions held of South Africa. These are tourism and non-tourism related dimensions that South Africa has very little to no control over.	**Perceived country image**	A subjective stakeholder attitude towards a nation and its state, comprising specific beliefs and general feelings in functional and normative dimensions.	Buhmann (2016)
	Place brand dimensions	The multi-dimensional cognitive associations that consumers utilize as reference points for information symmetry in consumptive decision-making.	Matiza & Slabbert, (2020a)
	Perceived risk of international travel & tourism activity	Perceived risk of international travel and tourism activity in South Africa.	Matiza & Slabbert, (2020b)
	International tourism risk perception	International tourists' perception of uncertainty and potential adverse outcomes resulting from the consumption of travel and tourism offerings based on perceived psychological, social, physical and financial risk, respectively.	Matiza (2020)
MESO: Country and tourism market level that is characterized by consistent adaptation to threats, risk and vulnerabilities of the tourism sector.	**Pull travel factors**	Pull factors include tangible resources that determine the attractiveness of the destination, such as landscapes, beaches, and historical resources. These external characteristics of a destination that attract tourists when making their destination choice.	Baloglu & Uysal (1996)
	Pharmaceutical & non-pharmaceutical Interventions	The perceived effectiveness of pharmaceutical and non-pharmaceutical interventions associated with the COVID-19 pandemic.	Liu, Schroeder, Pennington-Gray & Farajat, (2016)
MACRO II: Multi-stakeholder destination response via various media platforms and marketing strategies to elicit an induced perception of South Africa as a tourism destination.	**International media & marketing profile**	The influence of South Africa's tourism's media and marketing profile - which is where potential domestic tourists derive the information which they utilise as heuristic cues in their decision-making.	Fuchs & Reichel (2011)
INTENTION TO TRAVEL		The intention to travel internationally to South Africa in the near future	Law (2006); Olya & Al-ansi (2018); Wang (2017)

Model Plug-ins: I-TRM

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Construct	Dimensions	Definition	Relevant sources
I-TRM			
MACRO I: Multi-stakeholder country management policy and the global environment resulting in the organic image and perceptions held of South Africa. These are tourism and non-tourism-related dimensions that South Africa has very little to no control over.	**Safety & security perception**	Stable and orderly conditions, namely - being protected and free from injury or danger during tourism activities	Xiaolong, Litian, Lu, & Rong (2022); Zou & Yu (2022)
	Perceived and stereotypical xenophobia	A negative predisposition towards, or even the denigration of, groups and/or individuals based on perceived differences	Zenker, Braun & Gyimothy (2021)
MESO: Country and tourism market level that is characterized by consistent adaptation to threats, risk and vulnerabilities of the tourism sector.	**Vaccination for international tourism**	The perceptions towards initiating pharmaceutical interventions associated with the COVID-19 pandemic.	Kock, Josiassen & Assaf, (2019)
MICRO: Individual tourist level factors that moderate or mediate their behaviour towards tourism	**Perceived behavioural control**	The self-evaluation of the individual's ability to perform specific behaviours in terms of factors such as ability and resources	Liu, Shi, Li, & Amin (2021)

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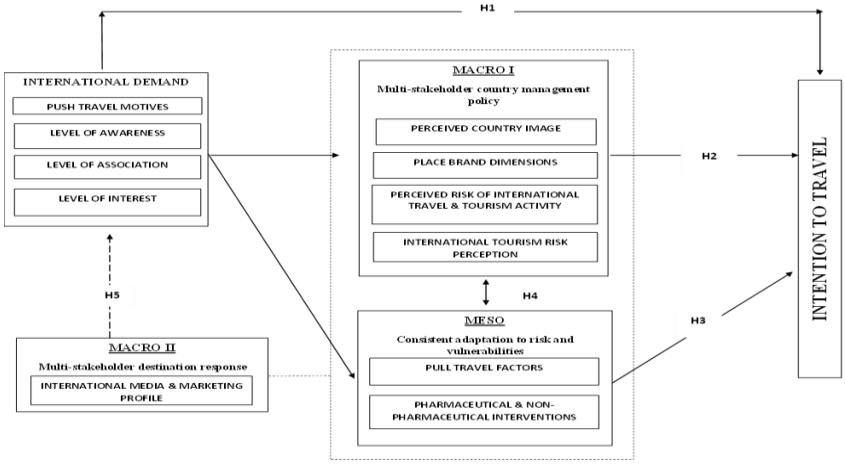
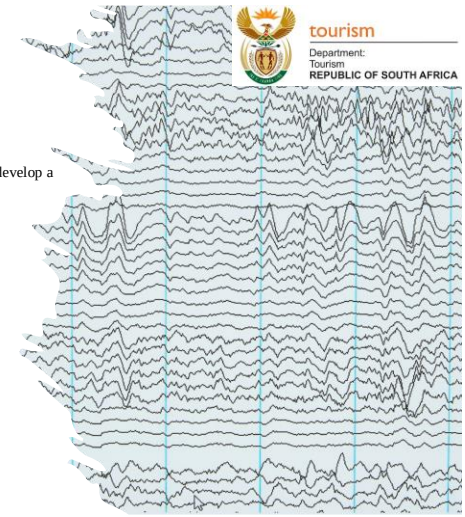
I-TRM



METHODOLOLGY



- **2022 I-TRM & D-TRM Model Pilot**
  - In-depth desktop study and expert interviews and reviews to develop a questionnaire
  - QuestionPro Online Questionnaire published
  - Amazon MTurk self-administered online survey
  - Sample was N= 600 Total (n= 223 USA Respondents)

- **2023 I-TRM & D-TRM Model Refinement and Test**
  - Desktop study to refine model and expert reviews
  - QuestionPro Online Questionnaire published
  - QuestionPro Audience Panel self-administered online survey
  - Sample was N=1500 (n=500 USA Respondents)

Socio-demographic variable	2022	2023
Gender	• Male (61%) • Female (39%)	• Female (76%) • Male (23%)
Age	• 25-34 (53%) • 35-44 (27%)	• 35-44(36%) • 55+ (35%)
Qualifications	• Bachelor's Degree (71%); • Postgraduate Degree (14%)	• High School Diploma (41%) • Bachelors (25%)
Marital status	• Married (85%) • Single (13%)	• Married (45%) • Single (30%)
Economic activity	• Employed in the public sector (72%) • Self-employed (15%)	• Employed- Private Sector (27%) • Employed- Public Sector (25%)
Travel companion(s)	• With my partner (36%) • Family (Adults & children) – (28%)	• With Partner (33%) • Family -Adults & Children (31%)
Income	• Above-average income (36%) • Same as average income (31%)	• Same as average (36%) • Below average (27%)
Travel to SA	• I would consider visiting South Africa as a tourist someday in the future (45%) • I have travelled to South Africa before (44%)	• I would consider visiting South Africa as a tourist some day in the future (45%) • I would never travel to South Africa for tourism (36%)
Prior international travel	• Once (46%) • More than once (40%)	• None have not travelled(48%) • More than once (26%)
Most influential media channels	• Social media (46%) • The internet (34%)	• Internet (28%) • TV (22%)
International travel in the near future	• Yes (94%) • No (6%)	• Yes (41%) • No (59%)
Domestic travel in the near future	• Yes (96%) • No (4%)	• Yes (67%) • No (33%)
Willing to pay for SA trip?	• $4 001 – $5 000 (33%) • $5 001 – $6 000 (23%)	• Less than USD$3 000 (28%) • USD$4 001 – USD$5 000 (20%)

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FACTOR ANALYSIS

Factor	Items	Eigenvalue (EV)	Variance (%)	Factor Loading (>.50) Min	Factor Loading (>.50) Max	Cronbach Alpha (α)	Mean ($\bar{x}$)
2022 Data							
International tourism risk perception							
Socio-economic Risk	PSR4; PHR1; PHR3; PHR4; SCR1; SCR2; SCR4; FNR1; FNR2; FNR3; FNR4	8.049	50.31	.507	.825	.930	**3.33**
Psychological Risk	PSR1; PSR3; SCR3	1.344	8.40	.633	.855	.786	**3.56**
Physical Risk	PHR2; PHR4	1.001	6.26	.526	.891	.609	**3.64**
Travel Intention	TRV1 -TRV4	2.573	64.33	.763	.822`	.815	**3.80**
2023 Data							
International tourism risk perception							
Socio-economic Risk	PSR4; SCR1; SCR2; SCR3; SCR4; FNR1; FNR2; FNR4	7.644	47.77	.522	.880	.898	**2.92**
Physical Risk	PHR2; PHR3; PHR4; FNR3	1.843	11.52	.565	.842	.791	**3.47**
Psychological Risk	PSR1; PSR2; PSR3	1.175	7.345	.781	.775	.858	**2.96**
Travel Intention	TRV1 -TRV4	3.348	83.69	.801	.932	.935	**2.74**

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DESCRIPTIVE FINDINGS

	USA Market 2022	USA Market 2023
International tourism risk perceptions	American risk perceptions were in three dimensions: (1) **Socio-economic Risk ($\bar{x}$ = 3.33):** • **Agree** the risk of infectious diseases could influence my decision to travel to South Africa ($\bar{x}$ = 3.52) • **Agree** that considering that travelling to South Africa may be more expensive than travelling to other tourism destinations ($\bar{x}$ = 3.48) **(2) Psychological Risk ($\bar{x}$ = 3.56):** • **Agree** that considering the thought of travelling to South Africa for tourism may make them feel uncomfortable ($\bar{x}$ = 3.59) • **Agree** that people who are important to them (family/close friends/colleagues) would disapprove of their visiting South Africa in the near future ($\bar{x}$ = 3.59). **(3) Physical Risk ($\bar{x}$ = 3.64):** • thought of travelling to South Africa for tourism worrying them ($\bar{x}$ = 3.75) • the risk of infectious diseases possibly influencing their decision to travel to South Africa ($\bar{x}$ = 3.52).	American risk perceptions were in three dimensions: **(1) Socio-economic Risk ($\bar{x}$ = 2.92):** • travelling to South Africa may be more expensive than travelling to other tourism destinations ($\bar{x}$ = 3.29) • international travel to South Africa may negatively impact their financial situation ($\bar{x}$ = 3.09) **(2) Psychological Risk ($\bar{x}$ = 2.96):** • travelling to South Africa for tourism, making tourists worry ($\bar{x}$ = 2.96) • the thought of travelling to South Africa for tourism, makes them feel uncomfortable ($\bar{x}$ = 2.96). **(3) Physical risk ($\bar{x}$ = 3.47):** • primarily based on the risk of infectious diseases possibly influencing their decision to travel to South Africa ($\bar{x}$ = 3.63) • proper sanitation and hygiene in South Africa being more important than ever ($\bar{x}$ = 3.56).
Travel Intention	**(1) Likely to travel to South Africa ($\bar{x}$ = 3.78):** • indicating planning to travel to South Africa in the near future ($\bar{x}$ = 3.89) • whenever they can travel, they will travel to South Africa ($\bar{x}$ = 3.77).	**(1) Likely to travel to South Africa ($\bar{x}$ = 2.74):** • they would actively recommend people they know to visit South Africa ($\bar{x}$ = 2.84) • whenever they can travel, they will travel to South Africa ($\bar{x}$ = 2.79).

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MULTIPLE REGRESSION

	Unstandardised coefficients		Standardised coefficients		
	B	Std. Error	β	t-value	Sig.
USA - 2022					
Socio-Economic Risk →Travel Intention	-.132	.081	-.155	-1.628	.105
Psychological Risk →Travel Intention	.370	.069	.429	5.331	.001***
Physical Risk →Travel Intention	.050	.071	.056	.703	.483
USA - 2023					
Socio-Economic Risk →Travel Intention	.204	.085	.175	2.827	.005**
Psychological Risk →Travel Intention	-.112	.074	-.082	-1.515	.130
Physical Risk →Travel Intention	-.200	.068	-.177	-2.969	.003**

Statistical significance: *p <05, **p < 01, *** p < 001

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QUADRANT APPLICATION

LOW INTENTION TO TRAVEL

HIGH RISK

Apathetic-cautious travellers
- Requires significant resources
- Showcase SA as a destination and showcase how risks will be decreased/limited
- Changing perceptions will take time
- Intense marketing strategy and focus

HIGH INTENTION TO TRAVEL

HIGH RISK

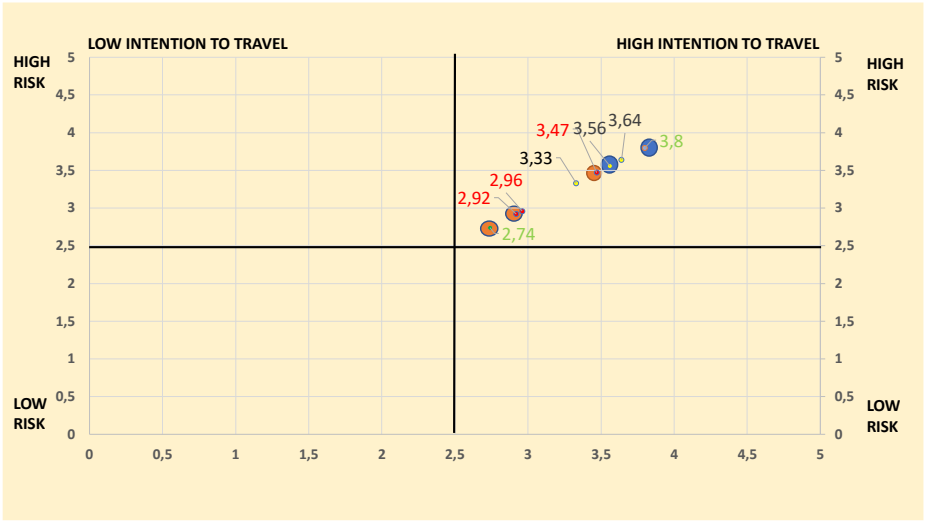
Enthusiastic-cautious travellers
- Willing to travel to SA
- Keep informed of strategies to keep them save
- Last-minute bookings
- Direct, updated information
- Stay in the mind of the American traveller

Apathetic-easy travellers
- Convince to travel
- Share information related to negative issues
- How will one improve their safety
- Advise on group travel

LOW RISK

Enthusiastic-easy travellers
- Willing to travel to SA
- Probably experienced travellers/repeat visitors
- Easiest to convince
- Sustain high levels of awareness of SA as a tourism destination

LOW RISK



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FINDINGS AND INTERPRETATION

- **High travel intention and High-Risk quadrant for American travellers to SA**
- **2022:**
  - US respondents were uncomfortable and drawn the disapproval of their social references groups like friends and family.
  - *Psychological risk* positively affected their likelihood of travelling to South Africa for tourism.
- **2023:**
  - *Psychological risk* was not influential to travel intention.
  - *Socio-economic risk* was influential because global economic forces may increase the financial risk associated with travel and tourism to South Africa. However, while the risk is inherent, currency fluctuations in South Africa (US dollar/Rand exchange) may mitigate the risk to the extent that it positively influences travel intentions (recommending others to travel).
  - *Physical Risk* had a negative influence on travel intention.

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FACTOR ANALYSIS

Factor	Items	Variance (%)	Factor Loading (>.50)		Cronbach Alpha (α)	Mean ($\bar{x}$)
			Min	Max		
2022 Data						
Place Brand Dimensions						
Governance & Resources	GOV1; GOV2; GOV4; IMM3; IMM4; INF1; INF2; INF3; INF4; PEO1	43.96	.595	.738	.901	3.70
International Relations	GOV3; PEO3; PEO4	8.01	.555	.705	.631	3.82
Immigration	IMM1; IMM2; PEO2	6.28	.516	.837	.693	3.77
Travel Intention	TRV1 -TRV4	64.33	.763	.822`	.815	3.80
2023 Data						
Place Brand Dimensions						
Governance	GOV1; GOV2; GOV4	1.84	.585	.872	.818	2.98
Public Infrastructure	1MM3; IMM4; INF1; INF2; INF3; INF4; PEO1	63.95	.608	.905	.944	3.05
People	PEO2; PEO3; PEO4	5.87	.895	.754	.876	3.35
Travel Intention	TRV1 -TRV4	83.69	.801	.932	.935	2.74

DESCRIPTIVE FINDINGS

	USA Market 2022	USA Market 2023
Place Brand Dimenisons	American Place Brand Perceptions were in three dimensions: **(1) Governance & Resources ($\bar{x}$ = 3.70):** • policing and safety from crime in South Africa ($\bar{x}$ = 3.80) • control and policy measures by the South African government to manage the COVID-19 pandemic ($\bar{x}$ = 3.79). **(2) International Relations ($\bar{x}$ = 3.82):** • perceptions of the acceptance of foreigners by South Africans ($\bar{x}$ = 3.85) • common language with South Africa ($\bar{x}$ = 3.84). **(3) South Africa's Immigration ($\bar{x}$ = 3.77):** • friendliness and helpfulness of South Africans ($\bar{x}$ = 3.84) • ease of immigration visa procedures when travelling to South Africa ($\bar{x}$ = 3.72) • the visa policy of South Africa towards the USA ($\bar{x}$ = 3.72)	American Place Brand Perceptions were in three dimensions: **(1) Governance & Resources ($\bar{x}$ = 2.98):** • control and policy measures by the South African government to manage the COVID-19 pandemic ($\bar{x}$ = 3.12) • the political situation in South Africa ($\bar{x}$ = 2.92). **(2) Public Infrastructure ($\bar{x}$ = 3.09).** • access to affordable medical treatment ($\bar{x}$ = 3.09) • quality of life in South Africa ($\bar{x}$ = 3.07). **(3) South Africa's People** ($\bar{x}$ = 3.35) • acceptance of foreigners by South Africans ($\bar{x}$ = 3.39). • friendliness and helpfulness of South Africans ($\bar{x}$ = 3.33) • common language with South Africa ($\bar{x}$ = 3.33)
Travel Intention	**Likely to travel to South Africa ($\bar{x}$ = 3.78):** • planning to travel to South Africa in the near future ($\bar{x}$ = 3.89) • if they have a chance to travel, they will travel to South Africa ($\bar{x}$ = 3.77).	**Likely to travel to South Africa ($\bar{x}$ = 2.74):** • indicating they would actively recommend people they know to visit South Africa ($\bar{x}$ = 2.84) • If they have a chance to travel, they will travel to South Africa ($\bar{x}$ = 2.79).

MULTIPLE REGRESSION

	Unstandardised coefficients		Standardised coefficients		
	B	Std. Error	β	t-value	Sig.
USA - 2022					
R^2=.564, (3,219)96.601, p=001					
Governance Resources	.600	.067	.543	8.986	,001**
International relations	.229	.069	.196	3.312	,001**
Immigration	.124	.067	.109	1.839	.067
USA - 2023					
R^2=.366, (3,496)96.954, p=001					
Governance	.233	.081	.179	2.891	,004**
Public Infrastructure	.418	.084	.326	4.945	,001**
People	.202	.070	.159	2.875	,004**

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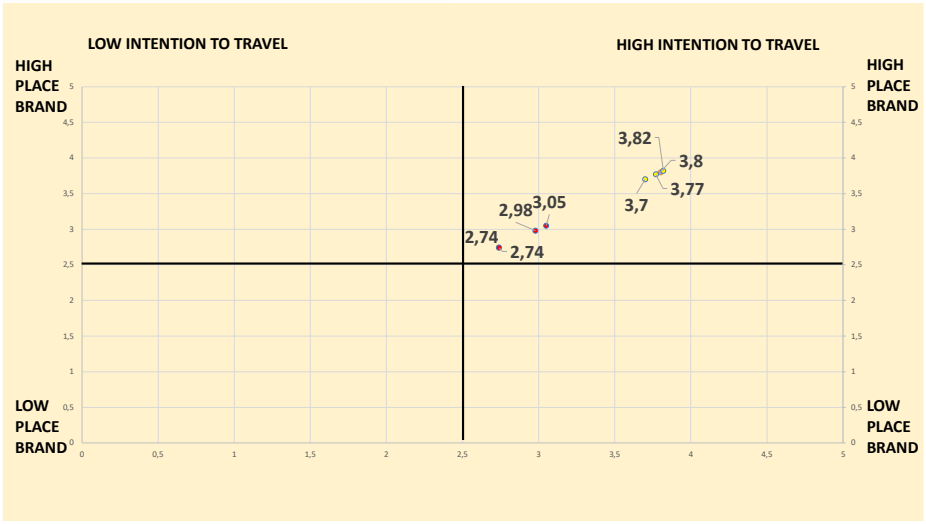

QUADRANT APPLICATION

LOW INTENTION TO TRAVEL

HIGH PLACE BRAND

Apathetic-brand lover travellers

- Market well in advance
- Showcase specials and opportunities
- Focus on the positive brand aspects
- Sell packages
- Make it easy

HIGH INTENTION TO TRAVEL

HIGH PLACE BRAND

Enthusiastic-brand lover travellers

- Positive image about SA
- Plan their trip in advance
- Repeat visitor
- Keep informed on what SA offers
- Bucket list approach will work

Apathetic-brand detached travellers

- Most difficult market
- Requires significant resources
- Changing brand perceptions will take time
- Intense marketing strategy and focus

LOW PLACE BRAND

Enthusiastic-brand detached travellers

- Convince on what SA can offer
- Build the image of SA
- Share stories of previous travellers

LOW PLACE BRAND

POINTS TO REMEMBER

STEP 1: Determine the current events in South Africa and/or globally

STEP 2: Develop/Adapt plug-ins and quadrants where needed based on scientific measures

STEP 3: Distribute the survey instrument either online or face-to-face

STEP 4: Data analysis in order to generate the scores to plot the factors on the quadrant

STEP 5: Interpretation and application

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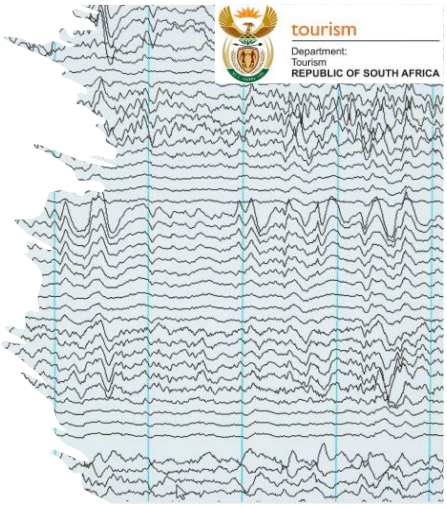
THANK YOU!



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