

TOURISM TAKES A HIT: THE DEVASTATING IMPACT OF TERRORISM ON ICONIC DESTINATIONS

Abstract

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Purpose – The purpose of this study is to examine the impact of terrorism on the tourism economy in 40 destinations and a total of 550 crises, based on the ranking of countries in terms of their economy and popularity.

Methodology/Design/Approach – The study employed a quantitative research methodology using multiple linear regression analysis to examine the key predictors of the impact of terrorism on tourism employment growth and tourist arrivals. The analysis considered various relevant variables, including the perceived attractiveness of destinations, to gain a comprehensive understanding of the issue at hand.

Findings – The findings confirm that the rankings of destinations as economically attractive and worth visiting plays an important role in determining tourist arrivals. Moreover, it was found that the type of tourism enterprises and tourists targeted by a destination can predict the growth of tourist arrivals after the crisis.

Originality - This study enriches the existing literature by highlighting the importance of destination ranking for post-crisis tourism growth and stability. It offers valuable policy recommendations and highlights the need to increase the resilience of tourism businesses through improved crisis management and security measures. In addition, destinations that rank lower in economic terms or as “must-see” places should place greater importance on crisis management capabilities.

Keywords Terrorism; tourism, destinations’ economic ranking, must-see places, tourist arrivals post-terrorism

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INTRODUCTION

Tourism significantly contributes to the global economy (World Tourism Organization, 2018), generating substantial revenue and providing employment opportunities worldwide, with 334 Million direct and indirect jobs in 2019 (ILO, 2022), representing 10.6 percent of total global employment. It plays an important role in promoting cultural exchange and generating foreign income for many nations (UNWTO, 2019). Tourism has become a key economic engine for emerging countries, driven by factors such as a strong destination image, attributes that make travel a priority, and mainly high levels of tourist satisfaction and loyalty (Haarhoff & De Klerk, 2019; Mohanty et al., 2021; Shekhar & Valeri, 2022; Woyo & Slabbert, 2020). These tourism destinations can maintain a competitive advantage, resulting in increased demand for their offerings and higher visitor numbers (Tan, 2017).

Therefore, it is imperative for destinations to understand the various factors that influence tourist behaviour and to actively work towards enhancing their competitiveness (Seraphin, 2017). This can include improving their tourism infrastructure, such as transportation, accommodations, and attractions, promoting their cultural heritage (Meskell, 2020), and developing a positive image through strategic marketing initiatives (Baggio & Sainaghi, 2011). By doing so, these destinations can not only attract more visitors but also sustain the growth of their tourism industry and generate economic benefits for the local community (Fountain & Cradock-Henry, 2020).

Despite its benefits, the tourism industry remains highly vulnerable to external factors such as natural disasters, health pandemics (Duro et al., 2021), political instability (UNWTO, 2020), and also terrorism (Liu & Pratt, 2017). The devastating impact of the latter is considered and justified as a significant threat to destinations worldwide (Korstanje, 2023; Polyzos et al., 2023). Acts of terrorism endanger tourists’ safety and inflict severe economic and reputational damage on these destinations (Afonso-Rodríguez, 2017; Seabra et al., 2020; Shoshani & Slone, 2008). The impact of terrorism on tourism can be extensive (Njoya et al., 2022), leading to a decline in visitor numbers (Beirman, 2020), a loss of revenue (Corbet et al., 2018; Njoya et al., 2022), and mainly a long-term negative perception that would require extensive recovery efforts (Feridun, 2011). These impacts may differ from one country or region to another according to factors mentioned in the literature related to terrorism and tourism destinations (Araña & Leon, 2008).

The contribution of this paper is to examine the fluctuating impact of terrorism on tourism destinations considering the ranking of the countries in terms of both their economy and their popularity over two decades from 2001 to 2021.

1. LITERATURE REVIEW

The literature on the impact of terrorism on the tourism industry has grown significantly in recent years. Numerous studies have investigated the relationship between terrorism and tourism, exploring the short-term and long-term effects of terrorist incidents on tourist behaviour and the overall performance of the tourism sector. These studies have examined a wide range of factors that contribute to the resilience of destinations in the aftermath of terrorist attacks, including destination image, perceived safety, and the local economy. The following literature review aims to provide an overview of the existing research on terrorism and tourism, focusing on the impact of terrorism on the highest-ranked destinations. By synthesising the findings from previous studies, it also aims to shed light on the key factors that influence the resilience of destinations in the face of terrorism and to identify gaps in the existing literature that can inform future research.

1.1. Terrorism's Impact on Tourism

Numerous studies present terrorism's negative impacts on tourism destinations in general. Some of these studies approach the negative impact on demand (Buigut et al., 2022; Krajiňák, 2021; Seraphin, 2017), while others focused on the destination vulnerability under such man-made crises (Liu & Pratt, 2017), using tourism time series data over two decades (Kumail et al., 2021) to analyse the impact on tourism. These studies demonstrate the importance of understanding the effects of terrorism on the tourism industry and help to inform policy decisions that aim to mitigate the negative impacts of terrorism on tourism destinations.

Terrorist attacks in tourism destinations can take various forms, including conventional violence such as bombings and mass shootings, as well as more complex attacks that utilise technology and the internet (Brunst, 2010; Diemel & Sharan, 2010). Common types of terrorist incidents in tourism destinations include bombings and explosions, mass shootings and hostage situations, vehicle-borne attacks, chemical, biological, and nuclear attacks, and cyber attacks on tourist infrastructure (Arshad et al., 2018; Marsden, S., & Schmid, 2011). Other forms of terrorism, such as kidnapping and ransom demands, assassinations and targeted killings, maritime terrorism, suicide attacks, and hybrid attacks combining physical and cyber elements, must also be considered when understanding the nature of terrorist threats to tourism destinations. To ensure the safety and security of tourists, it is essential to have a comprehensive understanding of these various forms of terrorism and to develop effective risk management strategies.

Studies have shown that the more frequent and severe a terrorist attack is, the higher the perceived risk and, thus, reduced tourism demand and negative impact on the destination (Pereira et al., 2023; Pizam, 1999).

Terrorism, characterised by the commission of criminal acts targeting civilians or violating conventions of war, is a significant threat to tourism destinations (Mansfield & Pizam, 2006). The effects of terrorism can take various forms, including international, religious, ethno-nationalist, separatist, and state-supported terrorism (Hoffman, 2017). Religious terrorism, as exemplified by the Islamic State (IS) (Niyaz, 2010; Rehman, 2005), is a form of terrorism in which the perpetrator believes they are acting on behalf of a higher power (Martin & Pedahzur 2017). IS has been designated as a terrorist group by the United Nations (UN) and the European Union (EU) and seeks to exert religious, political, and military authority over all Muslim populations worldwide (Cockburn, 2015). Understanding the nature and motivations behind these forms of terrorism is crucial to developing effective risk management strategies and ensuring the safety of tourists in travel destinations (Agnew, 2010; Valeri, 2022a).

The impact of political instability, war, and terrorism on tourism has been extensively studied in recent decades. According to the World Tourism Organization (2018), safety has become a significant concern for tourists when choosing their destinations. The fear of terrorism and other violent incidents is particularly high due to their unpredictable, random, and involuntary nature (Coca-Stefaniak & Morrison, 2018; Sönmez, 1998). This perceived risk has been shown to have a negative impact on tourists' decision-making and buying behaviours, regardless of their nationality or cultural background (Seabra et al., 2018; Toanoglou et al., 2022; Valeri, 2022b; Yang et al., 2015).

Several studies have demonstrated the relationship between terrorism and tourism (Enders et al., 1991; Enders et al., 1996; Enders et al., 1992; Fauzel et al., 2021). A global decline in tourism demand due to terrorism and insecurity has been reported (Fourie et al., 2020). In regions such as Africa (Fauzel & Seetanah, 2021; Santana-Gallego & Fourie, 2020), the impact of terrorism on tourism has been studied in detail, as well as in notable cases such as the Arab Spring (Groizard et al., 2021), Kenya's turbulent situation between 2010 and 2015 (Masinde & Buigut, 2018), and the impact of insecurity on the African inbound tourism, considered with a higher extent while compared to other regions (Santana-Gallego & Fourie, 2020) The study by Santana-Gallego & Fourie (2020) has also emphasised the significant role of governments in addressing the issue, considering the indirect economic costs of insecurity, such as the loss of tourism demand. Studies, including the work of Buigut et al. (2022), have explored the direct impact of terrorism attacks on the Southeast Asian (SEA) region, with a particular focus on Malaysian tourism demand, along with investigating the negative and positive spillover effects of neighbouring terrorism-impacted destinations. Their empirical findings provide evidence supporting the notion that regional terrorism has a significant

influence on the destination, leading to both adverse and favourable outcomes for tourism demand. These studies establish a clear causal relationship between terrorism and tourism. However, according to Göktuğ Kaya et al. (2022), this causal relationship, specifically regarding tourism revenues is confirmed only in the long run for the case of Turkey.

The “memory effect” plays a crucial role in shaping tourists’ decision-making processes regarding perceived risks. This term refers to the psychological phenomenon where individuals alter their usual behaviour as a result of past experiences or information received (Shin, 2017). When it comes to terrorism incidents, the memory effect is heightened, as people tend to create a lasting memory after hearing about or experiencing such events (Seabra et al., 2020).

The impact of terrorism on tourists can be far-reaching, as it can increase the sensitivity between the initial memory tourists have of a destination and the latest image of the same location. This creates a persistent recollection of the memory effect, which can negatively affect their decision to travel to the affected area (Baggio & Sainaghi, 2011). The significance of the memory effect in shaping tourists’ decisions highlights the importance of maintaining a positive image and promoting safety and security measures to mitigate the impact of terrorism on the tourism industry.

Tourists generally seek destinations that offer a peaceful and tranquil environment for their holiday experience (Araña & León, 2008; Reisinger & Mavondo, 2005; Neumayer, 2004). The occurrence of frightening and violent incidents, such as terrorism, however, significantly deters tourists from visiting the affected destination (Lanouar & Goaid, 2019; Sönmez et al., 1999), as well as neighbouring areas, due to the spatial spillover effect (Isaac & Velden, 2018; Walters & Biermann, 2017; Radić & Barišić, 2018).

The impact of such events on tourism can be substantial, as evidenced by data from the Institute of Economics and Peace (2016), which showed that in 2015, countries without terrorism incidents against tourists had a tourism contribution to GDP of 3.6%, almost double the 1.9% contribution seen in countries with violent attacks. In some cases, the decrease in tourism GDP contribution following terrorism incidents has been found to be directly linked to an increase in the proportion of GDP spent on safety, security, and military expenditure (Santamaria, 2021). These findings highlight the importance of maintaining a peaceful and secure environment for the tourism industry, contributing significantly to a country’s economy. According to this, the existing research has primarily focused on examining the impact of terrorism on the economies of tourism destinations. However, a compelling area of research involves investigating whether destinations’ economic ranking can influence their vulnerability to terrorism. This leads us to the development of the first two hypotheses:

H1.1: Tourism destinations with stronger economies will exhibit higher resilience and experience a lesser decline in tourist arrivals post-terrorist attacks.

H1.2: Tourism destinations with stronger economies will exhibit higher resilience and witness a smaller decrease in the employment rate within the tourism sector following terrorist attacks.

Terrorism also affects the reputation of a destination. According to studies (Seabra et al., 2020; Shoshani & Slone, 2008), negative media coverage of terrorist attacks can create a lasting negative impression in the minds of potential tourists, leading them to avoid visiting the destination in the future. This was evident in the aftermath of the 2015 Sousse attacks in Tunisia (Brondoni, 2016), which severely impacted the city’s tourism industry, with many tourists cancelling their plans to visit. Similarly, the recent rise in terrorism in some countries in the Middle East, such as Egypt and Turkey, has decreased the number of tourist arrivals (Seabra et al., 2020). Incidents such as the bombing of a tourist bus near the Giza pyramids in 2018 (Reuters, 2018) and the bombing in Istanbul’s Sultanahmet district in 2016 (BBC, 2016) have had a damaging impact on the tourism industry in these countries, leading to a decrease in the number of tourist arrivals and a significant loss of revenue for the local economy (Brondoni, 2016; Chemli, 2018).

Moreover, terrorism can lead to increased costs for tourists and the tourism industry (Santamaria, 2021). Increased security measures, such as heightened airport security and police presence, can increase travel costs, making a destination less appealing to tourists (Fourie et al, 2020; Santana-Gallego & Fourie, 2020). Similarly, the cost of insuring against terrorist attacks can also increase, putting a burden on the tourism industry and making travel more expensive for tourists. Finally, terrorism can also have long-term effects on the development of the tourism industry. In regions affected by terrorism, investment in tourism infrastructure may decrease, leading to a lack of new hotel developments and other tourist facilities. Thus, it can result in a decline in the quality of the tourist experience and a reduction in the destination’s competitiveness. In some cases, the impact can be long-lasting and cause significant damage to a destination’s reputation, leading to a decline in tourism for years to come. In light of the significant impact that terrorism incidents can have on the tourism industry, it is crucial to understand the effects of such events on the most sought-after and popular destinations. Despite the numerous studies that have explored the impact of terrorism on the tourism industry, there is a lack of research examining the effect on top-rated and attractive destinations. This gap in literature poses a significant research question that requires exploration.

The question of whether the highest-ranked and most attractive destinations (“must-see destinations”) experience any significant difference in their popularity and attraction post-terrorism incidents is an important area of inquiry. Such an investigation will help to shed light on the impact variations for these top-rated destinations and provide insights into the tourism industry’s

resilience to terrorism incidents. By exploring this research question, the study aims to provide a deeper understanding of the impact of terrorism on the tourism industry and the role that must-see destinations play in shaping tourists' decision-making processes. Ultimately, the findings of this study will contribute to the development of effective strategies for mitigating the impact of terrorism on the tourism industry and promoting sustainable tourism development.

Taking into account the aforementioned literature that has predominantly examined the effects of terrorism on destinations, with specific attention to regional impact or differences, economic repercussions, and destination potential tourism development, there arises a clear research gap related to the evaluation of terrorism's impact considering the attractiveness and popularity of destinations. In light of this gap, more hypotheses are formulated:

H2.1: Tourism destinations of high popularity, commonly called must-see destinations, will demonstrate greater resilience and experience a lesser decline in tourist arrivals post-terrorist attacks.

H2.2: Tourism destinations of high popularity will demonstrate greater resilience and experience a lesser decline in employment rate within the tourism sector following terrorist attacks

1.2. Managing Terrorism

One of the major challenges in addressing the impact of terrorism on tourism destinations is comprehending the nature and risk of the threat (Beirman, 2020., Liu & Pratt, 2017). The various forms of terrorism in tourism locations range from conventional violence, such as bombings and mass shootings (Yaya, 2009), to more complex and unconventional attacks that incorporate technology and the internet. These forms can include bombings and explosions, mass shootings and hostage-takings, vehicle-borne attacks, chemical, biological, and nuclear attacks, and cyber-attacks on tourist infrastructure (Arshad et al., 2018; Chen & Li, 2020; Phelps, 2021). Terrorism can also take the form of kidnapping and ransom demands, assassinations and targeted killings, maritime terrorism, suicide attacks, and hybrid attacks that involve physical and cyber elements. Thus, comprehending the nature and modus operandi of these various forms of terrorism is crucial to developing effective risk management strategies and ensuring the safety and security of tourists.

The tourism industry and government organisations play a significant role in preparing for and responding to a terrorist incident. This involves developing emergency response plans, enhancing security measures, and collaborating with local law enforcement to ensure the safety of tourists. Furthermore, it is necessary to implement effective recovery and resilience strategies to help destinations recover from the impact of a terrorism incident as soon as possible (Laurence, 2014; Rose, 2009). Managing the impact of terrorism on tourism destinations is an important challenge for both the tourism industry and policymakers. Terrorism incidents can have significant and lasting effects on the local economy and the destination's reputation, leading to decreased tourist arrivals and reduced revenue (Njoya et al., 2022). Various strategies and measures have been proposed and implemented to address this issue, as outlined below.

One of the key strategies in managing the impact of terrorism in tourism destinations is effective crisis communication. It involves having a clear and consistent message and communicating with stakeholders, including tourists, media, and the local community, promptly and transparently (Chemli et al., 2022; Shoshani & Slone, 2008). Crisis communication can help mitigate negative perceptions and reduce the impact of terrorism on the tourism industry. Another strategy is the implementation of tourism recovery plans. This involves developing a comprehensive plan to restore the local economy and rebuild the destination's reputation after a terrorism incident. This may include measures such as marketing campaigns, improving infrastructure and tourist facilities, and supporting local businesses (Chen & Li, 2020; Phelps, 2021). In addition, enhancing physical security measures is also important in managing the impact of terrorism in tourism destinations. It entails implementing measures such as access controls, perimeter fencing, and enhanced surveillance systems to deter potential terrorists and increase the perception of safety among tourists (Phelps, 2021).

Stakeholder collaboration is also crucial in managing the impact of terrorism in tourism destinations. It comprises establishing partnerships between the tourism industry, local communities, and law enforcement agencies to develop and implement effective strategies to prevent and respond to terrorism incidents. Finally, promoting cross-border cooperation is important in managing the impact of terrorism in tourism destinations, such as sharing intelligence information and resources between countries to prevent the movement of terrorists and reduce the risk of attacks. Thus, managing the impact of terrorism in tourism destinations requires a multi-disciplinary approach that involves effective crisis communication, implementing tourism recovery plans, enhancing physical security measures, promoting stakeholder collaboration, and cross-border cooperation (Chemli et al., 2022). These strategies can help mitigate the impact of terrorism and support the recovery and sustainability of the tourism industry.

2. METHODOLOGY

The objective of this study is to examine the impact of terrorism on tourism destinations considering two potential predictors, the ranking of destinations (1) according to their popularity and attractiveness, and (2) according to the economic strength. By exploring the relationship between a destination's ranking and its susceptibility to the adverse effects of terrorism on its tourism industry, we seek to provide valuable insights into the complex dynamics at play.

To address the primary objective of this research, a quantitative research methodology was adopted. Data was gathered from publicly available sources such as government reports, tourism boards, academic studies, and mainly secondary sources field-related platforms. The data was analyzed using multiple linear regression to determine the relationship between the dependent variables (tourist arrivals and tourism employment growth) and the independent variables (mainly destination ranking and economic strength). The use of multiple linear regression was appropriate in this study to assess the collective impact of multiple independent variables (refer to table 1). The inclusion of both DVs is motivated by the identified research gaps highlighted in the reviewed literature.

2.1. Data Collection and Cleaning

The study uses secondary data from diverse sources. The main one is the ‘Global Terrorism Database’ (GTD) (START, 2022) and the GTD codebook. Other sources used are Worldbank (2021) and Our World in Data (2019) for employment growth and tourism GDP figures. Besides, the ranking of countries with must-see places referred to as must-see destinations, was gathered from World Economic Forum – Competitiveness ranking (2019). These sources collectively contribute to constructing the study’s final database, as presented in Table 1.

The study employs a comprehensive secondary data collection approach, utilising a multitude of sources to provide a thorough understanding of the research topic. The centrepiece of the data collection is the ‘Global Terrorism Database’ (GTD) maintained by the National Consortium for the Study of Terrorism and Responses to Terrorism (START) (START, 2022), in conjunction with the GTD codebook.

Table 1: Database sources’ compilation

Databases sources	Variables	Type of variable
Global Terrorism Database (START, 2022)	- Variance of employment growth of pre-and post-terrorist attack	Continuous
	- Target type (Business, Airports and Airlines, and Tourists)	Categorical
	- Nationality of the target (multinational or national)	Binary
	- Year of the attack	numeric
	- Month of the attack	numeric
	- Countries	Categorical
	- Success (whether the attack was successful)	Categorical
	- Attack type (Assassination, Hijacking...)	Categorical
	- Kidnapping, Barricade Incident, Bombing/Explosion, Armed Assault, Unarmed Assault, Facility/Infrastructure Attack, Unknown)	Categorical
	- Weapon type (biological, chemical, radiological, nuclear, firearms, explosives, fake weapons, incendiary, melee, vehicle, sabotage equipment, other or unknown)	Categorical
- Deaths	Continuous	
- Wounded	Continuous	
- Property damage (yes, no, unknown)	Categorical	
The-top-50-places-in-the-world (Bloom, 2019)	The ranking of countries with must-see places	Categorical
World Bank	The variance of GDP growth	Continuous
	The ranking of countries with GDP 2015	Categorical
Ourworld in data	Growth of tourists arrivals (year of the attack, year-1, and year+1)	Continuous

In addition to the GTD, other sources, the Worldbank (2021) and Our World in Data (2019), were also consulted to obtain data related to employment growth and tourism GDP figures. The World Economic Forum’s Competitiveness ranking (2019) was utilised to enhance further the accuracy of the study’s database. The final database synthesises all of these diverse sources to provide a comprehensive picture of the research topic. By integrating data from these diverse sources, the final database encompassed a total of 550 cases across 40 countries, extracted from an initial global list of 214,666 terrorism acts (Figure 1). This approach ensures a strong and representative analysis of the research topic.

Figure 1: Flowchart data cleaning, enriching and filters

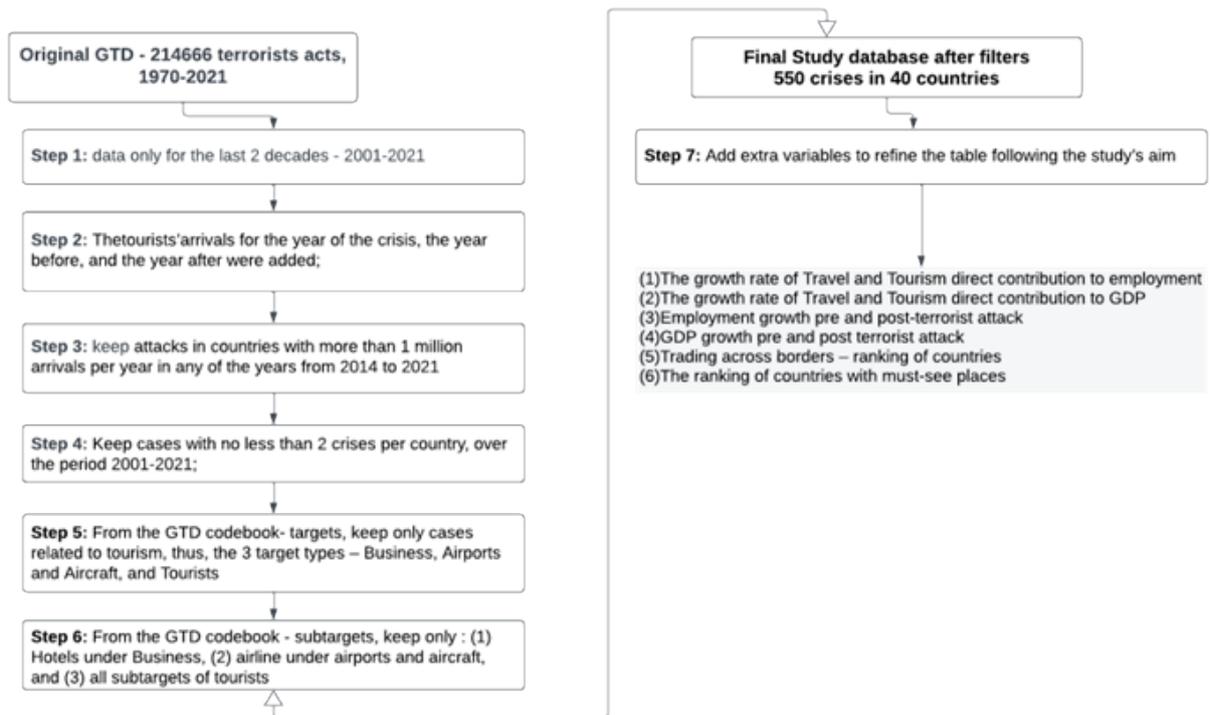


Table2: Database description

Countries	Crisis Frequency	Percent
Austria	4	0.7
Belgium	2	0.4
Brazil	1	0.2
Bulgaria	2	0.4
Cambodia	2	0.4
Chile	1	0.2
China	12	2.2
Colombia	67	12.2
Egypt	26	4.7
France	31	5.6
Germany	4	0.7
Greece	6	1.1
India	49	8.9
Indonesia	18	3.3
Iran	5	0.9
Ireland	2	0.4
Israel	11	2
Italy	6	1.1
Japan	3	0.5
Jordan	6	1.1
Kyrgyzstan	2	0.4
Lebanon	1	0.2
Malaysia	3	0.5
Maldives	1	0.2
Morocco	4	0.7

Countries	Crisis Frequency	Percent
Myanmar	16	2.9
Netherlands	2	0.4
Nigeria	18	3.3
Philippines	49	8.9
Russia	22	4
Saudi Arabia	14	2.5
South Africa	4	0.7
Spain	25	4.5
Sri Lanka	7	1.3
Thailand	37	6.7
Tunisia	5	0.9
Turkey	23	4.2
Ukraine	15	2.7
United Kingdom	29	5.3
United States	15	2.7
Total	550	100

2.2. Data Analysis

In this study, two multiple linear regression models were employed to test the four previously stated hypotheses. The dependent variables were (1) the Variance of employment growth of pre and post-terrorist attacks (VE) and (2) the growth rate of tourists' arrivals (GTA), taking into account the GTA crisis years if it occurred within the first six months, and the following year if it occurred after the sixth month. The independent variables were of various types, including continuous, ordinal, and nominal (as detailed in Table 3). Thus to test hypotheses H1.1, H1.2, H2.1 and H2.2, both rankings of countries representing the *IV2 – RCG* and *IV3-RCM* (Table 3) are concurrently considered.

Table 3: Models descriptions

Variables	
Dependent variables – DV1 and DV2	
DV1 (Y1) VE	Continuous variable - Variance of employment growth of pre and post-terrorist attack
DV2 (Y2) GTA	Continuous variable – Growth of tourists arrivals post-crisis (arrivals of the year of the event and the year before for crises until month 6 (June), and the year after for those from July to December)
Predictors	
<i>IV1 – VGG</i>	Continuous variable - the variance of GDP growth
<i>IV2 – RCG</i>	Categorical variable - the ranking of countries with GDP 2015
<i>IV3 - RCM</i>	Categorical variable - the ranking of countries with must-see places
<i>IV3 - TT</i>	Categorical variable - Target Type (Business, Airports and Airlines, and Tourists)
<i>IV4- Nkill</i>	Continuous variable - Number of deaths
<i>IV5 - Nationality</i>	Binary variable - Nationality of the target (multinational or national)
<i>IV6– NWounded</i>	Continuous variable - Number of injured
<i>N</i>	550 cases

To ensure the validity of the multiple linear regression results, several assumptions were tested using SPSS, including the absence of multicollinearity, homoscedasticity, normal distribution, and non-significance

3. RESULTS AND DISCUSSION

In this study, the assumption of multicollinearity was examined through the correlation table, using the tolerance and variance inflation factors (VIF) (Aguinis et al., 2013; Mansfield & Helms, 1982; Thayer, 2002). The results revealed two main predictor variables for VE and four for GTA. It was also noted that 99.4% of the variance of each independent variable in Model 1 was not accounted for by other independent variables. In Model 2, the tolerance values (Table 4) were found to be greater than 0.1 (ranging from 0.617 to 0.933), and the VIF values (ranging from 1.071 to 1.621) were less than 10, indicating that there were no multicollinearity concerns in both models (Mansfield & Helms, 1982). Furthermore, the Cook's distance (a measure of residual statistics) was found to be less than 1 for both VE (ranging from 0 to 0.321) and Model 2 (ranging from 0 to 0.080), indicating that no outliers were disrupting the models (Aguinis et al., 2013). The main predictors for VE were VGG and RCM, while for GTA, the predictors were RCG, VGG, TT, and RCM. The number of deaths and wounded during the attack was excluded from the model due to non-statistical significance.

Table 4: Multiple Linear Regressions - Variables in the Equations

Models		Unstandardized Coefficients		t	Sig.	Correlations	Collinearity Statistics	
		B	Std. Error			Part	Tolerance	VIF
1 a	(Constant)	0.818	0.571	1.432	0.05			
	VGG	0.77	0.32	24.155	0	0.722	0.994	1.006
	RCM	-1.94	0.82	-2.366	-0.018	-0.71	0.994	1.006
2 b	(Constant)	43658	267.401	0.163	0.05			
	RCG	0.143	0.42	3.404	0.01	0.171	0.617	1.621
	VGG	1.076	0.106	10.184	0	0.416	0.933	1.071
	TT	-2.375	1.026	-2.314	0.021	-0.099	0.842	1.187
	RCM	0.402	0.159	2.53	0.012	0.114	0.766	1.306
Adjusted R Square		0.532 (a) & 0.193 (b)						
F		306.808 (a) & 5.906 (b)						
N		550						
P<0.05								
a Dependent Variable: VE								
b Dependent Variable: GTA								

In the ANOVA analysis, the null hypothesis was tested and found to be statistically significant ($p < 0.05$). The F value was determined to be 306.808 with degrees of freedom of 2 and 538 for Model 1 and $F = 5.906$ with degrees of freedom of 21 and 519 for Model 2 (Table 5). These results led to rejecting the null hypothesis and the slope, implying that the models are statistically significant.

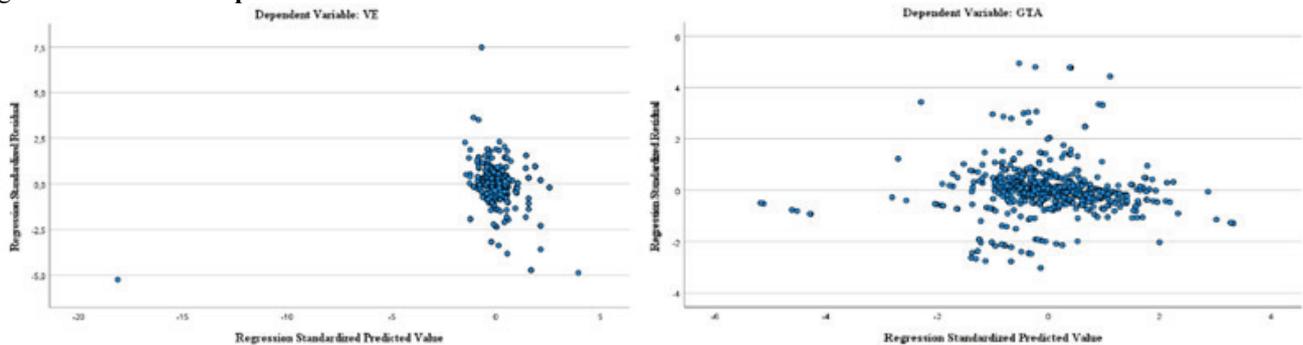
Table 5: ANOVA a. b

Models		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60397.267	2	30198.633	300.68	.000c
	Residual	52828.558	526	100.435		
	Total	113225.83	528			
2	Regression	36747.86	21	1749.898	5.906	.000d
	Residual	153787.5	519	296.315		
	Total	190535.36	540			
a Dependent Variable: VE						
b Dependent Variable: GTA						
c Predictors: (Constant), Difference of GDP growth, Countries with must-see places ranking						
d Predictors: (Constant), country, RCG, RCM, VGG, Nwounded, TT, nkill, Nationality, RCG						

The unstandardised coefficient (Table 4) represents the change in the DVs. For instance, for every one-point increase in VGG and RCM, the DV VE would be expected to change by 0.77 and -1.94, respectively. Similarly, for every increase in RCG, VGG, TT, and RCM, the DV GTA would change by 0.143, 1.076, -2.375, and 0.402, respectively. The Beta values indicate the impact of the IVs, after taking into account the influence of the other predictor variables. It can be seen that VGG, RCG, and RCM have a more significant effect and are more associated with changes in the DV GTA. On the other hand, for the DV VE, both predictors have a comparable impact.

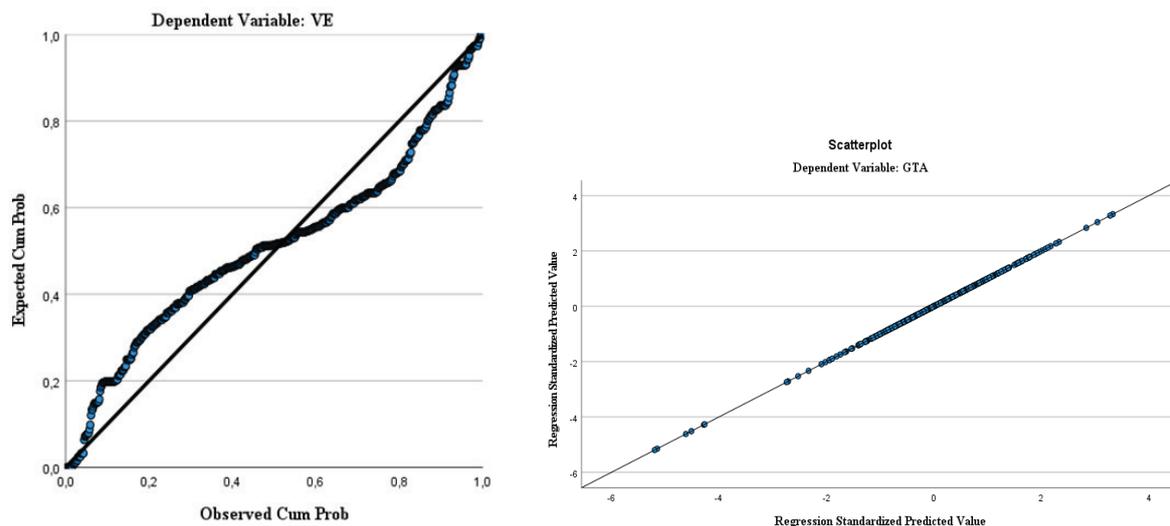
The Part value stating the unsquared values shows the variance, which will no longer be explained on the DV if we remove the predictor ones. Thus if we eliminate the variable VGG, the variance of the outcome GTA will drop by 40.8%, impacting more than any other predictors in the model, which is also consistent with the Beta values analysis. Similarly, if we eliminate RCM, the variance of VE will drop by 20.5%. This leads to assuming that the higher growth of GDP in selected countries as well as their higher ranking as must-see places (Forbes, 2019), consecutively lessens the impact of terrorism in terms of tourist arrivals growth (Vanneste et al., 2017; Walters et al., 2018) and raises the effects of terrorism in terms of tourism employment growth.

Figure 1a & 1b: Scatterplots M1 & M2 Z-Residual/ Z-Predicted



The examination of the probability/probability Plots (P-P plots) demonstrates that the distribution of the data points is closely aligned with the line for both dependent variables, and the residuals exhibit a pattern consistent with a normal distribution (as demonstrated in Figure 2). The scatterplot further attests to the absence of outliers near either axis, resulting in a desirable distribution shape. The points are evenly dispersed both above and below zero on the X-axis and to the left and right on the Y-axis. These findings provide evidence of homoscedasticity in the data (as depicted in Figure 1).

Figure 2a & 2b: Normal P-P Plt of regression standardised residual



The findings contribute to the growing body of literature on the relationship between terrorism and tourism. The results suggest that destinations with a stronger economy, as reflected by higher GDP growth, tend to experience a lesser impact of terrorism on employment growth in the tourism industry, supporting the hypothesis H1.2. Additionally, it is found that highly ranked must-see destinations exhibit lower resilience in the face of adverse impacts of terrorism on employment within the tourism sector, leading to the rejection of H2.2. Based on these findings, it can be inferred that although destination popularity enhances their resilience to terrorism in terms of tourists' behaviour, it does not guarantee the preservation of employment rates in the tourism industry. Regarding tourist arrivals, the results indicate that destinations that are highly ranked as must-see places and have a strong economy are more resilient to the impact of terrorism. Thus, the finding supports both hypotheses H1.1 and H2.1, providing evidence that these key characteristics influence the impact of terrorism on tourism.

Furthermore, the result enriches the causal effect between terrorism and tourism and expands upon previous studies (Feridun, 2011; Raza & Javaid, 2013; Araña & León, 2008; Neumayer, 2004; Lanouar & Goaid, 2019) by demonstrating that tourists' preferences for peaceful holidays may vary depending on the level of must-see appeal and economic strength of a destination. It also aligns with the findings of the Institute of Economics and Peace (2004) that terrorism has a significant impact on the economy, with a particularly pronounced effect on tourism employment.

CONCLUSIONS

This research builds on previous studies that have documented the negative impact of terrorism on various indicators of tourism success, such as the number of visitors, revenue generated by tourism, and employment in the tourism industry. However, this study goes deeper as it aims to investigate further how two key characteristics - the must-see appeal of the destination and the strength of its economy, as reflected by its GDP growth - might modify these impacts.

The effects of terrorism on the tourism industry are widely documented and can substantially negatively impact a destination's appeal and performance. The article concludes that destinations that are highly popular and attractive and have a robust economy, as indicated by a higher position on the Global Financial Rankings, tend to be less affected by terrorism when considering the tourists' arrival as an indicator. These destinations have the advantage of being able to recover from terrorism incidents more quickly due to their strong infrastructure and resources that enable them to address the situation and assure travellers of their safety. They often possess iconic attractions and rich cultural heritage that can still attract tourists despite incidents of terrorism. However, although destination popularity enhances their resilience to terrorism in terms of tourists' behaviour, it does not guarantee the preservation of employment rates in the tourism industry. Thus, while terrorism may significantly impact tourism, it is generally minimal and short-lived for destinations with strong economies and attractive features.

The reviewed literature delved into how terrorism affects the tourism industry and various destinations, the potential actions and reactions of tourists, and the impact of terrorism on different regions, as well as the higher vulnerability of some of them. This study goes a step further than previous researches (Fauzel & Seetana, 2021; Fouris et al., 2020; Santana-Gallego & Fourie, 2020; and Masinde & Buigut, 2018) by considering not only the impact of terrorism on these factors but also the ranking of the countries in terms of both their economy and their popularity as must-see tourism destinations. This approach introduces a new layer of analysis to the field, enhancing our understanding of the relationship between terrorism, tourism, and destinations ranking. It provides a more comprehensive perspective on the complex dynamics involved in these interrelated factors. Indeed, the study's findings point to the fact that those countries with a strong economy, such as France and the United States, and those considered to be 'must-visit destinations' due to their historical and cultural appeal, such as Egypt, experience less impact following terrorist attacks. Consequently, these countries continue to attract tourists even in the aftermath of such incidents. However, the findings also reveal that in countries with a weaker economy, the impact of terrorism on the growth of tourism employment is more pronounced.

Theoretical implications

These conclusions have significant theoretical implications, as they indicate that the impact of terrorism on tourism destinations is not uniform for all tourism destinations and is dependent on several factors from which mainly the ranking of destinations based on their popularity and economic strength. This creates a new theoretical connection between the impact of terrorism and tourism destinations, highlighting the importance of these factors in mitigating the effects of terrorism on the tourism industry. These findings can serve as a valuable reference for future research with data at national and regional levels, considering the strategies employed in the short term to respond to a crisis.

Policy recommendations

In light of this study's results and conclusions, three major policy recommendations are proposed for more resilience of destinations to terrorism and unforeseen events and aligned with the findings. Firstly, there should be recognition by all the stakeholders and mainly the Government on the impact of terrorism on tourism destinations and the fact that it is more pronounced for those with lower GDP. Thus there should be a focus on the economic stability of the country. This means implementing measures to ensure economic stability and avoid being fully tourism-dependent, especially for weaker economies. Second, it would be important to enhance the resilience of tourism businesses and work jointly with multiple stakeholders in the industry to strengthen their crisis management capabilities as well as their security. This could be done by both (1) implementing measures for enhancing security in tourism-related businesses and sites and (2) providing training and resources to tourism businesses to improve their security. Finally, prioritising security and crisis management capabilities in lower-ranked tourism destinations. To effectively address the threat of terrorism, it is crucial for all destinations, regardless of their ranking as must-see places, to enhance their security measures. However, lower-ranked destinations should particularly emphasise the importance of security and crisis management capabilities due to the potential severity of the impact of terrorist acts across various levels. As a strategic line of action, these destinations should prioritise allocating resources towards security infrastructure, training programs, and collaboration with stakeholders. By recognising and addressing these specific security challenges, lower-ranked destinations can better safeguard against terrorism and ensure the resilience of their tourism industry.

Study limitations and future research

The limitations of the study stem from its reliance on global data sources such as the World Bank and Global Terrorism Database as the main sources of data. The latter makes it imperative for future research to focus on collecting data from more local and specific sources to gain a more nuanced understanding of the impacts of terrorism on tourism destinations. Another limitation of the study is the use of country-level data for both terrorism incidents and destination performance. This study's generalisation may not accurately reflect the specific impacts of terrorism on individual city destinations within a country. Therefore, it would be more beneficial for future research to collect data at a city level to obtain a more accurate picture of the effects of terrorism on individual tourism destinations. Additionally, the use of cross-sectional data in the study may not provide a comprehensive view of the effects of terrorism on tourism destinations over time. Longitudinal studies that track the impacts of terrorism incidents on destinations over an extended period would provide more robust insights into the effects of terrorism on tourism destinations. The study's limitations highlight the importance of conducting future research incorporating more comprehensive and localised data to evaluate the effects of terrorism on tourism destinations accurately.

REFERENCES

- Afonso-Rodríguez, J. A. (2017). Evaluating the dynamics and impact of terrorist attacks on tourism and economic growth for Turkey. *Journal of Policy Research in Tourism, Leisure and Events*, 9(1), 56-81. <https://doi.org/10.1080/19407963.2016.1231196>
- Agnew, R. (2010). A general strain theory of terrorism. *Theoretical Criminology*, 14(2), 131-153. <https://doi.org/10.1177/1362480609350163>
- Aguinis, H., Gottfredson, R. K., & Culpepper, S. A. (2013). Best-practice recommendations for estimating cross-level interaction effects using multilevel modeling. *Journal of Management*, 39(6), 1490-1528. <https://doi.org/10.1177/0149206313478188>
- Araña, J. E., & León, C. J. (2008). The impact of terrorism on tourism demand. *Annals of Tourism Research*, 35(2), 299-315. <https://doi.org/10.1016/j.annals.2007.08.003>
- Arshad, M. I., Iqbal, M. A., & Shahbaz, M. (2018). Pakistan tourism industry and challenges: a review. *Asia Pacific Journal of Tourism Research*, 23(2), 121-132. <https://doi.org/10.1080/10941665.2017.1410192>
- Baggio, R., & Sainaghi, R. (2011). Complex and chaotic tourism systems: towards a quantitative approach. *International Journal of Contemporary Hospitality Management*, 23(6), 840-861. <https://doi.org/10.1108/09596111111153501>
- BBC. (2016, January 12). Turkey: 'IS suicide bomber' kills 10 in Istanbul Sultanahmet district. BBC News. Retrieved from <https://www.bbc.com/news/world-europe-35290760>
- Beirman, D. (2020). Restoring tourism destinations in crisis: A strategic marketing approach. London: Routledge. <https://doi.org/10.4324/9781003117148>
- Bloom, L. B. (2019). The top 50 Places in the World. Retrieved March 15, 2021, from <https://www.forbes.com/sites/laurabegleybloom/2019/09/04/bucket-list-travel-the-top-50-places-in-the-world/?sh=7dd479e20cfd>
- Brondoni, S. M. (2016). Global tourism and terrorism. Safety and security management. *Symphonya. Emerging Issues in Management*, 2, 7-16. <https://doi.org/10.4468/2016.2.02brondoni>
- Brunst, P. W. (2010). Terrorism and the internet: New threats posed by cyberterrorism and terrorist use of the internet. In Wade, M., & Maljevic, A. (Eds), *A War on Terror? the European Stance on a New Threat, Changing Laws and Human Rights Implications* (pp. 51-78), Springer. https://doi.org/10.1007/978-0-387-89291-7_3
- Buigut, S., Kapar, B., & Braendle, U. (2022). Effect of regional terrorism events on Malaysian tourism demand. *Tourism and Hospitality Research*, 22(3), 271-283. <https://doi.org/10.1177/14673584211021895>
- Chemli, S. (2018). Human-induced crisis-impacts on tourism and recovery progress. *관광연구*, 33(4), 113-134. <https://doi.org/10.21719/IJTMS.33.4.7>
- Chemli, S., Toanoglou, M., & Valeri, M. (2022). The impact of Covid-19 media coverage on tourist's awareness for future travelling. *Current Issues in Tourism*, 25(2), 179-186. <https://doi.org/10.1080/13683500.2020.1846502>
- Chen, T. J., & Li, J. (2020). Tourism crisis management: A review of literature and research agenda. *Journal of Hospitality and Tourism Management*, 43, 62-75.
- Coca-Stefaniak, A., & Morrison, A. M. (2018). City tourism destinations and terrorism—a worrying trend for now, but could it get worse? *International Journal of Tourism Cities*, 4(4), 409-412. <https://doi.org/10.1108/IJTC-12-2018-099>
- Cockburn, P. (2015). *The rise of Islamic State: ISIS and the new Sunni revolution*. Verso Books.
- Corbet, S., Gurdgiev, C., & Meegan, A. (2018). Long-term stock market volatility and the influence of terrorist attacks in Europe. *The Quarterly Review of Economics and Finance*, 68, 118-131. <https://doi.org/10.1016/j.qref.2017.11.012>
- De La Roche, R. S. (2004). Toward a scientific theory of terrorism. *Sociological Theory*, 22(1), 1-4. <https://doi.org/10.1111/j.1467-9558.2004.00199.x>
- Dienel, H., & Sharan, Y. (2010). *Terrorism and the Internet: threats, target groups, deradicalisation strategies*. IOS Press.
- Duro, J. A., Perez-Laborda, A., Turrion-Prats, J., & Fernández-Fernández, M. (2021). Covid-19 and tourism vulnerability. *Tourism Management Perspectives*, 38, 100819. <https://doi.org/10.1016/j.tmp.2021.100819>
- Enders, W., & Sandler, T. (1991). Causality between transnational terrorism and tourism: The case of Spain. *Studies in Conflict & Terrorism*, 14(1), 49-58. <https://doi.org/10.1080/10576109108435856>
- Enders, W., & Sandler, T. (1996). Terrorism and foreign direct investment in Spain and Greece. *Kyklos*, 49(3), 331-352. <https://doi.org/10.1111/j.1467-6435.1996.tb01400.x>
- Enders, W., Sandler, T., & Parise, G. F. (1992). An econometric analysis of the impact of terrorism on tourism. *Kyklos*, 45(4), 531-554. <https://doi.org/10.1111/j.1467-6435.1992.tb02758.x>
- Fauzel, S., & Seetanah, B. (2021). Assessing the Impact of Terrorism on African Tourism Demand. *Tourism Analysis*, 26(2-3). <https://doi.org/10.3727/108354221X16288738624441>
- Feridun, M. (2011). Impact of terrorism on tourism in Turkey: empirical evidence from Turkey. *Applied Economics*, 43(24), 3349-3354. <https://doi.org/10.1080/00036841003636268>
- Fountain, J., & Cradock-Henry, N. A. (2020). Recovery, risk and resilience: Post-disaster tourism experiences in Kaikōura, New Zealand. *Tourism Management Perspectives*, 35, 100695. <https://doi.org/10.1016/j.tmp.2020.100695>
- Fourie, J., Rosselló-Nadal, J., & Santana-Gallego, M. (2020). Fatal attraction: How security threats hurt tourism. *Journal of Travel Research*, 59(2), 209-219. <https://doi.org/10.1177/0047287519826208>
- Göktuğ Kaya, M., Onifade, S. T., & Akpınar, A. (2022). Terrorism and tourism: An empirical exemplification of consequences of terrorist attacks on tourism revenues in Turkey. *Tourism: An International Interdisciplinary Journal*, 70(1), 28-42. <https://doi.org/10.37741/t.70.1.2>
- Groizard, J. L., Ismael, M., & Santana-Gallego, M. (2021). Political Upheavals, Tourism Flight, and Spillovers: The Case of the Arab Spring. *Journal of Travel Research*, 61(4), 476-487. <https://doi.org/10.1177/00472875211002652>
- Haarhoff, R., & De Klerk, B. (2019). Destination South Africa: analysis of destination awareness and image by international visitors. *GeoJournal of Tourism and Geosites*, 24(1), 201-211. <https://doi.org/10.30892/gtg.24116-353>
- Hoffman, B. (2017). *Inside Terrorism*. New York: Columbia UP. <https://doi.org/10.7312/hoff17476>

- ILO. (2022). The future of work in the tourism sector: Sustainable and safe recovery and decent work in the context of the COVID-19 pandemic Report for the Technical Meeting on COVID-19 and Sustainable Recovery in the Tourism Sector. International Labour Organization. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/meetingdocument/wcms_840403.pdf
- Isaac, R. K., & Velden, V. (2018). The German source market perceptions: how risky is Turkey to travel to? *International Journal of Tourism Cities*, 4(4), 305-319. <https://doi.org/10.1108/IJTC-11-2017-0057>
- Korstanje, M. E. (2023). The Janus Face of Terrorism and Tourism: Terrorism as a Risk, as a Danger and as a Worry. In Seabra, C., & Korstanje, M. E. (Eds), *Safety and Tourism (Tourism Security-Safety and Post Conflict Destinations)* (pp. 103-115). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80382-811-420231006>
- Krajňák, T. (2021). The effects of terrorism on tourism demand: A systematic review. *Tourism Economics*, 27(8), 1736-1758. <https://doi.org/10.1177/1354816620938900>
- Kumail, T., Ali, W., Sadiq, F., & Khan, A. (2021). Nexus of Terrorism and Tourism: Empirical evidence from South Asian Countries. *Journal of Tourism Analysis: Revista De Analisis Turistico (JTA)*, 28(1). <https://doi.org/10.53596/jta.v28i1.376>
- Lanouar, C., & Goaid, M. (2019). Tourism, terrorism and political violence in Tunisia: Evidence from Markov-switching models. *Tourism Management*, 70, 404-418. <https://doi.org/10.1016/j.tourman.2018.09.002>
- Laurence, V. J. (2014). The politics of resilient cities: whose resilience and whose city? *Building Research & Information*, 42(2), 191-201. <https://doi.org/10.1080/09613218.2014.850602>
- Liu, A., & Pratt, S. (2017). Tourism's vulnerability and resilience to terrorism. *Tourism Management*, 60, 404-417. <https://doi.org/10.1016/j.tourman.2017.01.001>
- Mansfeld, Y., & Pizam, A. (2006). Tourism, terrorism, and civil unrest issues. *Tourism, Security and Safety*, 29-31. <https://doi.org/10.1016/B978-0-7506-7898-8.50005-9>
- Mansfield, E. R., & Helms, B. P. (1982). Detecting multicollinearity. *The American Statistician*, 36(3a), 158-160. <https://doi.org/10.1080/00031305.1982.10482818>
- Martin, S., & Pedahzur, A. (2017). Suicideteriorism theories. In *Oxford Research Encyclopedia of Politics*. <https://doi.org/10.1093/acrefore/9780190228637.013.579>
- Marsden, S., & Schmid, A. (2011). *Typologies of terrorism and political violence*. Routledge.
- Masinde, B., & Buigut, S. (2018). Effect of terrorism and travel warning on Kenyan tourism demand. *Tourism Analysis*, 23(2), 283-288. <https://doi.org/10.3727/108354218X15210313771322>
- Meskeel, L. (2020). Sites of violence: terrorism, tourism, and heritage in the archaeological present. In Meskeel, L., & Pels, P. (Eds), *Embedding ethics* (pp. 123-146). Routledge. <https://doi.org/10.4324/9781003085249-8>
- Mohanty, S., Mishra, S., & Mohanty, S. (2021). Destination attractiveness from the view of tourists-a case analysis on the temple city, Bhubaneswar, India. *Geo Journal of Tourism and Geosites*, 38(4), 1247-1255. <https://doi.org/10.30892/gtg.38432-766>
- Neumayer, E. (2004). The impact of political violence on tourism: Dynamic cross-national estimation. *Journal of Conflict Resolution*, 48(2), 259-281. <https://doi.org/10.1177/0022002703262358>
- Niyaz, A. (2010). Terrorism and extremism: a threat to Maldives tourism industry. *Unisci Discussion Papers*, 24, 221-231.
- Njoya, E. T., Efthymiou, M., Nikitas, A., & O'Connell, J. F. (2022). The Effects of Diminished Tourism Arrivals and Expenditures Caused by Terrorism and Political Unrest on the Kenyan Economy. *Economies*, 10(8), 191. <https://doi.org/10.3390/economies10080191>
- Our World in Data. (2019) Terrorism. Retrieved March 13, 2021, from <https://ourworldindata.org/terrorism>
- Pereira, A., Caldeira, A. M., & Seabra, C. (2023). Comprehensive Review of Physical Risk Perceptions. In Seabra, C., & Korstanje, M. E. (Eds), *Safety and Tourism (Tourism Security-Safety and Post Conflict Destinations)* (pp. 159-174). Leeds: Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80382-811-420231009>
- Phelps, M. (2021). The role of the private sector in counter-terrorism: a scoping review of the literature on emergency responses to terrorism. *Security Journal*, 34, 599-620. <https://doi.org/10.1057/s41284-020-00250-6>
- Pizam, A. (1999). A comprehensive approach to classifying acts of crime and violence at tourism destinations. *Journal of Travel Research*, 38(1), 5-12. <https://doi.org/10.1177/004728759903800103>
- Polyzos, S., Papadopoulou, G., & Xesfingi, S. (2023). Examining the link between terrorism and tourism demand: the case of Egypt. *Journal of Policy Research in Tourism, Leisure and Events*, 15(1), 69-87. <https://doi.org/10.1080/19407963.2021.1904965>
- Radić, M. N., & Barišić, M. (2018). Does terrorism have a limited impact on international investments in tourism? Some theoretical considerations. *Almatourism-Journal of Tourism, Culture and Territorial Development*, 9(17), 153-164.
- Raza, S. A., & Javaid, S. T. (2013). Terrorism and tourism: A conjunction and ramification in Pakistan. *Economic Modelling*, 33, 65-70. <https://doi.org/10.1016/j.econmod.2013.03.008>
- Rehman, J. (2005). *Islamic state practices, international law and the threat from terrorism: a critique of the 'clash of civilizations' in the new world order*. Hart Publishing.
- Reisinger, Y., & Mavondo, F. (2005). Travel anxiety and intentions to travel internationally: Implications of travel risk perception. *Journal of Travel Research*, 43(3), 212-225. <https://doi.org/10.1177/0047287504272017>
- Reuters. (2018, December 28). Bombing kills three Vietnamese tourists, Egyptian guide in Egypt. Reuters. Retrieved March 3, 2022, from <https://www.reuters.com/article/egypt-blast-idINKCN1OR1GF/>
- Rose, A. Z. (2009). A framework for analyzing the total economic impacts of terrorist attacks and natural disasters. *Journal of Homeland Security and Emergency Management*, 6(1). <https://doi.org/10.2202/1547-7355.1399>
- Santamaria, E. C. (2021). Terrorism and Tourism: Evidences from a Panel OLS Estimation. *Review of Economics and Finance*, 19(1), 107-115. <https://doi.org/10.55365/1923.x2021.19.11>
- Santana-Gallego, M., & Fourie, J. (2020). Tourism falls apart: How insecurity affects African tourism. *Tourism Economics*, 26(6), 899-918.
- Seabra, C., Kastenholz, E., Abrantes, J. L., & Reis, M. (2018). Peacefulness at home: impacts on international travel. *International Journal of Tourism Cities*, 4(4), 413-428. <https://doi.org/10.1108/IJTC-10-2017-0050>
- Seabra, C., Reis, P., & Abrantes, J. L. (2020). The influence of terrorism in tourism arrivals: A longitudinal approach in a Mediterranean country. *Annals of Tourism Research*, 80, 102811. <https://doi.org/10.1016/j.annals.2019.102811>
- Seraphin, H. (2017). Terrorism and tourism in France: the limitations of dark tourism. *Worldwide Hospitality and Tourism Themes*, 9(2), 187-195. <https://doi.org/10.1108/WHATT-09-2016-0044>
- Shin, Y. (2017). *Time series analysis in the social sciences: The fundamentals*. Univ of California Press.
- Shekhar, S., & Valeri, M. (2022). Evolving Themes in Dark Tourism Research: A Review Study. *Tourism: An International Interdisciplinary Journal*, 70(4), 624-641. <https://doi.org/10.37741/t.70.4.6>
- Shoshani, A., & Slone, M. (2008). The drama of media coverage of terrorism: Emotional and attitudinal impact on the audience. *Studies in Conflict & Terrorism*, 31(7), 627-640. <https://doi.org/10.1080/10576100802144064>
- Sönmez, S. F. (1998). Tourism, terrorism, and political instability. *Annals of Tourism Research*, 25(2), 416-456. [https://doi.org/10.1016/S0160-7383\(97\)00093-5](https://doi.org/10.1016/S0160-7383(97)00093-5)
- Sönmez, S. F., Apostolopoulos, Y., & Tarlow, P. (1999). Tourism in crisis: Managing the effects of terrorism. *Journal of Travel Research*, 38(1), 13-18. <https://doi.org/10.1177/004728759903800104>
- Tan, W. (2017). Repeat visitation: A study from the perspective of leisure constraint, tourist experience, destination images, and experiential familiarity. *Journal of Destination Marketing & Management*, 6(3), 233-242. <https://doi.org/10.1016/j.jdmm.2016.04.003>
- Toanoglou, M., Chemli, S., & Valeri, M. (2022). The organizational impact of COVID-19 crisis on travel perceived risk across four continents. *Journal of Organizational Change Management*, 35(2), 293-307. <https://doi.org/10.1108/JOCM-12-2020-0369>
- Thayer, J. D. (2002). Stepwise Regression as an Exploratory Data Analysis Procedure.
- UNWTO. (2019). World tourism day 2019. World Tourism Organization. Retrieved from <https://www.unwto.org/world-tourism-day-2019>

- UNWTO. (2020). Impact of the russian offensive in ukraine on international tourism. World Tourism Organization. Retrieved from <https://www.unwto.org/impact-russian-offensive-in-ukraine-on-tourism>
- Valeri, M. (Ed.). (2022a). Tourism risk: crisis and recovery management. Emerald Publishing Limited. <https://doi.org/10.1108/9781801177085>
- Valeri, M. (2022b). New governance and management in tourist destinations, IGI Global Publishing, Hershey PA.
- Vanneste, D., Tudorache, P., Teodoroiu, F., & Steenberghen, T. (2017). The impact of the 2016 terrorist attacks in Brussels on tourism. *BELGEO* (Leuven), 4(4). <https://doi.org/10.4000/belgeo.20688>
- Walters, G., & Beirman, D. (2017). Marketing the Middle East in times of political instability-The case of Jordan. *Tourism in the Arab World: An Industry Perspective*.
- Walters, G., Wallin, A., & Hartley, N. (2018). The Threat of Terrorism and Tourist Choice Behavior. *Journal of Travel Research*, 58(3), 370-382. <https://doi.org/10.1177/0047287518755503>
- World Tourism Organization (2018). Tourism highlights. Madrid: World Tourism Organization.
- Worldbank. (2021). GDP per Capita (n.d). The World Bank. Retrieved March 5, 2021, from <https://data.worldbank.org/indicator/NY.GDP.PCAP.CD>
- START. (2022). *Global Terrorism Database (n.d)*. GTD. Retrieved March 3, 2022, from <https://www.start.umd.edu/gtd/>
- Woyo, E., & Slabbert, E. (2020). Unpacking the motivations, satisfaction and loyalty of tourists travelling to a distressed destination. *Anatolia*, 31(4), 536-548. <https://doi.org/10.1080/13032917.2020.1794919>
- Yang, E. C. L., Sharif, S. P., & Khoo-Lattimore, C. (2015). Tourists' risk perception of risky destinations: The case of Sabah's eastern coast. *Tourism and Hospitality Research*, 15(3), 206-221. <https://doi.org/10.1177/1467358415576085>
- Yaya, M. E. (2009). Terrorism and tourism: The case of Turkey. *Defence and Peace Economics*, 20(6), 477-497. <https://doi.org/10.1080/10242690903105414>

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