

**AGE AS A GAME CHANGER: MODELLING ENVIRONMENTAL RISK
EFFECTS ON REVISIT BEHAVIOR**

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Abstract

Purpose: Through acknowledging behaviors that reduce environmental impact, this research is obliging in accentuate the significance of eco-tourism and other sustainable tourism approaches.

Methodology/Design/Approach: An empirical model has been developed to justify the extent to which environmental risk variables influence revisit intention. To facilitate greater comprehension of the study, demographic parameters have been incorporated into the model as a moderating component to determine whether age selection can alter visit intention when environmental risk factors remain. Utilizing a quantitative approach, the study employed SEM-PLS analysis to ascertain the findings.

Findings: While the threat of a natural disaster has an effect, the intention to revisit is unaffected by bad air quality. However, age clubbing does matter between these criteria and the decision to return. Some narrative shortcomings in Bangladesh's tourism industry have been addressed by the model, as discussed and detailed in the study's conclusion.

Originality of the research: This study conceptually constructs a framework and derives a proposed equation that links environmental risk (air pollution, natural disasters) to the outcome of tourists' intention to return. Furthermore, the model additionally looks for changes in the results by using demography (age) as a moderating factor between environmental risk and intention to return.

Keywords: Tourism, Environmental factors, Natural Disaster, Air Quality, Revisit Intention, Age.

1. Introduction

The effectiveness of travel destinations in global markets remains influenced by their relative level of local competition. Researchers studying tourism are becoming more interested in the topic of tourism destination competitiveness (Horaira et al.,2021). Globalization, volatile markets, intense rivalry, and a number of crises, in addition to the pervasive spread of networking and data technologies are just a few of the factors that have caused the marketplace and the corporate setting in the leisure industry and travel trades to change dramatically over the past three decades. Effectiveness of destination marketing considerations typically encompass a number of factors that influence how a destination is portrayed to potential travelers. Destination marketing organizations are typically focus on aspects that are thought to be tourist attractions (Sorokina et al., 2022). The elements that are thought to draw tourists are typically those that destination marketing companies focus on. Both sides are demand oriented consideration (Zhange et al.,2018). In addition to minimizing damage, properly managed tourism may actively preserve the destinations that people visit. In addition to being

a cause of climate change, tourism is also one of its many victims. Rising oceans, harsh weather, and ecological collapse are putting the very places that attract tourists from all over the world in jeopardy (Sanchez et al.,2015).

Tourism can help local communities, fund conservation efforts, and offer compelling incentives to preserve the environment and culture by generating revenue and increasing awareness. The economic worth of a place's biodiversity or natural beauty frequently serves as justification for its preservation. Therefore, it is crucial to observe that a location is primarily sustainable based on its ability to retain visitors and persuade them to return (Horaira et al.,2021). An all-encompassing, multi-organizational strategy for destination management organizations (DMOs) or marketing which, in order to succeed, need to synchronize the greatest endeavors of numerous associate businesses and people (stakeholders). An incessant, consecutive process are explained in all way for management of destination who promotes marketing along with other strategies through, whereby a DMO develops, studies, executes, oversees, and assesses programs that meet the requirements and desires of travelers as well as the vision, goals, and objectives of the destination and DMO. Quoted from Kotler on the essence of DMO; engages examination, forecasting, application, and management of initiatives intended to create desirable interactions with target audiences for both parties' benefit (Sorokina et al., 2022). In order to get responses, it mostly depends towards the acceptance and synchronization of creation, value, elevation, and location. Marketing management, then, is a commercial process that involves overseeing marketing initiatives. Decisions made by marketing managers are founded on a thorough understanding of marketing functions as well as a precise application of managerial methodologies and strategies. As a managerial process, this piece takes into account and synthesizes the available literature and marketing knowledge (Rahis,2019). Management and marketing of destinations are two fields of tourism research that are strongly tied to each other. In actuality, destination marketing plays a part in the broader framework of destination management. Synchronizing DMOs are in charge of managing the assets and resources related to tourism. Increasing and maintaining tourism flows in the destination is the primary goal of DMOs' marketing initiatives. Therefore, the DMO's marketing initiatives have a big impact on how effective destination management is (Sotiriadis, M. 2020).

Bangladesh is flattering as a prevalent tourist destination, and the country's economy has a lot of potential for growth owing to tourism, which contributes roughly 4.4% of GDP and \$391 million. (Parjatan Corporation of Bangladesh, 2019). Bangladesh's geographic location makes the tourism industry susceptible to a number of environmental hazards (Rahis,2019). Eco-friendly destinations are primarily at risk from environmental issues. Air emissions, natural disasters are some of the serious, risky environmental factors that govern tourists in return to the spot. Under the direction of the nation's disaster management authority, destination marketing organizations (DMOs) should anticipate the probable substances that ascend that lead to the demise of the new destination (Zhange et al.,2018). As far as the researchers are aware, and according to the associated concepts 9related gap, this paper sought to identify two significant environmental risk factors and determine how they affected the intention to return.

Additionally, a new dimension—age—was included as a moderating variable to determine whether age concerns during a return visit when environmental risk factors are present.

2. Literature Review

2.1. Environmental Risk and Intention to Revisit

Concerning tourism, environmental risk denotes the most possible harm that tourism-related activities may do to ecosystems, biodiversity, and natural resources. These hazards can result from a number of tourism-related activities, including building tourist amenities, using more energy and water, producing trash, polluting the environment, and harming delicate ecosystems. Analyzing the environmental dangers associated emissions in the vacation spot's attachment that is negatively associated and is one of the most crucial environmental risk that is frame worked of sustainable tourism development. (Wei et al 2023). Multiple studies have determined the extemporization features and significant variables influencing the environmental concerns connected to environmental risk. The consequences directed from Han et al (2023) initiate about risk as an important consideration in the tourism sector. Tasci and Gartner (2007) state that since tourism is a service-oriented business, its products are intangible by nature, making it susceptible to threats like crime, natural disasters, social unrest, and widespread sickness. These problems make it difficult for travelers to gauge how appealing a place is, and they frequently base their decisions more on perceptions than facts (Wei et al 2023). Consumer risk factor in tourism identification aids in the analysis of perception levels based on demographic profiles, which in turn supports marketing tactics aimed at the chosen target market and their positioning, claimed by Balsalobre et al., (2020). Findings portraits by Kusumawati et al. (2020) showed, environmental consciousness significantly influences travelers' intentions to return to a specific location. In order to more accurately predict visitor pleasure and behavioral intention, destination quality has been integrated with environmental risk factors were changed of behavioral pattern of tourist changes with risk management system as well (Wei et al 2023). Agreeing to recent research regarding risk dimensions on travel industry, tourists' insight of risk has been frequently summed up as environmental risk that has a negative impression on their target to return on a specific vacation spot. This multifaceted perception regarding risk in tourism primarily denotes to undesirable significances or harmful impression that possibly will ensue throughout travel (Gozgor et al.,2020).

In recent time, people have been paying swelling attention to risk on travelling along with ensuring of being safe. A quantifiable assessment of tourist safekeeping is being emerged as tourism risk assessment.

2.2. Air Emissions that shake the travel industry

Given that the vacation industry is frequently seen as a extremely vulnerable economic sector to environmental issues it is especially critical towards take into account the obstacles to industry expansion posed by air pollution and global warming, as well as the effects these factors have on the industry's appeal to tourists (Zikirya et al.,2021). Climate change has a significant and long-lasting effect on travel industry. Conferring to the United Nations World

Tourism Organization (2020), one of most prevalent threat to sustainable tourism is the variety of risks brought on by climate change, including global warming. Several academics contend that while formulating legislation, engaging in international talks, and providing international development assistance, the affect The implications of global warming on impoverished nations where vacation industry or tourism sector is the major industry essentially be fully taken into consideration (Scott et al.,2019; Wang et al.,2019).Concerns with air quality are becoming a significant obstacle to the growth of sustainable tourism (Zhou et al.,2019;Nepal et al.,2019). Bad air quality reduces people's desire to travel by posing a health risk, producing heavy fog, and obstructing the vistas provided by tourist destinations. The pollutant ozone has long been the cause of changing and unusual patterns in temperature, precipitation and natural disasters all over the globe (Crooks et al., 2022). This pollutant ozone is the result of severe pollution in the air that is growing drastically due to industrial emissions, road dust, transport emission, and overpopulation (Manisalidis et al., 2020 and Manucci & Franchini, 2017). Both long-term and short-term exposure to air pollution can trigger severe diseases like respiratory infections, lung diseases, and cardiovascular diseases, and people tend to avoid places where Air Quality (AQ) is degrading on a continuous basis (Boogard et al., 2019). Among the primary causes, of travellers that are travelling to any tourist spot, is to enjoy good environment quality, and Air Quality (AQ) is considered as one of the most important factors of good environment quality (Zhang et al., 2015). Visit to tourism destination like China, Egypt, and India is reducing at a concerning level due to deteriorating environment quality, especially the haze pollution is worsening the air quality which is now a growing concern for tourism-based cities (Chen et al., 2017). An investigation that was carried out, by Eusébio et al. in 2021 originated about good air quality, has a positive relationship with the traffic of tourists in the destination. The flow of tourists become low if the air emission increases in a region and the impact is bigger for the domestic tourists' arrival in the tourist spots, where air emission is in increasing trend (Zikirya et al., 2021).

2.3. Natural Disaster and intention to revisit

Natural catastrophes and tourism are mutually dependent. According to Francescutti et al. (2017), a natural catastrophe is defined as having severe aftereffects from a natural hazard, usually related to death, morbidity, and resource depletion. The tourism sector has a variety of roles during a crisis, but it is primarily important for providing information, communications, and emergency lodging for travelers, and accordingly effect the interest of the tourist the wish to reappearance towards similar terminus (Genc,2018; Wnag et al.,2018). In the study of Bauman (2020) tinted those negative effects of natural disasters can be severe, especially for the reputation of the place. Destinations with a rich cultural legacy are frequently at risk from natural disaster (Min et al.,2020), however, study also showed how natural catastrophes affect cultural resources and tourism are scarce, despite the fact that this is particularly important in cases where cultural destinations heavily depend on tourism for economic growth. Multiple factors, like urbanization, earthquake, sudden land slide destruction is importantly counted for natural disaster, especially in hilly or cultural heritage destinations (Min et al.,2020; Dhakal et al.,2020; Saini et al.,2020).

Travelers' intentions to reoccurrence to any famous vocational spot can be deduced through their attitudes or behavior, which subsequently affects in making choice to repurchase the travel assistance that offers a way to return, according to Simpson et al., (2020). In many tourist magnetisms, it is essential in regularly dividing the amount of guests in order to understand their inclinations to spend a lot of time at specific locations that offer them realistic and pleasant experiences. In the meantime, satisfaction leads to the intention to return. Rarely do tourists want to return to a place regardless of whether they are aware of the risks involved (Manci,2022).

2.4. Demography in tourism:

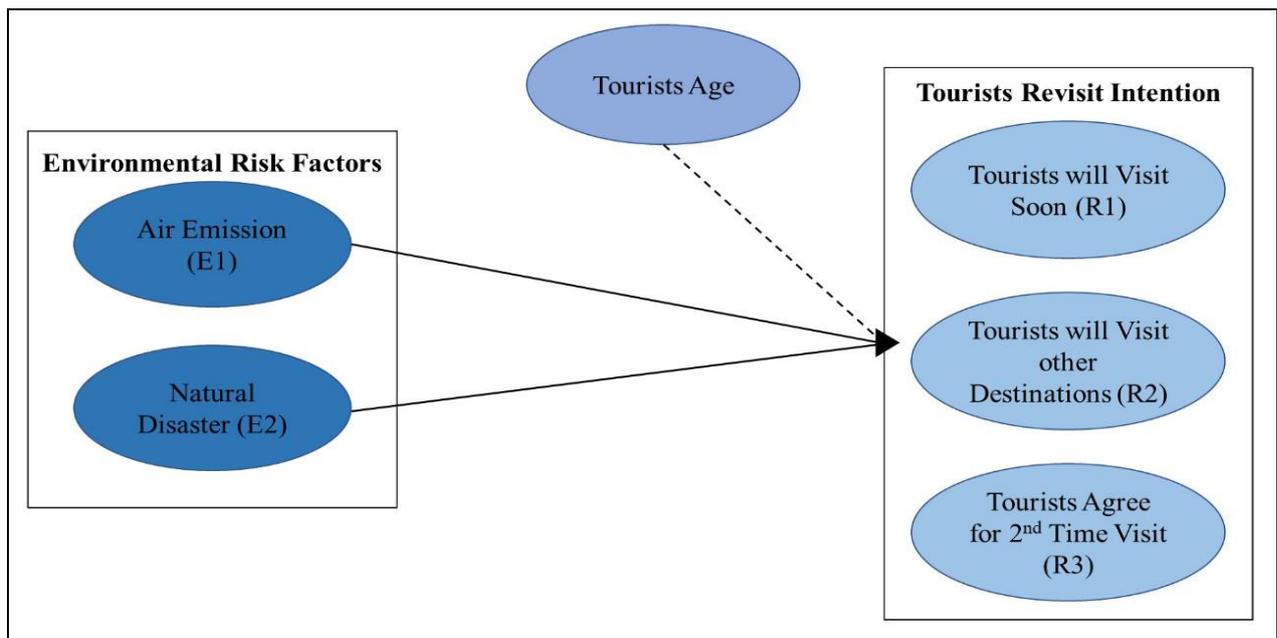
Demographic factors play a crucial influence in defining consumer experiences and subsequent behavior, creating a positive atmosphere that encourages return visits (Bak, 2020). One of the most crucial tools for determining how to satisfy clients from various demographics and foster consumer loyalty is demographic data. De Vos et al., (2022) asserts that careful consideration of tourist attributes is crucial and is often used to gauge visitor behavior, which is crucial for both market segmentation analysis and the strategic marketing effort that must be put into place. According to Acharya et al., (2023); Tourist characteristics include changes in the attributes of the tourists and their satisfaction with the destination of their choice, which includes information about the destination, length of stay, and group membership, as well as previous visit experiences. Rendering to a topical suggestion by the European Travel Commission and The World Tourism Organization (2010) on the topic of changing demographics and tourism, these changes present greater challenges for the enlargement of the business owing to the effects of participation from travelers' behavior (Morar,2021) Demographic shifts can both pose a risk and present opportunities (Federal Ministry of Economics and Technology Germany, 2009). Nevertheless, they have highlighted how shifting sociodemographic factors can affect the average population share, high life expectancy, family size, and population migration. It should be mentioned that demographic characteristics influence the choice to travel to a specific location and aid in determining whether or not to return there (Prideux and Glover, 2009). In the study of Chew and Jahari (2014), demographic features that have been noted as influencing factors to revisit a particular site include another significant variable as the manner of travel arrangements. When considering the place of origin, the unequal gender distribution may have the highest proportion rate of revisit intention; in these situations, however, elderly age also matters (Tosun et al., 2015). It can be considered that varied demographic aspects, such as age, result in different reviews for future plans to return. The most important and significant factors influencing the intention to return will be taken into account in this study, which is supported by the literature.

2.5. Conceptual Framework support to the study:

A conceptual structure serves as a textual or visual depiction of the connections between important ideas, variables, or aspects of a study. By defining the emphasis, laying out anticipated relationships, and offering a framework for analysis, it serves as a roadmap that directs the research process. In essence, it is a researcher's method of describing how they view

the study problem and the relationships among its components. It is a cohesive technique to extant the association concerning the notions of a learning that comes up with the determination which is also frequent to monitor in the manner through which an investigation will be carried out (Adom et al., 2018). Created on the benefits of exemplifying a framework of this particular study, existing research on environmental risks comparative to the holidaymakers’ revisit intention and also the moderating effect of demographic factor “Age” has been structured as follows -

Figure 1: Conceptual Framework



2.6. Study area

Srimangal is renowned as the tea capital of Bangladesh and is adorned with tea heaven, it is in Bangladesh's Sylhet Division, an upazila of the Moulvibazar District that lies southwest of the district and shares boundaries with the Indian state of Tripura to the south and Habiganj District to the west ("*Upazilar Potbhum*". Srimangal Upazila, 2019). In the meantime, Quraishi's (2019) study uncovered the economic benefit of empowerment derived from Bangladesh's ecotourism on the same destination. On a very recent study from Srimangal of Hafsa (2020) shows by improving the conservation of natural resources, maintaining culture and customs, and producing revenue locally, community-based tourism (CBT), is a mechanism that helps assure sustainable development. Srimangal is frequently in the top selections for tourists, who are willing to pay more if the destination is close to nature and the environment, according to Islam et al. (2015). Further Zannat (2022) also illustrated the drawbacks of tourists not deficient to stopover for a extended time since of the absence on the supportive environment they desire According to the assessment of existing literature on Srimangal, there are some gaps that relate to the growth of Bangladesh's tourism sector. Grounded on a appraisal of the prevailing literature, the authors of the current study have made an effort for the first time to identify the

elements that can truly influence a visitor's intention to return to the same location. This is because the most crucial element for a sustainable tourism development is the intention to return, and destination sustainability serves as essential for this.

2.7. Hypothesis Development

From the significant research gap on the body of literature that combines environmental risk concerns with Bangladesh's distinctive tourism destination, the following null hypothesis has been made. However, H3 has been formulated from recommendation of further studies (Indiani et al., 2024) in order to know the consequences of age in terms of intention to visit again when question comes of environmental risk (Sameroff et al., 1998). The following hypothesis emphasized the significance of the research's objective, which is to determine the range and to precise environmental danger (air emissions and natural disasters) threatens tourists' minds and influences their inclination to return to the study location. However, the choice of variables also aids in determining the extent of additional significance required for ecotourism or hilly tourism in Bangladesh. It is also expected from the study to evaluate the consequence of Srimangal's tourist influx contribution to economy of Bangladesh.

2.6.1: H1: Threats of natural disasters and plans to return to SriMamgal are not significantly correlated.

2.6.2: H2: The intention to return to Srimangal is not significantly correlated with poor air quality.

2.6.2: H3: Demographic characteristics (age) have no discernible moderating influence on environmental risk variables and inclination to return to Srimangal.

3. METHODOLOGY

3.1. Instruments and Sampling

Two bilingual individuals who speak Bangla and English fluently were used to administer a selfstructured questionnaire that was initially created in English and then translated into standardized Bengali language. The questionnaire was structured with the two scales of environmental risk (air emissions and air quality) to inspect in what extent does it touch towards aim to revisit. The scales were created based on recommendations from advanced research (Nguyen et al., 2020; Min et al., 2020; Chen et al., 2017) focusing on most popular destination hub situated (research gap) based on the research's solid understanding. The non-probability technique of the sampling recognized as purposive sampling, also known as judgmental sampling, was jumble-sale to collect all data for this investigation. It entails picking respondents depending through the assessment on the benchmarked set by the researcher as suitable towards a given study (Tauhid, 2019). Because it is inexpensive and gives plasticity in choosing defendants that are particularly pertinent towards a particular study, this sampling approach was employed (Andika et al., 2017). The focus of this study is descriptive.

3.2. Data collection and sample size

Target respondents that have been set to collect data on this particular research are Bangladeshi male and female income-oriented respondents, that showed up at the survey location. Additionally, they come from a variety of professional backgrounds and consented to participate after being informed of the goal of the inquiry. As per the sample size detector Rawosoft that is widely used in descriptive research (Jamal et al.,2024) has detected sample size as 385 with 100% respondents' accuracy.

3.3. Statistical approaches

Cronbach's alpha was employed to guarantee validity and reliability because of being careful along with the well-regarded knowledgeable regarding rejoinders in addition to the necessity for genuineness in data collection (Vaske et al.,2024). Discriminant validity is checked due to examine the degree to which one test is unrelated to another that assess distinct constructs through HTMT approaches (Afthanorhan et al., 2021). Meanwhile, the bootstrapping method has been chosen used to test the hypothesis. For the SEM model and the aforementioned statistical study, PLS 3 statistical software was utilized.

4. RESULTS AND DISCUSSIONS

4.1. Demographic screening

Considering the audience perspective on 385 final defendants, the demographic table indicates relatively little difference between the male and female percentages, with the females dominating the table at 56% and the males at 44%. The second-highest income group is clubbing, with 46% (BDT:2100040000), 30% (BDT:41000-to-above), and 24% (BDT:8000-20000). Lastly, the age clubbing survey indicates that individuals between the ages of 18 and 40 rule the table with 65% and 35%, respectively, for those aged 41 and up.

4.2. Reliability and validity

Reliability is measured in order for evaluating every fitness from any tool to transport results that is consistent in continuation under some situation. Churchill Jr (1979) explained reliability as the degree to which the tool is measured without any kind of mistake and that is randomly which results the appropriateness of used variables continuously and also supported by Markovic et al. (2017), where the threshold limit begins from 0.7 and above. Figure 2 demonstrates reliability analysis where the dimensions of the paper are well-suited within the threshold limit.

Figure 2:Reliability Analysis

Dimensions	Item	Outer Loading	Cronbach's alpha
		Environmental risk	Revisit Intention

Environmental risk	E1	0.781	0.701
	E2	0.772	
Revisit Intention	R1	0.772	0.712
	R2	0.780	
	R3	0.780	

* Note: E1: natural disaster; E2: air emissions. R1: will visit soon, R2: over other destinations, R3: agree for 2nd time visit.

On the other hand, Fornell and Larcker (1981) assert that the scale validity that is discriminant, proves the measure's independence from other notions to which it should not be related. The Heterotrait-Monotrait Ratio of Correlation Criterion (HTMT), developed is employed by Heseler et al. (2015) to assess discriminant validity. Heterotrait-hetero method correlations, or HTMT, are demarcated as average correlations between items across constructs, Comparing the average correlations between items measuring related constructs to their logical mean value (Franke et al., 2019) that match its demand by establishing discriminant validity since the threshold limit is less than 0.09 (Franke et al., 2019) in the Figure 3.

Figure 3:HTMT Model

	Environment Risk Factors	Intention to Revisit
Environment Risk Factors		0.060
Intention to Revisit	0.62	

4.3. Hypothesis testing

4.3.1: SEM Model

A well-established multivariate analysis method in the social sciences, partial least squares structural equation modeling (PLS-SEM; Hair et al., 2022) has been used to regulate the

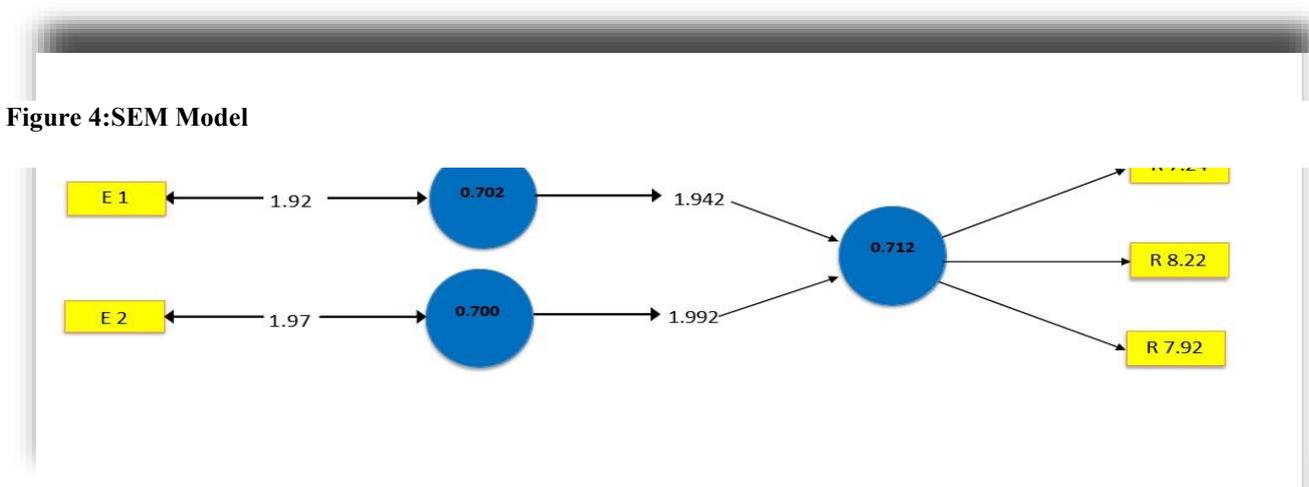


Figure 4:SEM Model

influence of contacts amid various components. It appraises an endogenous variable's degree of dependence on external factors and examines the significance of different hypotheses using route estimation (Hair et al., 2010). SEM utilizes all of the measurement model's attributes while investigating the impact link between various constructs (Fan et al.,2016). Figure 4 displays the results of SEM for Hypotheses 1 and 2, which are also described in Table 1, done through the Bootstrapping method.

H1: Threats of natural disasters and plans to return to Srimamgal are not significantly correlated

H2: The intention to return to Srimangal is not significantly correlated with poor air quality.

Table 1:Hypothesis Results (Significance Level at 0.05)

Particulars	R2	Path Coefficient (β)	T statistics (p Values)	Result
H1: Threats of natural disasters and plans to return to SriMamgal are not significantly correlated	0.232	0.04	1.942	Accepted
H2: The intention to return to Srimangal is not significantly correlated with poor air quality.	0.448	1.907	1.992	Rejected

Table 1's hypothesis results indicate a minor indifference to both hypotheses. According to Nakagawa et al., (2017) the amount of effect (coefficient determination) in H1 and H2 is 0.232/23% where the alteration from endogenous variable (revisit intention) is weekly explained by the size of the exogenous factors (natural disaster) and moderately explained towards air emissions as 0.448/45%. However, Path coefficient (β) explains the weak impression of reenter intention headed for natural disaster (0.04) and good impact of air emission (1.907) towards revisit intention. H1 shows that β value is less than 0.1 and T-statistic is less than 1.96 as (0.04/1.942) respectively. According to Mueller et al., (2018) the values referred as threshold limit of β and T-statistics, the made null hypothesis is acknowledged at a higher implication level of 0.05. For H2 β value more than 0.1 and T-statistics is more than 1.96 as (0.242/1.991) on the significant level of 0.05, null hypothesis is disallowed, and so for what, alternative is recognized (Ringle et al.,2014).

4.3.2. Moderation Analysis

Understanding the circumstances that lead to an association between independent and dependent

variables is possible through the use of moderation analysis. (Fairchild et al., 2009). According to Hair et al. (2010), a moderation inquiry genuinely examines the contextual relationship between two variables and explains how this relationship changes when a third variable is introduced. In order to understand the effect of moderation when demographic characteristics (age) are introduced as a third variable, the current study examines the effect on the selected environmental risk factors (air emissions and natural disasters) for revisit intent. However, through the Bootstrapping method in PLS3, hypothesis 3 has been analyzed in Figure 5, as defined in Table 2.



Table 2: Moderation Hypothesis Result (Significance Level at 0.05)

Particulars	R2	Path Coefficient (β)	T statistics(p Values)	Result
H3: Demographic characteristics (age) have no discernible moderating influence on environmental risk variables and inclination to return to Srimangal	0.60	0.22	1.96	Rejected

In accordance with the model presented in Figure 5 and Table 2 explains that the null hypothesis is rejected. The model's R2 assessment of 0.60 explains on demographic factor (age) accounts for 6% of the good variance of revisit intention, which is a good effect size in moderation (Henselor et al., 2015). This indicates that the values are well-fitted in terms of a good sample size. T statistics is 1.96 higher or equal to 1.96 on the significant level (0.04) less than the necessary significant level 0.05; the path coefficient (β) indicates that the value is 0.22 more than 0.01 (Çikrıkci, 2016).

5. CONCLUSIONS

Not only does tourism leave its mark, but it frequently left scars. As we've discussed, unrestrained tourism can harm the very places visitors come to see, even as travel can boost local economy and conservation efforts. Let's investigate this further. Travelers' Their assessment of the peril of the destination directly influences their likelihood to make a purchase. Visitors are more vulnerable to risks because of the imbalance between the objective reality and of knowledge about tourist protection and their idiosyncratic perception. Tourists must possess a particular level of information about the destination environment due to the inevitable risks associated with tourism. The main essence of this research was to look into whether environmental risks are, like air emissions and natural disasters influence the intention of the tourists to revisit Srimangal, a flagship ecotourism destination in Bangladesh. The result of this study shows that air emission works as a negative stimulus for tourists' revisit intentions which adheres that tourist are more cautious about the air pollution and environmental degradation when it comes to go to a tourist attraction. However, the factor natural disaster remained less influential in tourists revisit intentions to the selected destination. The reason behind this could be the low frequency of natural disasters happening in Srimangal.

The moderation analysis suggests that the age of the tourists significantly modifies the connection among the environmental risk that directs their intention to revisit the tourism spot. The consequence indicates about tourists of different age groups evaluate environmental risks differently when considering a return visit to the flagship destination.

The outcomes of particular analysis are crucial for stakeholders like destination management organizations, policy makers, environmentalists, and local government to execute if it has not been previously maintained. To maintain the ecological integrity of Srimangal, prioritizing air quality monitoring, pollution control, and effective environmental campaigns is central (Masum et al., 2020). When it originates to tourism, stakeholders are people or organizations that have the power to influence or be influenced by the growth and operations of the industry. They include visitors, local communities, companies, governments, and non-governmental organizations, among many other institutions. For the growth of environmentally conscious and environmentally friendly tourism, it is essential from comprehending the various viewpoints with the interests from different stakeholders. ways by stakeholders in the industry, such as governments, corporations, and local communities. Together, they may influence the destination's identity, protect its environment and culture, improve the experiences of tourists, and guarantee that tourism boosts the local economy. This cooperative endeavor may entail official alliances, unofficial agreements, and bolstering regional democratic frameworks (Rachmawati et al.,2020).

Tourism sector is particularly vulnerable as there are effects of natural disasters in comparison to other economic sectors (Quesada et al.,2025). Accordingly, to properly position and consolidate the tourism industry, action plans and strategies have been built around the foundational framework for tourism crisis management (Faulkner, 2001). Numerous studies have examined and assessed risk and catastrophe management in the travel and tourism sector,

encompassing various levels of management. Tourism stakeholders should emphasize on strategic implementation of targeted communication of environmental safety and sustainability efforts to the tourists that reassure tourists trust and intention to revisit (Bhattacharyya et al. 2024). Every detrimental effect from the natural calamities must be lessened. People start to view the environment more scientifically and rationally as socioeconomic development progresses, and authorities react to environmental risks in a more sensible manner and (Gálvez et al., 2021). Disaster management is seen as a successful tactic and a crucial component in reducing any disaster's detrimental effects (Oktari et al., 2020).

Promoting environmentally friendly modes of transportation, fostering conscientious travel, and improving waste management techniques are the main ways to improve air quality in ecotourism (Zhang et al., 2015). Additionally, give eco-friendly lodging first priority, make green space investments, and educate the public about the value of clean air (Zhu, 2018). Tourism is significantly impacted by air pollution, which affects visitors' experiences and reduces their likelihood of returning. Reduced outdoor activities, health issues, and poor visibility are all consequences of high pollution levels. Although sustainable activities can assist to mitigate the impact, tourists' transportation choices contribute to air pollution (Junhui, 2018). Travelers should look at the quality of the air, take eco-friendly transit, and book eco-friendly lodging.

Making wise mobility choices is essential to reducing our environmental impact and enhancing air quality. (Becken et al., 2017; Liu et al., 2019). By reducing the number of cars and electric vehicles on the road, the adoption of sustainable modes of transportation, such public transportation, can significantly reduce individual carbon footprints (Wu et al. (2018). Travel behavior, intention, and destination selection are all likely to be positively impacted by good air quality (Zhou et al., 2018; Yan et al., 2019). Visitors with varying travel goals exhibit differences; those who go for leisure and sightseeing express a significantly greater concern about miasma contamination than folks who travel either to work, either to see friends and family. resulting in haze-dependent visual conditions that reduce the possibility of future travel to the locations (Wu et al., 2018; Pant et al., 2018).

5.1. Limitations of the study:

This research is subject to a couple of restrictions that might be taken into consideration from the interpretation from the fact findings. First, all records that are collected for the purpose of analyzing suitable on this study, was taken only from the local tourists within Bangladesh, and the international visitors where not take into consideration warning the adaptability of the results. Second, as certain nature taken into account as cross-sectional, it restricts the ability to deduce the cause-and-effect relationships to track evolving perceptions of the tourists over time.

5.2. SCOPE OF ADVANCE RESEARCH:

To strengthen and validate the research model, further research could consider incorporating a comparative analysis involving international tourists, other less utilized but potential

moderators like education level, prior travel experience. Another crucial point for future study could be expanding the scope of the study to other eco-tourism regions in Bangladesh which could provide a broader picture of tourism behavior for a nuanced understanding of the environmental risk perceptions. Further this research paper could be used to compare similar studies of other regions or countries for advanced ramifications.

In conclusion, when Bangladesh is trying to position its tourism industry in a strong spot at global tourism, addressing environmental risks, specifically air emissions must be given priority in tourism development and policy. Effective strategies based on visitor demographics can portrait a significant impact, in improving tourists repeat visits, serving vacation industry places like Srimangal to succeed in the long run.

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