

# Tourism Patterns in Kashmir: Assessing the Impact of Threat-Related Events on Visitor Behaviour and Economic Growth

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## Abstract

Tourism in conflict-sensitive regions is highly vulnerable to fluctuations in perceived and actual security conditions. The present study examines the effect of terror-related incidents on tourist flow in Srinagar, Kashmir, and evaluates the consequent economic implications for local stakeholders. Using a quantitative cross-sectional research design, primary data were collected from 200 respondents, comprising 100 tourists and 100 residents whose livelihoods may or may not depend on tourism. Structured questionnaires were administered to assess perceived threat impact, business sustainability, risk perception, experiential safety, and loyalty intentions. Data were analysed using SPSS, including descriptive statistics, reliability analysis, correlation, and multiple regression. The findings reveal a significant negative relationship between perceived threat impact and business stability among local stakeholders, indicating that terror-related disturbances directly undermine tourism-dependent livelihoods. However, a notable perception–experience gap was identified among tourists. While a substantial proportion of respondents reported moderate to high safety concerns before their visit, the majority reported feeling secure during their stay and demonstrated strong revisit and recommendation intentions. Regression analysis further established that actual security experience and positive interaction with locals significantly predict tourist loyalty, outweighing the influence of pre-visit risk perception. The study highlights the paradoxical resilience of Srinagar’s tourism sector: although episodic instability disrupts tourist inflows in the short term, positive experiential outcomes help rebuild confidence rapidly. The results underscore the importance of managing destination perception alongside ensuring on-ground security. Strengthening crisis communication strategies and enhancing local-tourist engagement may be effective mechanisms to mitigate the adverse effects of terror-related incidents on tourism sustainability.

**Keywords:** Tourism risk perception, Security-related events, Tourist behavioural response, Regional economic growth, Tourism resilience

## 1. Introduction

Tourism plays a significant role in promoting regional economic growth, particularly in destinations rich in natural beauty and cultural heritage [1]. It generates employment, supports small and medium enterprises, and creates income opportunities for local communities [2]. The Kashmir Valley is one such destination where tourism has historically contributed to economic activity through hotels, houseboats, transport services, handicrafts, and other allied sectors. The region’s landscapes, gardens, lakes, and traditional culture continue to attract a large number of visitors, making tourism an important pillar of the

local economy [3]. Despite its strong tourism potential, the sector in Kashmir has frequently been influenced by threat-related events. Periods of unrest and violence create uncertainty in travel decisions and often result in sudden fluctuations in tourist arrivals. Such disruptions contribute to volatility in tourism demand, with visitor numbers declining sharply within a short time. Even temporary disturbances can reduce hotel occupancy, decrease tourist spending, and affect business continuity. As tourism has strong linkages with the broader economy, these changes directly influence regional economic growth and place pressure on households that depend on tourism income [4].

A key factor explaining these fluctuations is the perception of tourism risk. Tourists often make decisions based on how safe they believe a destination is, rather than solely on actual ground realities [5]. Social Media, travel advisories, and online discussions significantly shape these perceptions. When perceived risk increases, tourists may postpone their visits, shorten their stays, or choose alternative destinations [6]. This tourist behavioural response not only reduces overall arrivals but also alters the spatial distribution of tourism within the Valley, as visitors tend to concentrate in areas they consider safer [7]. As a result, economic benefits become unevenly distributed across different tourism zones. Although tourism resilience, the ability of a destination to recover from disruptions, is widely discussed in tourism research, limited studies have examined how security-related events, tourism risk perception, tourist behavioural response, spatial tourism distribution, and regional economic growth interact in the context of Kashmir. Therefore, this study aims to analyse these interconnected factors within a unified framework better to understand tourism patterns and resilience in the Kashmir Valley. The present study was conducted in Srinagar, the primary tourism hub of the Kashmir Valley and the summer capital of the Union Territory of Jammu and Kashmir, India. Srinagar has historically been one of the most visited destinations in northern India, renowned for its houseboats on Dal Lake, Mughal gardens, traditional handicrafts, and Himalayan landscape. However, the region has also experienced intermittent terror-related incidents that have periodically influenced tourist arrivals. This duality between natural beauty and geopolitical instability makes Srinagar an important case for examining how perceived and actual security conditions influence tourism flows and local economic sustainability.

## 2. Literature Review

The sensitivity of tourism to threat-related events has been well established in academic research. Early empirical work by Pizam et al. [8] demonstrated that terrorist incidents often lead to significant declines in tourist arrivals. Their findings showed that tourism demand reacts quickly to such shocks, though recovery patterns vary across destinations. Similarly, Seabra et al. [9] confirmed that terrorism has both immediate and longer-term effects on international tourism flows. These studies highlight the issue of tourism demand volatility in destinations exposed to repeated disturbances. Over time, scholars shifted attention from arrival statistics to the psychological factors influencing travel decisions. Yang et al. [10] described tourism risk perception as a multidimensional concept, including physical, financial, social, and psychological risks. They argued that perceived threats play a more important role in decision-making than objective risk levels. Supporting this view, Karl M. et al. [11] found that safety concerns strongly influence destination choice. In addition, Issac et al. [12] demonstrated that terrorism-related concerns significantly affect tourist behavioural response, including cancellation, postponement, and substitution of travel plans. Researchers have also examined the relationship between perceived risk, destination image, and loyalty. Rather et al. [13] found that higher perceived risk negatively affects destination image, which, in turn, reduces revisit intentions. Their later study [14] further confirmed that perceived tourism

risks significantly influence visit intentions in destinations facing ongoing unrest. This line of research shows that safety perceptions influence both attitudes and behavioural intentions, which are central to tourism resilience.

In the context of the Kashmir Valley, studies reflect similar trends. The study by Shah et al. [15] examined the impact of conflict on tourist arrivals and the spatial distribution of tourism in the Kashmir Valley. Their study found that periods of instability significantly influence tourist flow, often leading visitors to concentrate in locations perceived as relatively safer. The findings highlight how conflict conditions can reshape tourism patterns, leading to an uneven distribution of tourism activity across the region. Earlier research from Ahmad et al. [16] documented repeated declines and recoveries in visitor numbers during periods of unrest. More recent research has focused directly on tourism risk perception in Kashmir. Chaudhary et al. [17] developed a Tourism Risk Index and concluded that security concerns strongly shape visitor perceptions, though repeat tourists tend to perceive lower levels of risk. Furthermore, Kumar A. [18] highlighted structural challenges that increase vulnerability during disruptions, while Raja et al. [19] emphasised the long-term impact of sustained unrest on the destination's reputation. Overall, the literature confirms that threat-related events increase tourism risk perception, which influences tourist behavioural response and alters spatial tourism distribution. These interconnected factors ultimately affect regional economic growth in tourism-dependent destinations. However, limited research integrates all these dimensions within a single analytical framework in the Kashmir context. Addressing this gap is important for strengthening tourism resilience and promoting sustainable regional development.

### 3. Research Design

The study employed a quantitative, cross-sectional research design to investigate the effect of terror-related incidents on tourist flow and the consequent economic implications for residents. Two structured questionnaires were administered: one targeting tourists visiting Srinagar and the other targeting residents whose livelihoods may depend on tourism. A total of 200 respondents participated in the study, comprising 100 tourists and 100 local stakeholders. The design enabled comparative analysis of perceived risk (tourist perspective) and economic vulnerability (local perspective), thereby offering a multidimensional understanding of the tourism-security relationship.

#### 3.1. Questionnaire Development

The questionnaires were systematically developed following an extensive review of established tourism risk-perception literature, particularly studies examining the relationship between terrorism, destination image, perceived safety, and travel behaviour in politically sensitive regions. The instrument design was further contextualised to reflect the unique socio-economic and geopolitical realities of Kashmir, where tourism constitutes a significant source of livelihood and is highly sensitive to security fluctuations. Particular attention was paid to ensuring that the constructs measured were both theoretically grounded and regionally relevant.

The local stakeholder questionnaire comprised ten structured Likert-scale items intended to capture the multidimensional impact of terror-related incidents on tourism-dependent communities. The items were designed to measure: (i) degree of dependence on tourism-generated income, (ii) perceived decline in tourist arrivals following security disturbances, (iii) financial instability and business sustainability challenges during periods of unrest, (iv) adoption of income diversification strategies, (v) seasonal volatility amplified by security concerns, and (vi) perceptions regarding destination image, repeat visitation trends, and long-term business confidence. Responses were recorded using a five-point Likert

scale, ranging from strong disagreement (1) to strong agreement (5) or from minimal impact (1) to very high impact (5), depending on the semantic framing of each item. This scaling approach enabled the quantification of subjective perceptions while maintaining consistency for statistical analysis. Table 1 shows the structure of the local stakeholder questionnaire.

The tourist questionnaire consisted of twelve Likert-type items structured to assess risk perception, behavioural response, and attitudinal intention. Specifically, the instrument measured: (i) level of awareness of prior security incidents before planning travel, (ii) perceived safety concerns during the pre-travel decision stage, (iii) perceived security and comfort levels during the visit, and (iv) post-visit behavioural intentions, including likelihood of revisiting or recommending Kashmir as a destination. The use of Likert-type scales enabled the systematic quantification of perceived risk, psychological comfort, and future behavioural intentions, facilitating correlation and regression-based analyses. To ensure content validity, both instruments were reviewed by subject matter experts familiar with tourism studies and regional socio-economic dynamics. Minor linguistic modifications were incorporated to enhance clarity, eliminate ambiguity, and ensure cultural appropriateness without altering the underlying constructs. Table 2 shows the structure of the tourist questionnaire. Care was taken to maintain semantic equivalence between conceptual constructs and questionnaire items. A pilot study was conducted on a preliminary sample of 20 respondents representing both stakeholder and tourist categories. The pilot phase served multiple objectives: (i) testing item clarity and comprehensibility, (ii) assessing response variability, (iii) identifying ambiguous wording, and (iv) evaluating internal consistency reliability. Preliminary reliability analysis (e.g., Cronbach’s alpha) indicated acceptable internal consistency, confirming the instrument’s suitability for full-scale deployment. Feedback from the pilot phase led to minor refinements in wording and item sequencing to improve the logical flow and respondent engagement. Overall, the structured design of the questionnaires ensured methodological rigour, construct validity, and suitability for quantitative statistical analysis using tools such as SPSS, enabling reliable measurement of the relationship between terror-related incidents and tourism dynamics in Kashmir.

**Table 1: Local Stakeholder Questionnaire**

Variable Code	Construct Measured	Questionnaire Item Description	Scale Type	Measurement
L1	Tourism Income Dependency	Household income depends on tourism-related activities	Likert	1 = Strongly Disagree to 5 = Strongly Agree
L2	Perceived Threat Impact	Threat-related activities affect tourist flow	Ordinal	1 = No Effect to 5 = Very High Effect
L3	Business Impact	Decrease in tourist flow affects business	Ordinal	1 = Not at all to 5 = To a very great extent
L4	Livelihood Sustainability	Prolonged disruptions challenge livelihood	Likert	1 = Strongly Disagree to 5 = Strongly Agree
L5	Secondary Income Reliance	Reliance on secondary income during turmoil	Ordinal	1 = Never to 5 = Always

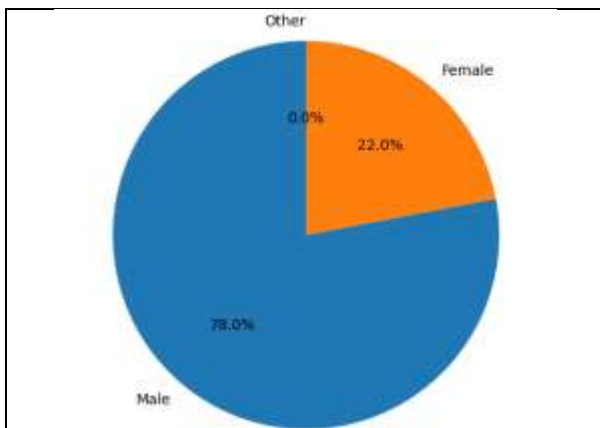
<b>L6</b>	Local–Tourist Interaction Impact	Interaction creates a positive impact	Likert	1 = Strongly Disagree to 5 = Strongly Agree
<b>L7</b>	Visitor Type Dependency	Business relies on repeat vs first-time visitors	Ordinal	1 = Completely first-time to 5 = Completely repeat
<b>L8</b>	Perception vs Reality Effect	Tourism is affected more by perception than actual conditions	Likert	1 = Strongly Disagree to 5 = Strongly Agree
<b>L9</b>	Income Diversification Necessity	Diversifying income is necessary due to instability	Likert	1 = Strongly Disagree to 5 = Strongly Agree
<b>L10</b>	Tourist Fear Expression	Tourists express fear/hesitation during visit	Ordinal	1 = Never to 5 = Very Often

**Table 2: Tourist Questionnaire**

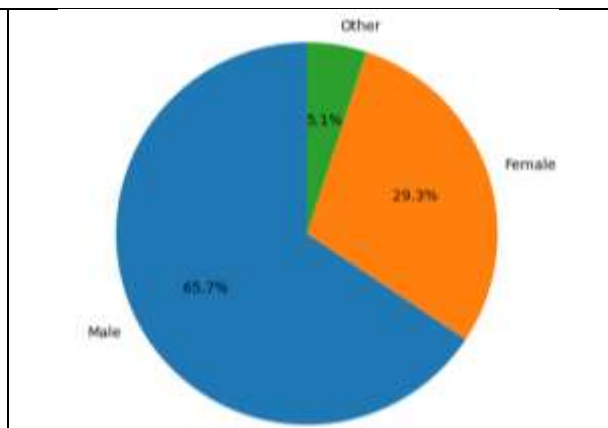
Variable Code	Construct Measured	Questionnaire Item Description	Scale Type	Measurement
<b>T1</b>	Threat Awareness	Awareness of threats before the visit	Ordinal	1 = Not aware to 5 = Very well aware
<b>T2</b>	Pre-Visit Safety Concern	Concern about safety before the visit	Ordinal	1 = Not concerned to 5 = Extremely concerned
<b>T3</b>	Travel Motivation	Reason for choosing Kashmir	Nominal	Multiple choice
<b>T4</b>	Perception Gap	Experience differs from prior perception	Ordinal	1 = No difference to 5 = Huge difference
<b>T5</b>	Security Experience	Felt secure during visit	Likert	1 = Strongly Disagree to 5 = Strongly Agree
<b>T6</b>	Revisit Intention	Likelihood of revisiting	Ordinal	1 = Definitely not to 5 = Definitely yes
<b>T7</b>	Recommendation Intention	Likelihood of recommending Kashmir	Ordinal	1 = Definitely not to 5 = Definitely yes
<b>T8</b>	Local Interaction Confidence	Interaction increased confidence	Likert	1 = Strongly Disagree to 5 = Strongly Agree

The demographic distribution of respondents provides insight into the composition of both the tourist and local stakeholder samples included in the study. Among the tourist respondents, the age distribution shows that the largest proportion was in the 24–30 age group (36%), followed by the 36–40 age group (24%) and the 31–35 age group (21%). A smaller proportion of respondents were in the 41–45 age group (14%), while only 5% were in the 46–50 age group. This distribution suggests that the majority of tourists visiting the region during the study period were relatively young adults, highlighting the strong participation of younger age groups in tourism activities. In contrast, the age distribution of local stakeholders reflects a

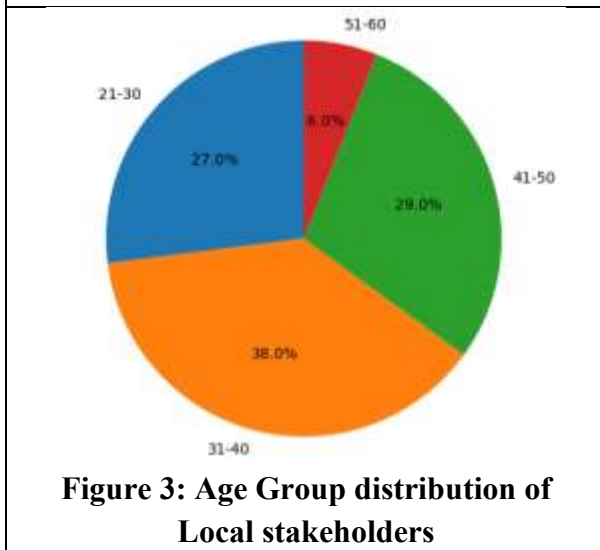
slightly older demographic profile. The largest group of local respondents was in the 31–40 age category (38%), followed by 41–50 (29%) and 21–30 (27%), while only 6% were in the 51–60 age group. This indicates that the tourism-related workforce and business operators in the region are predominantly middle-aged individuals who are actively engaged in tourism-related economic activities. The gender distribution of tourists shows that male respondents constituted the majority (65.7%), while female respondents accounted for 29.3%, and 5.1% identified as other genders. Similarly, the gender distribution among local stakeholders showed a higher proportion of male respondents (78%) and 22% female, with no respondents in the other gender category. Overall, these demographic patterns suggest that both the tourist sample and the local stakeholder group were predominantly male, although female participation was still notable among tourist respondents. These demographic characteristics provide an important context for interpreting the perceptions and responses analysed in the subsequent sections of the study. Figures 1, 2, 3 and 4 display the gender and Age group distributions for locals and tourists.



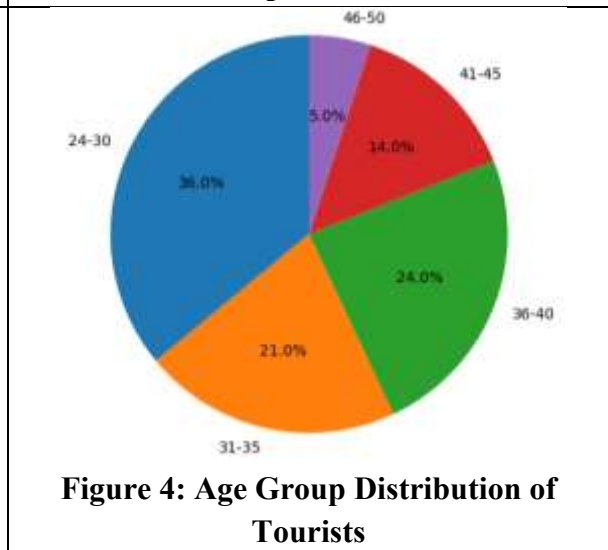
**Figure 1: Gender distribution of local stakeholders**



**Figure 2: Gender distribution of tourist respondents**



**Figure 3: Age Group distribution of Local stakeholders**



**Figure 4: Age Group Distribution of Tourists**

### 3.2. Sampling Procedure

Data were collected through convenience sampling at major tourist and commercial locations in Srinagar, including Dal Lake, Boulevard Road, Lal Chowk, and Mughal Gardens. Participation was voluntary and

based on informed consent. Respondents were assured that their responses would be used solely for academic research.

### 3.3.Data Analysis

The collected data were coded and entered into IBM SPSS Statistics 25 for statistical analysis. Likert responses were numerically coded on a five-point scale. Composite indices were constructed to capture broader constructs, including Tourism Dependency, Perceived Threat Impact, Tourist Risk Perception, and Loyalty Intention. Descriptive statistics were computed to summarise demographic characteristics and response distributions. Reliability analysis was performed using Cronbach's alpha to assess the internal consistency of the instruments. Pearson and Spearman's correlation analysis was conducted to determine the strength and direction of relationships between variables. Multiple regression models were developed to identify predictors of business sustainability and tourist loyalty.

## 4. Results

This section discusses about the results of the analytical study of our survey. It begins with a discussion of reliability and instrument consistency, followed by descriptive and correlational analyses. This section further discusses the regression analysis. This section concludes by discussing the survey's key findings and analysis.

### 4.1.Reliability and Instrument Consistency

The reliability analysis demonstrated strong internal consistency across both instruments. The local stakeholder questionnaire yielded a Cronbach's alpha coefficient of 0.87, while the tourist questionnaire achieved an alpha value of 0.91. These values exceed the commonly accepted threshold of 0.70, confirming that the scales were statistically reliable for measuring the intended constructs.

### 4.2.Data Analysis Methods

The data collected from both local stakeholders and tourists were analysed using IBM SPSS to examine relationships between perceived security conditions, tourism dynamics, and socio-economic outcomes. A total of 100 valid responses were included in the analysis. Since most questionnaire items were measured using Likert-type scales, both parametric and non-parametric statistical techniques were applied to ensure robust interpretation of relationships among variables.

#### 4.2.1. Pearson Correlation Analysis

Pearson's correlation coefficient was employed to measure the linear relationship between two continuous or ordinal variables treated as interval data [20]. This test was particularly useful for identifying the strength of associations among variables such as perceived threats, tourist flow, business sustainability, and visitor perceptions. The correlation coefficient ( $r$ ) ranges between -1 and +1, where positive values indicate a direct relationship and negative values indicate an inverse relationship. Statistical significance was determined using the two-tailed significance value ( $p$ -value), with  $p < 0.05$  considered statistically significant. The Pearson correlation coefficient measures the strength and direction of the linear relationship between two variables.

$$r = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum_{i=1}^n (x_i - \bar{x})^2 \sum_{i=1}^n (y_i - \bar{y})^2}} \quad (1)$$

Where  $r$  is the Pearson correlation coefficient.  $x_i, y_i$  are individual sample values,  $\bar{x}, \bar{y}$  are the means of variables X and Y respectively, and  $n$  refers to the number of observations.

#### 4.2.2. Spearman Rank Correlation

Given that many survey responses were collected using ordinal Likert-scale measurements, Spearman's rank correlation coefficient ( $\rho$ ) was also computed to confirm the strength and direction of monotonic relationships between variables [21]. Spearman correlation is particularly appropriate when assumptions of normality are uncertain or when ordinal data are analysed. Consistency between Pearson and Spearman coefficients strengthens the reliability of the observed relationships. Spearman correlation measures the strength of a monotonic relationship between ranked variables.

$$\rho = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)} \quad (2)$$

Where,  $\rho$  is the Spearman rank correlation coefficient,  $d_i$  is the difference between the ranks of paired observations, and  $n$  is the number of observations.

#### 4.2.3. Chi-Square Test of Independence

To examine associations between categorical variables, the Pearson Chi-Square test was applied [22]. This test evaluates whether two categorical variables are statistically independent or associated. Additional statistics, such as the Likelihood Ratio and Linear-by-Linear Association, were also considered to support the interpretation of relationships among variables, including changes in tourist flows and diversification of income sources. A significance level below 0.05 indicates a statistically meaningful association. A chi-squared statistical value is calculated as follows:

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i} \quad (3)$$

Where  $\chi^2$  is the chi-squared statistic,  $O_i$  is the observed frequency, and  $E_i$  is the expected frequency. The expected frequency is calculated as:

$$E_{ij} = \frac{(\text{Row Total})(\text{Column Total})}{(\text{Grand Total})} \quad (4)$$

These statistical methods collectively enabled the study to examine both perceptual relationships among tourists and economic impacts experienced by local stakeholders, thereby providing a comprehensive understanding of how threat-related perceptions influence tourism dynamics in Kashmir.

### 4.3. Results from Local Stakeholder Survey

The responses from local stakeholders highlight the significant economic vulnerability of tourism-dependent communities to threats and fluctuations in tourist arrivals.

#### 4.3.1. Impact of Threat-Related Activities on Tourist Flow and Behaviour

The analysis revealed a moderate positive correlation between threat-related activities and tourist hesitation (Pearson  $r = 0.366$ ,  $p < 0.001$ ; Spearman  $\rho = 0.219$ ,  $p = 0.029$ ). The statistical significance of these results indicates that perceived threat-related incidents are meaningfully associated with increased hesitation or uncertainty among tourists. As perceptions of security threats rise, potential visitors may become more cautious in their travel decisions, leading to delayed travel planning, reduced travel frequency, or reconsideration of the destination. This finding reflects the sensitivity of tourism demand to perceptions of security, as travellers often evaluate destinations not only on attractions but also on perceived safety and stability. Such hesitation does not necessarily mean that tourists completely avoid visiting the destination; however, it can influence the overall volume and timing of tourist arrivals. Even moderate increases in perceived risk may lead to fluctuations in tourist flows, shorter stays, or selective

travel to perceived safer areas. Consequently, tourism-dependent regions may experience variations in visitor numbers and economic activity when threat-related perceptions become more prominent. Furthermore, threat-related events were positively associated with the diversification of income sources among local stakeholders (Pearson  $r = 0.237$ ,  $p = 0.017$ ; Spearman  $\rho = 0.253$ ,  $p = 0.011$ ). This relationship suggests that instability in tourism demand encourages households and tourism-related businesses to adopt alternative livelihood strategies to mitigate economic vulnerability. When tourist arrivals decline or become unpredictable due to security concerns, local stakeholders may seek supplementary sources of income such as small-scale trade, agriculture, handicraft production, or other service-based activities. This adaptive behaviour highlights the economic resilience of local communities that depend heavily on tourism. Diversifying income sources can serve as a coping mechanism that reduces financial risk during periods of tourism instability. At the same time, it reflects the broader economic challenges faced by tourism-dependent households in regions where external factors, such as security perceptions, can significantly influence visitor flows. Overall, the findings emphasise the interconnected relationship between perceived security conditions, tourist behaviour, and the livelihood strategies adopted by local communities.

#### **4.3.2. Tourism Disruptions and Livelihood Sustainability**

The study also examined the relationship between livelihood sustainability and household income derived from tourism. A statistically significant positive correlation was observed (Pearson  $r = 0.205$ ,  $p = 0.041$ ; Spearman  $\rho = 0.214$ ,  $p = 0.032$ ). Although the correlation is relatively moderate, the statistical significance indicates that households whose income is largely dependent on tourism are more likely to face challenges maintaining sustainable livelihoods when tourism activity is disrupted. This relationship reflects the critical role that tourism plays as a primary source of income for many residents. When tourist arrivals decline due to security concerns or other external factors, the resulting economic slowdown can directly affect household earnings, employment opportunities, and financial stability. Such disruptions can have broader implications for the socio-economic well-being of communities that rely heavily on tourism. Reduced tourist flow may lead to decreased demand for accommodation, transportation, handicrafts, and other tourism-related services, thereby affecting multiple segments of the local economy. As a result, households that depend predominantly on tourism-generated income may face difficulties in meeting daily expenses, sustaining business operations, or maintaining long-term economic security during periods of instability. Similarly, the analysis demonstrated that household income's dependence on tourism is significantly associated with the impact of declining tourist flows on business operations (Pearson  $r = 0.309$ ,  $p = 0.002$ ; Spearman  $\rho = 0.332$ ,  $p = 0.001$ ). This stronger correlation suggests that businesses and households that rely more on tourism are particularly vulnerable to fluctuations in visitor numbers. When tourist arrivals decrease, enterprises such as hotels, guesthouses, transport services, and local markets often experience immediate revenue declines, which can affect their ability to sustain operations and employment. These findings highlight the economic vulnerability of tourism-dependent enterprises in regions where visitor flows are sensitive to external factors such as perceived security conditions. At the same time, they underscore the importance of developing strategies that enhance economic resilience within tourism-based communities. Diversification of income sources, development of alternative livelihood opportunities, and strengthening of sustainable tourism practices may help mitigate the economic risks associated with fluctuations in tourism demand.

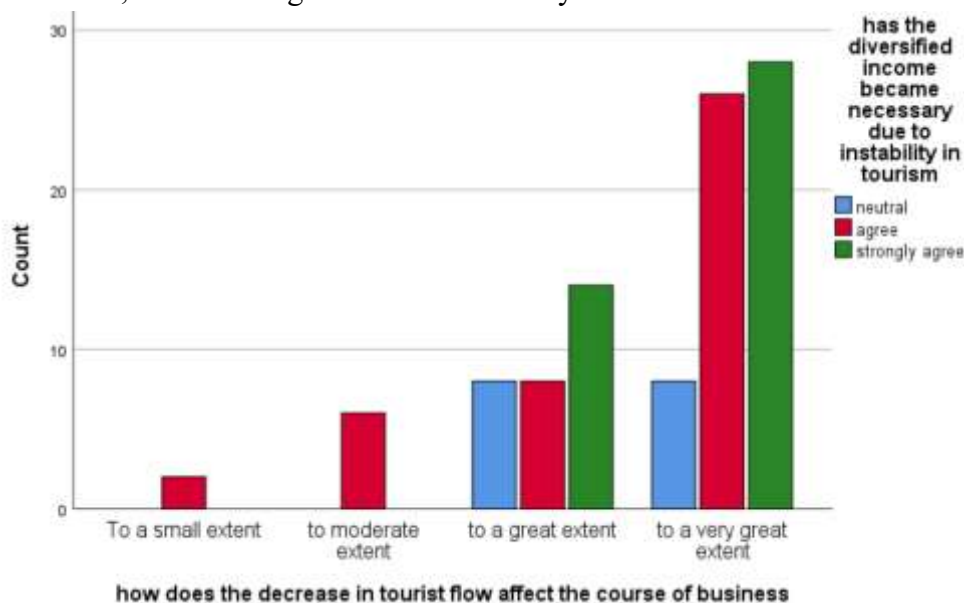
#### **4.3.3. Threat Perception and Business Impact**

One of the strongest relationships identified in the local dataset was between threat-related activities and

the overall impact on business operations (Pearson  $r = 0.603$ ,  $p < 0.001$ ; Spearman  $\rho = 0.643$ ,  $p < 0.001$ ). The high magnitude and statistical significance of these correlation coefficients indicate a strong positive association between the occurrence or perception of threat-related incidents and the degree to which local businesses experience operational and financial impacts. This suggests that as perceptions of security threats increase, tourism-related businesses face greater challenges in maintaining stable operations. Such a strong relationship highlights the sensitivity of tourism-dependent sectors to changes in the security environment. Businesses such as hotels, guesthouses, transport services, restaurants, and local handicraft vendors rely heavily on consistent tourist arrivals. When threat-related incidents occur or are widely perceived through media coverage or public discourse, potential visitors may postpone or reconsider their travel plans. As a result, even temporary fluctuations in tourist inflow can lead to reduced demand for tourism services, decreased revenue, and uncertainty in business operations.

#### 4.3.4. Association Between Decline in Tourist Flow and Income Diversification

The Chi-square test further confirmed the statistical association between declining tourist arrivals and the adoption of diversified income sources. The Pearson Chi-square statistic was  $\chi^2 = 15.535$  ( $df = 6$ ,  $p = 0.016$ ), while the likelihood ratio yielded  $\chi^2 = 18.277$  ( $df = 6$ ,  $p = 0.006$ ). These results suggest that reductions in tourist flow significantly influence the need for alternative income strategies among residents. Another Chi-square analysis examining tourist hesitation and interactions produced a Pearson Chi-square value of  $\chi^2 = 19.292$  ( $df = 8$ ,  $p = 0.013$ ), indicating that perceptions of fear or hesitation among tourists are significantly related to patterns of interaction between tourists and local communities. Overall, the findings indicate that tourism instability driven by perceived or actual threat-related events exerts measurable economic pressure on local stakeholders, leading to business disruptions and increased reliance on diversified income sources. Figure 5 illustrates the impact of reduced tourism on local stakeholders' businesses, underscoring the need to diversify income sources.



**Figure 5: Effect of a decrease in tourism on the business of local stakeholders with respect to the need to diversify income sources**

#### 4.4. Results from Tourist Survey

The tourist survey examined how awareness of security incidents, perceived risk, and overall travel experiences influence tourists' travel behaviour and their perception of Kashmir as a destination. The

questionnaire was designed to capture multiple dimensions of the tourist decision-making process, including pre-visit awareness of threat-related events, concerns regarding personal safety and security, motivations for choosing Kashmir as a travel destination, and perceptions formed during the visit. By assessing these factors, the survey aimed to understand how prior knowledge of security-related incidents shapes tourists' expectations before arrival and how these expectations compare with their actual experiences at the destination. Particular attention was given to evaluating whether perceived risks influence travel decisions, length of stay, and behavioural intentions such as revisiting the destination or recommending it to others.

#### **4.4.1. Awareness of Threat Events and Travel Decision**

A statistically significant positive correlation was observed between awareness of threat-related events and the decision to visit Kashmir (Pearson  $r = 0.307$ ,  $p = 0.002$ ; Spearman  $\rho = 0.282$ ,  $p = 0.004$ ). These results indicate that awareness of security-related incidents is meaningfully associated with tourists' travel decisions. However, the positive direction of the relationship suggests that such awareness does not necessarily discourage tourists from visiting the region. Instead, many visitors appear willing to travel despite being informed about these events. This finding implies that tourists may interpret security-related information in a broader context, taking into account factors such as the overall appeal of the destination, perceived safety measures, and personal travel motivations. The results therefore suggest that while threat-related awareness exists among visitors, it does not automatically translate into avoidance behaviour, and Kashmir continues to attract tourists due to its strong destination appeal and visitor confidence.

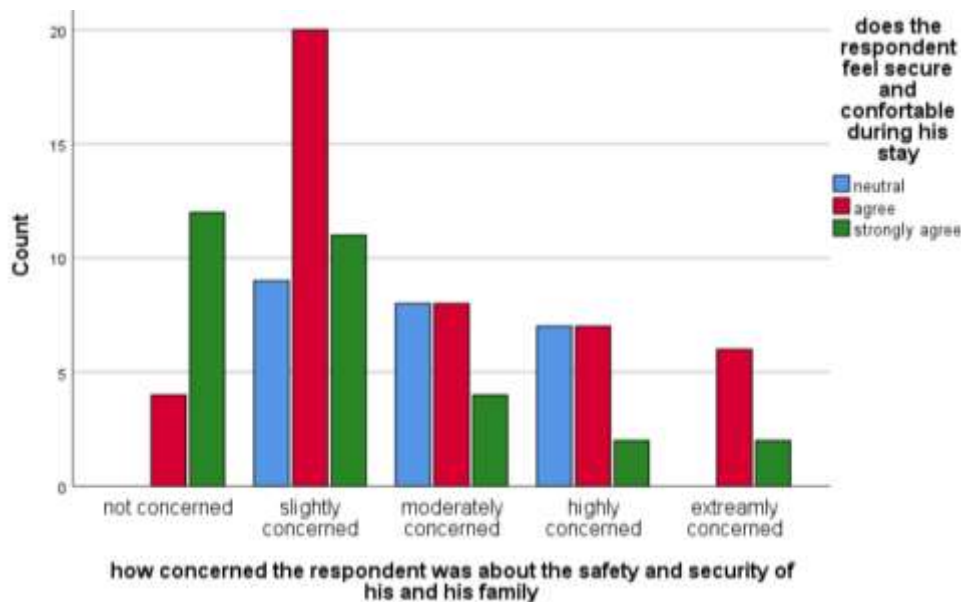
#### **4.4.2. Safety Concerns and Perception Changes**

The relationship between safety concerns and changes in perception during the visit showed a statistically significant negative correlation (Pearson  $r = -0.252$ ,  $p = 0.011$ ; Spearman  $\rho = -0.306$ ,  $p = 0.002$ ). The negative correlation indicates that tourists who initially reported higher levels of concern about safety and security were more likely to experience a positive change in perception after visiting the destination. This finding suggests that there is often a difference between tourists' pre-visit expectations and their actual on-site experiences. Visitors who initially perceived higher levels of risk may find the situation on the ground to be safer and more comfortable than anticipated, leading to a more favourable reassessment of the destination during their stay. Such changes in perception may result from factors such as visible security measures, welcoming interactions with locals, and overall travel experiences that contradict prior concerns.

#### **4.4.3. Visitor Experience and Revisit Intention**

A positive relationship was observed between overall travel experience and the intention to revisit Kashmir (Spearman  $\rho = 0.317$ ,  $p = 0.001$ ). The statistical significance of this relationship indicates that tourists who reported more positive travel experiences during their visit were more likely to express a willingness to return to the destination. This finding underscores the importance of on-site experiences in shaping tourists' long-term behavioural intentions and highlights how satisfaction during the visit can strengthen destination loyalty. Positive experiences related to hospitality, scenic attractions, cultural interactions, and overall comfort may encourage visitors to consider Kashmir as a destination worth revisiting. Similarly, tourist experience was positively associated with the willingness to recommend Kashmir as a travel destination (Spearman  $\rho = 0.229$ ,  $p = 0.022$ ). This suggests that visitors who have satisfying, enjoyable experiences are more inclined to share positive feedback with others, thereby contributing to favourable word-of-mouth promotion. Such recommendations can play a crucial role in shaping potential tourists' perceptions and travel decisions, particularly in destinations where perceptions

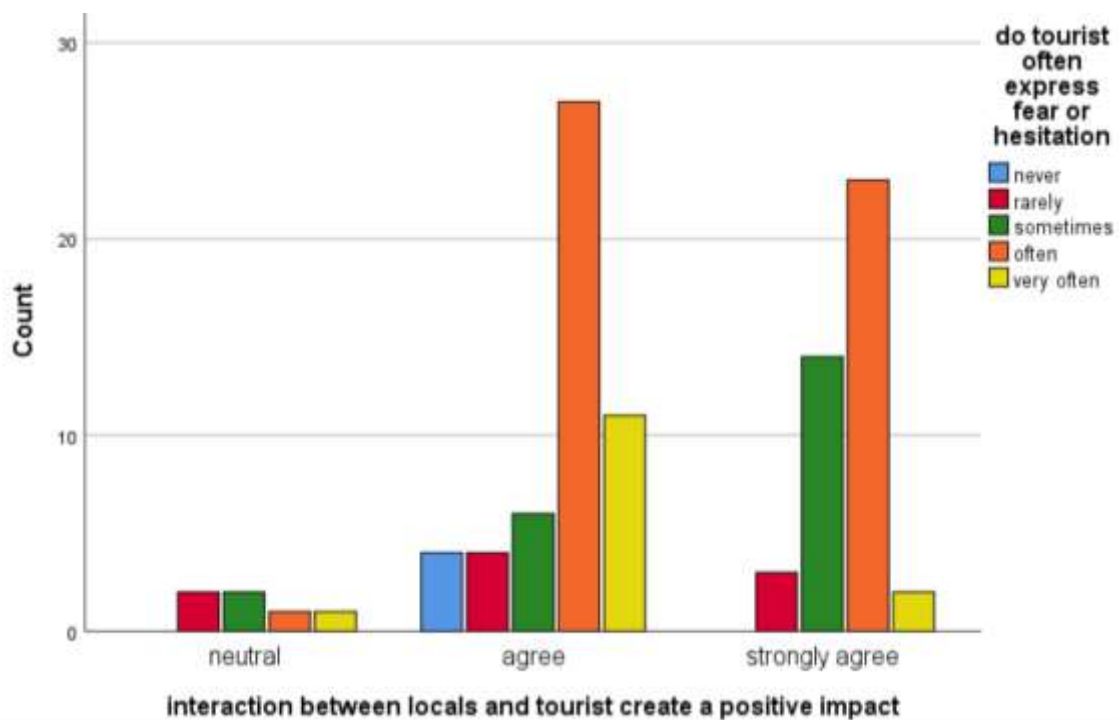
of safety may affect tourism demand. Overall, these findings highlight the significance of delivering positive visitor experiences, as satisfied tourists not only demonstrate stronger revisit intentions but also act as informal ambassadors who help enhance the destination’s image. Figure 6 shows the Relationship between tourists’ level of safety concern before or during travel and their perceived sense of security and comfort during their stay in Kashmir.



**Figure 6: Relationship between tourists’ level of safety concern before or during travel and their perceived sense of security and comfort during their stay in Kashmir**

#### 4.4.4. Tourist Concerns and Interaction with Locals

An inverse relationship was identified between tourist concern levels and interaction with residents (Pearson  $r = -0.403$ ,  $p < 0.001$ ; Spearman  $\rho = -0.417$ ,  $p < 0.001$ ). The negative, statistically significant correlation indicates that higher levels of engagement between tourists and local communities are associated with lower perceived concern among visitors. In other words, tourists who reported more frequent or meaningful interactions with residents tended to feel less anxious or worried about safety-related issues during their stay. This finding suggests that interpersonal contact with local communities may play an important role in shaping tourists’ perceptions of security and comfort within the destination. Friendly interactions, hospitality, and informal communication with locals can help create a sense of familiarity and reassurance for visitors, which may reduce uncertainty or fear that could arise from prior perceptions about the region. Such experiences may also allow tourists to gain a more authentic understanding of the local environment, helping them reassess any preconceived concerns they may have had before their visit. Overall, the results highlight the significance of positive host–guest interactions in shaping tourists’ psychological comfort and perceived safety. Encouraging meaningful engagement between visitors and local communities may therefore help reduce perceived risks and enhance the overall travel experience in the destination. Figure 7 displays the relationship between the interaction of locals and tourists and the hesitation/fear of tourists.



**Figure 7: Relationship between the interaction of locals and tourists and the hesitation/fear of tourists.**

#### 4.4.5. Perceived Security and Overall Concern

The Chi-square analysis revealed a statistically significant association between perceived safety and concern levels among tourists ( $\chi^2 = 26.683$ ,  $df = 8$ ,  $p = 0.001$ ). The significance of the Pearson Chi-square statistic indicates that the level of safety perceived by tourists during their visit is closely related to the degree of concern they experience regarding security and personal well-being. In other words, tourists who perceive the destination as safer are more likely to report lower anxiety or concern, whereas those who perceive greater risk tend to express greater apprehension. The likelihood ratio test further confirmed the presence of this relationship ( $\chi^2 = 29.350$ ,  $p < 0.001$ ), providing additional statistical support for the association between these variables. Moreover, the linear-by-linear association was statistically significant ( $\chi^2 = 7.821$ ,  $p = 0.005$ ), suggesting a consistent trend across the ordered categories of the variables. This indicates that as tourists' perceptions of safety improve, their level of concern tends to decrease systematically. Together, these results highlight the critical role of perceived security in shaping tourists' psychological comfort during their visit. Perceptions of safety can significantly influence how relaxed, confident, and comfortable tourists feel while travelling within the destination. Consequently, maintaining visible security measures, effective communication about safety conditions, and a supportive travel environment may play an important role in reducing tourists' concerns and enhancing their overall travel experience.

#### 4.5. Overall Interpretation of Results

The results collectively suggest that tourism in Kashmir is influenced not only by actual security conditions but also by perceptions of risk and safety. While local stakeholders experience significant economic vulnerability due to fluctuations in tourist arrivals, tourists themselves often report more positive experiences than their initial perceptions suggested. This discrepancy highlights the critical role of

destination image, media narratives, and interpersonal interactions in shaping tourism outcomes. Furthermore, the findings demonstrate that positive interaction between tourists and local communities can mitigate perceived risk, reinforcing trust and improving destination perception. At the same time, the economic analysis reveals that tourism-dependent households remain highly susceptible to external shocks, emphasising the need for diversification and resilience strategies in the region's tourism economy.

## 5. Conclusion

This study examined the relationship between threat-related perceptions, tourism behaviour, and socio-economic outcomes in Kashmir by analysing responses from both local stakeholders and visiting tourists. Using correlation analysis and Chi-square tests, the research provides empirical insights into how perceived security conditions influence tourism dynamics and the livelihoods of communities dependent on the tourism sector. The findings indicate that threat-related activities significantly influence tourist behaviour and local economic stability. Among local stakeholders, a strong positive relationship was observed between perceived threat-related events and the impact on business operations, suggesting that fluctuations in the security environment directly affect tourism-dependent enterprises. Declines in tourist arrivals were also found to significantly influence the diversification of income sources, highlighting the adaptive strategies adopted by local communities in response to instability in tourism demand. Furthermore, the results confirm that households heavily dependent on tourism face greater challenges in sustaining their livelihoods during prolonged disruptions, demonstrating the economic vulnerability of tourism-driven local economies. From the perspective of tourists, the results reveal a complex relationship between risk perception and actual travel behaviour. While many respondents were aware of threat-related events before their visit, this awareness did not necessarily deter them from choosing Kashmir as a destination. In fact, the findings suggest that tourists often experience a more positive perception of safety and comfort after their visit, indicating a discrepancy between pre-visit risk perceptions and the on-site experience. Additionally, positive travel experiences were significantly associated with higher intentions to revisit and recommend the destination, emphasising the importance of visitor satisfaction in strengthening tourism resilience. Another key finding of the study is the role of interaction between tourists and local communities. Increased engagement with residents was associated with lower levels of perceived concern among tourists, suggesting that interpersonal interactions can help reduce anxiety and improve destination perception. This highlights the importance of community-driven tourism experiences in fostering trust and enhancing the overall visitor experience. Overall, the study demonstrates that tourism in Kashmir is influenced not only by actual security conditions but also by the perceptions and narratives surrounding them. While local communities remain economically sensitive to fluctuations in tourist arrivals, the generally positive experiences reported by visitors indicate significant potential for tourism recovery and growth when safety perceptions are effectively managed. Strengthening destination communication, promoting authentic local interactions, and encouraging economic diversification among tourism-dependent communities may therefore play a critical role in building a more resilient and sustainable tourism ecosystem in the region. In conclusion, the findings highlight the need for balanced tourism development strategies that address both perception management and economic resilience, ensuring that tourism continues to serve as a stable source of livelihood while maintaining visitor confidence in Kashmir as a travel destination.

## 6. Declaration

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