

ANALYSING THE RELATIONSHIP BETWEEN DEMOGRAPHIC CHARACTERISTICS OF ADVENTURE TOURISTS AND THEIR OVERALL SATISFACTION: EVIDENCE FROM RISHIKESH

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Abstract

The concept of tourist satisfaction is well established as one of the major motivators of destination competitiveness, destinations loyalty and long-term sustainability. Although a lot of research has been done as regards to the satisfaction in respect to service quality and destination attributes, little has been done with respect to demographics, particularly in the case of adventure tourism. This paper aims at exploring the relationship between demographics of tourists and their general satisfaction in Rishikesh which is a major adventure tourism attraction in India. There were 460 tourists on whom primary data were collected using structured questions. Statistical evaluation (correlation and chi-square tests) was done to evaluate the importance of correlations between the variables of satisfaction and the factors of age, gender, income, education, frequency of visits, traveling alone, transportation, preferred season, adventure excitement, proximity, motivations, and place of residence. Findings indicate that 8 variables such as age, income, gender, frequency of visits, travel companions, preferred season, adventure enthusiasm, and motivations are strongly related to the level of satisfaction whereas education, transportation, proximity and residence are not. These results emphasize the role of population profiling in adventure tourism planning, and they have implications to destination managers, policy makers, and tourism marketers.

Keywords: Adventure tourism, tourist satisfaction, demographics, Rishikesh, India, chi-square analysis

1. INTRODUCTION

One of the most rapidly developing sectors in the world tourism sector is adventure tourism and it has played a significant role in economic growth and development of regions (Buckley, 2010). Destinations with natural sceneries, the cultural diversity as well as outdoor adventure activities have experienced an increase in demand. In India, Rishikesh has entered the limelight as the adventure capital because of the distinctive mix of nature, spiritual charm, and adventure with river rafting, trekking, camping and bungee jumping.

Tourist satisfaction is generally recognized to be one of the major indicators of destination performance (Chen and Chen, 2010). Contented tourists will make repeat visits and also suggest destinations and that enhances competitiveness (Yoon and Uysal, 2005). Satisfaction of a destination is however influenced by both the attributes of the destinations as well as the demographics and behavioral attributes of the tourists. The expectations and perceptions depend on age, gender, income, education, and travel motivations and thus, on the satisfaction (Pizam and Mansfeld, 2000).

Although the general trend is in favor of increasing the popularity of adventure tourism in India, there are very few empirical studies on the role of demographic factors in determining satisfaction in the same. The proposed research aims to fill this gap by looking at the demographic predictors of tourist satisfaction in Rishikesh.

2. LITERATURE REVIEW

Hu et al. (2025) examine the relationship between psychological orientation such as sensation seeking and demographic factors to increase adventure tourism satisfaction. Their results as well point out that the psychological drivers are demographic, including age and gender, in impacting the satisfaction levels, which should be approached as a multi-faceted way to comprehend the experiences of tourists.

Li et al. (2024) offer empirical data that income level of tourists can have a significant influence on their access to and satisfaction with premium adventure tourism services. The higher income customers are found to be more satisfied mostly because of the improved quality and exclusivity of the experiences that they can afford. Kim and Chen (2024) consider cultural background as a mediator between demographic characteristics and satisfaction,

which reveals that cultural norms and expectations influence how age, gender, and income influence perceived satisfaction in various markets in adventure tourism.

Novelli et al. (2023, published early 2024) consider the differences in motivation among different demographic groups and ultimately confirm the idea that demographic variables can determine the salience of such motivations as self-expression, escapism, and social interaction, which, in its turn, affect the level of satisfaction.

Dangi and Jamal (2024) identify the segments of adventure tourists by integrating demographic and psychographic factors and recommend target marketing. Their study supports the idea that the demographic factors are not enough predictors without reflecting on the underlying motivation and behaviour patterns.

Dowling and Fennell (2024) investigate how the demographic analysis can be integrated in the process of planning sustainable adventure tourism. They claim that demographic knowledge underpins environmental and cultural sustainability by helping to design responsible tourism experiences that are aligned to particular visitor types.

Muller and Jansson (2024) discuss the implications of the policy, which leads to the conclusion that the research on the effect of demographics on satisfaction is important in developing competitive adventure tourism policies at the destination and national level. Sustainable growth should be based on effective policy that takes into account the heterogeneity of the demographics.

Hall and Saarinen (2023, published 2024) address the topic of seasonality in the demand of adventure tourism and relate the preferences of demographics and seasons to tourism. Their effort demonstrates that satisfaction is seasonal based on the tolerance of demographic groups to types of weather and activities.

According to Sebastian (2023, which is to appear in 2024), there exists a positive correlation between the frequency of repeat visitation (frequency) and satisfaction, with familiarity with destination attributes as well as social companions increasing the perceived value among adventure travelers.

Kruger and Saayman (2023) demonstrate that gender-based satisfaction levels in Southern Africa adventure tourism differ greatly as males are more satisfied with the physically challenging activities and females prefer cultural and nature-oriented adventure, which means that products should be developed in a gender-sensitive way. Intrinsic motivation and adventure enthusiasm prove to be good predictors of overall satisfaction in adventure tourists (Nasution, 2023), which indicates that emotional and psychological involvement is a significant attribute that overrides demographic aspects.

Roberts and Tribe (2023) note that travel companions contribute to increased satisfaction in the context of adventure as they provide social bonding, sense of safety, and shared experiences, which increase the enjoyment. Ryan and Hall (2023) present a case study of the demographic impact on mountain adventure tourists, that is, age and gender influence the preferences and satisfaction levels of tourist types, in particular, risk tolerance and the choice of the type of activity.

Weaver (2023) also talks about how demographic research can increase the authenticity of adventure tourism experiences, and states that demographic-based information aids in creating customized and authentic tourism products that increase satisfaction and loyalty.

Sharpley (2024, early online) explores the relationship between educational level and trip planning sophistication and overall finds no significant effect, which is directly affecting satisfaction, which means that education primarily influences the preparatory behavior and not experience evaluation.

Gossling and Peeters (2024) combine eco-tourism with demographics and report the impact of environmental conscientiousness of specific demographic groups on satisfaction in nature-based adventure tourism.

Choi and Sirakaya (2023) emphasize the mediating nature of motivations in the relationship between demographic traits and satisfaction, showing that motivations could account for a big part of the demographic difference in satisfaction results.

Williams and Soutar (2021, cited 2023) suggest a multidimensional system of customer value (emotional, novelty, monetary) that is influenced by demographic variables, providing a multifaceted knowledge on the motivators of satisfaction in adventure tourism.

The Uppal (2021, recently cited) highlights the significance of frequency of visits and travel companions on satisfaction in the sense of national park adventure tourism, with references to the significance of social and experiential familiarity.

Gross et al. (2024) offer one of the most thorough descriptions of the effects of demographics, with younger tourists being more oriented to risky activities compared to the older tourists, with gender being identified as one of the key factors affecting the participation in activities and satisfaction.

3. RESEARCH METHODOLOGY

3.1 Population and Sample Size

The population comprises adventure tourists visiting Rishikesh during January to June 2025. A sample of 460 respondents was selected using convenience sampling, ensuring diversity in demographic attributes.

3.2 Geographical Area

Rishikesh, located in Uttarakhand, India, is the study's geographical focus. It is renowned for white-water rafting, trekking, and spiritual tourism.

3.3 Tools and Techniques

- **Data Collection:** Structured questionnaires measuring demographic characteristics and overall satisfaction on a Likert scale.
- **Statistical Analysis:** Pearson correlation analysis to explore relationships between demographic variables and satisfaction.
- **Software:** SPSS was used for data analysis.

3.4 Variables

- **Dependent variable:** Perceived overall satisfaction (measured on a 5-point Likert scale).
- **Independent variables:** Age, gender, monthly income, education, frequency of visits, travel companions, mode of transportation, preferred season, level of adventure enthusiasm, proximity, motivations, and residence.

4. Objectives

- **Objective 1:** To identify the demographic characteristics of adventure tourists visiting Rishikesh.
- **Objective 2:** To examine the relationship between demographic characteristics and the overall satisfaction of adventure tourists.
- **Objective 3:** To suggest measures for enhancing the satisfaction level of adventure tourists based on study findings.

5. Hypotheses

H₀₁: There is no significant relationship between demographic characteristics and overall satisfaction of adventure tourists.

6. Analysis and Interpretation

Objective 1: To Identify the Demographic Characteristics of Adventure Tourists Visiting Rishikesh

The initial aim of the research consisted of the determination of demographic aspects of the adventure tourists who visit Rishikesh. Demographic profiling assists in the interpretation of the participation of people in adventure tourism and offers a basis in the interpretation of satisfaction patterns. Descriptive statistics were employed on a sample of 460 respondents. Results have been tabulated and graphical representation of the results is given.

Age Distribution

Table 1: Age of the respondents (n=460)

Age Group	Percentage (%)
Below 20	9
21-30	41
31-40	27
41-50	16
51 and above	7

Interpretation

According to the data, the age groups of 21-30 (41%) and 31-40 (27%) are the predominant. This indicates that adventure tourism in Rishikesh is youth-driven which aligns with the findings made around the world where millennials and young professionals tend to be more attracted to high-energy and experience-driven tourism. The older groups are smaller shares represented.

Gender Distribution

Table 2: Gender Distribution of Respondents.

Gender	Percentage (%)
Male	56
Female	44

Interpretation

A slight majority (56 %) of males was against a minority (44%) female. Although the male hegemony is still there, the proximity of parity indicates the evolving trends in traveling and increasing female involvement in adventure tourism. This trend implies inclusiveness and traditional gender barriers being broken in the activities of tourism.

Educational Qualification

Table 3: Level of Education of the respondents.

Education Level	Percentage (%)
Secondary/Diploma	19
Graduate	46
Postgraduate	35

Interpretation

Most of the tourists were graduates (46%), postgraduates (35%), which proves that the adventure tourism mostly appeals to the well-educated category. There is a positive relationship between education and the greater knowledge of leisure opportunities and willingness to participate in outdoor activities.

Monthly Income

Table 4: Monthly Income of the Respondents.

Income Level (INR)	Percentage (%)
< 25,000	21
25,000-50,000	37
50,001-75,000	25
75,000	17

Interpretation

The greater part of the respondents are in the middle-income range (25,000-50,000 INR), and then the upper-middle layers. This makes Rishikesh adventure activities an inexpensive location serving wide economic range and not limited to the rich tourists.

Travel Companions

Table 5: Traveling Company of the respondents.

Travel Companion	Percentage (%)
Alone	17
Family	31
Friends/Groups	52

Interpretation

Most of the tourists (52 percent) visited as part of groups or friends, and this fact underscores the social aspect of adventure tourism. There was average family-based participation (31 percent) and few solo travelers (17 percent). Rishikesh Adventure is hence sometimes seen as a collective activity in terms of recreation.

Frequency of Visits

Table 6: Rishikesh Visit Frequency.

Visit Frequency	Percentage (%)
First-time	66
Repeat Visitors	34

Interpretation

Most of the respondents (66) were first time visitors, although a high percentage (34) were repeat visitors implying good experiences that make them loyal and immerse them into repeat travels. This shows a good destination image and promotion by word-of-mouth.

Mode of Transportation

Table 7: Transportation mode used.

Mode of Transport	Percent (%)
Road	61
Rail	24
Air	15

Interpretation

The most common form was road transport (61%), which is a strong indication of how road connected Rishikesh with the rest of northern India. The second option was rail (24%), and air travel (15%), which was a constraint given that there was no specific airport within the town.

Preferred Season

Table 8: Rishikesh Adventure Tourism Preferred Season.

Season	Percentage (%)
Summer	36
Post-Monsoon	30
Winter	25
Monsoon	9

Interpretation

Summer (36) and post-monsoon (30) were the most preferred seasons because of favorable weather and suitable water levels to run the raft and trek. Winter represented 25 percent and monsoon (10 percent) experienced less popularity because of the risk of safety.

Overall Interpretation

Demographic profile indicates that young, middle-income, and educated people dominate adventure tourism in Rishikesh with a balanced sex ratio and high rates of group travel. The availability of transport by road and the availability of favorable seasonal periods determines the accessibility whereas the loyalty to the destination is manifested by the presence of a repeat visitor. Such observations indicate that the tourism content needs to focus on youth-focused, low-cost and group-based adventure offerings and as such seasonal safety and quality requirements.

Objective 2: To examine the relationship between demographic characteristics and the overall satisfaction of adventure tourists.

The relationship between tourists' perceived overall satisfaction with demographic characteristics is a critical area of exploration in tourism research. This study aims to investigate whether key demographic factors, such as age, monthly income, gender, educational qualification, frequency of visits, travel companions, mode of transportation, preferred season for adventure tourism, level of adventure enthusiasm, proximity to the destination, motivations for adventure tourism, and place of residence, significantly influence tourists' overall satisfaction. To address this, **Null Hypothesis (H₀₁):** There is no significant relationship between tourists' perceived overall satisfaction and their demographic characteristics.

The study employs correlation analysis to evaluate these relationships, providing valuable insights into the interplay of demographic variables and satisfaction levels, particularly for adventure tourism in Rishikesh. Understanding these dynamics can help destination managers and policymakers tailor their offerings to better meet the diverse needs and expectations of tourists.

Table: 2.1 - Correlations for relationship between tourists perceived overall satisfaction with their demographic characteristics

	Overall Satisfaction		
	Correlation Coefficient	Sig. (2-tailed)	N
Age of tourists	7.191	0.039	460
Monthly income	9.952	0.041	460
Gender of tourists	7.532	0.042	460
Educational qualification	0.052	0.263	460
Frequency of visits to Rishikesh	10.109	0.019	460
Travel companion(s)	17.016	0.025	460
Mode of transportation used	0.02	0.666	460
Preferred season for adventure tourism in Rishikesh	20.034	0.046	460
Level of adventure enthusiasm	30.089	0.04	460
Proximity to Rishikesh	0.004	0.933	460
Motivations for adventure tourism	4.801	0.008	460

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It is possible to introduce adventure sports that are at an advanced level (several-day rafting sessions, climbers competitions). This way, the tourists who are highly enthusiastic will be kept occupied.

Motivation-Centric Marketing

Thrill, nature, spirituality and social bonding tourists need specific communication.

Destination branding can underline Rishikesh as the place where the adrenaline meets the spirituality and the community.

Summary of Objective 3

To improve the level of tourist satisfaction in Rishikesh, the segmentation strategy must be organized in relation to the demographics and motivation. Rishikesh can cement its status as the top adventure tourism destination in India by creating age- and income-relevant packages, gender inclusiveness, encouraging repeat business, seasonal options and motivation-based experiences.

7. CONCLUSION AND SUGGESTION

This study confirms that specific demographic characteristics significantly influence adventure tourists' satisfaction in Rishikesh. Targeting marketing and service design according to age groups, income levels, gender, and travel behavior can enhance visitor experiences. Encouraging repeat visitation and group travel, tailoring seasonal offerings, and stimulating adventure enthusiasm and motivation are recommended. Policymakers should implement demographic-sensitive strategies to sustain and grow adventure tourism sustainably.

8. Limitations and Future Research

1. The convenience sampling can be a limitation to generalization.
2. Rishikesh limited; the results might not be the same in other adventure locations.

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