



Residents' Perceptions and Attitudes Toward the Impacts of Tourism in Swat Valley, Pakistan

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Abstract: Tourism has emerged as a pivotal economic driver in Pakistan's Swat Valley, yet its long-term viability is contingent upon sustained support from the host community. In this study, the multifaceted perceptions and attitudes of residents toward tourism impacts were examined through a quantitative survey of 400 participants. Data were analyzed using Exploratory Factor Analysis (EFA) to identify latent perceptual dimensions and correlation analysis to explore interrelationships among these dimensions. The findings revealed a pronounced dichotomy: strong positive attitudes, primarily driven by perceived economic benefits ($r = 0.804$), were significantly counterbalanced by a robust negative association with environmental concerns ($r = -0.684$), particularly those related to pollution and ecological degradation. Socio-cultural impacts were perceived with ambivalence, reflecting both appreciation for cultural exchange and apprehension regarding cultural erosion. A pivotal factor, termed "development and governance", was identified, linking economic growth trajectories to the quality and effectiveness of policy implementation. The results indicate that community support for tourism is conditional, reflecting a calculated trade-off between economic opportunity and environmental preservation. The evidence further suggests that a transition from unregulated expansion to a sustainable tourism paradigm is imperative, integrating economic aspirations with rigorous environmental governance and ensuring active community participation in decision-making processes. Such an approach is posited to enhance tourism's resilience, safeguard the Swat Valley's ecological integrity, and align local development trajectories with long-term sustainability goals. The study provides actionable insights for policymakers, development agencies, and tourism planners, offering a comprehensive framework for fostering a balanced and mutually beneficial relationship between tourism development and host community welfare.

Keywords: Tourism; Sustainable tourism; Residents' attitudes; Impacts of tourism; Swat Valley

1. Introduction

Tourism has evolved into one of the world's most challenging socio-economic forces, a global industry that connects disparate cultures, fuels economies, and reshapes landscapes. The United Nations World Tourism Organization (UNWTO) consistently highlights its role as a leading source of export earnings, employment, and investment worldwide (UNWTO-2023). For many developing nations, tourism is campaigned as a potent catalyst for development, offering a pathway to economic diversification, poverty reduction, and integration into the global economy (Iftikhar et al., 2022). By leveraging their natural and cultural endowments, countries can generate vital foreign exchange, create employment opportunities in sectors ranging from hospitality to transport, and stimulate the growth of local enterprises (Qamruzzaman, 2023). In this paradigm, tourism is not merely about travel; it is a strategic tool for national progress.

Pakistan's extraordinary geographical diversity, spanning from the majestic Karakoram and Himalayan ranges in the north to the arid desert and vast coastlines in the south, offers immense tourism opportunities that are still

largely untapped (Akbar et al., 2017; Ali et al., 2022). The country is a repository of ancient civilizations, vibrant cultural traditions, and breathtaking natural beauty (Ahmed et al., 2022). Recognizing this, successive governments have made efforts to promote the sector, viewing it as a vehicle for improving the country's international image and stimulating economic activity, particularly in its more remote regions (Ashraf et al., 2023). The northern regions of Pakistan, especially Swat Valley, have historically been the premier tourist destination of the country. Being called "Switzerland of the East" for its alpine meadows, lush forests, and serene rivers, Swat Valley has long attracted both domestic and international visitors (Ali, 2023). However, the development of this industry is fraught with complexities that extend far beyond simple economic calculations. The long-term success or failure of any tourism destination is inextricably linked to the host community. Local inhabitants are an integral part of any tourist destination's appeal (Scalabrini & Remoaldo, 2022). While residents feel that tourism growth supports their values and aspirations, they willingly offer hospitality, act as guardians of local heritage, and back policies that ensure its sustainability (Munjal, 2023).

To ensure the sustainable development of tourism, it is crucial to analyze the complex attitudes of the host community. When residents feel that tourism is more of a burden than a benefit, social resistance can be created, damaging the destination appeal. Researchers often use the Social Exchange Theory (SET) to systematically study these feelings (Chang, 2021). This theory provides a powerful model for understanding why local communities either support or resist tourism. This framework is critical because a destination's long-term health depends on a positive relationship with its residents. The gains or benefits are wide-ranging. Economic benefits are a major source of support, bringing new jobs for individuals and families, opportunities for entrepreneurs, and tax revenues for public services. At the same time, socio-cultural benefits can foster positive exchanges and build mutual respect between different cultures. Tourism can also instill a sense of pride in local heritage and traditions, sometimes leading to the revival of cultural practices, festivals, and crafts that might otherwise have declined (Richards, 2018; Saarinen, 2006). Furthermore, tourism can lead to the development of public amenities like improved roads, parks, and recreational facilities that benefit both tourists and residents. Environmental benefits provide a powerful economic incentive for the conservation of natural environments and wildlife, as well as the preservation of historical and archaeological sites (Shrestha & L'Espoir Decosta, 2023).

Conversely, perceived costs can be equally impactful like economic costs, including increased inflation and higher costs of living for residents, a surge in land and property value that can displace locals, seasonal employment that creates income instability and economic leakage, where profits are repatriated by foreign-owned companies rather than benefiting the local economy (Sharpley, 2014). Similarly, socio-cultural costs are among the most contentious issues, including overcrowding, increased traffic congestion and noise, and a rise in social problems such as crime, prostitution, and drug use (Almeida-García et al., 2016; Andereck et al., 2005). A significant concern is the "commodification of culture," where sacred rituals or authentic traditions are repackaged as superficial performances for tourist consumption, leading to a loss of meaning and authenticity (Eyisi et al., 2023). Likewise, the negative environmental impacts are often severe, including pollution (air, water, and solid waste), depletion of natural resources (especially water), destruction of habitats for infrastructure development, and general degradation of the aesthetic beauty of the landscape.

Building on SET, other models illustrate that attitudes are not static. Jamnia et al. (2023) elaborated on the Irritation Index proposed by Doxey-1975, who proposed a dynamic, four-stage evolution of residents' attitudes along with the tourism development: euphoria (enthusiasm and welcome), apathy (as residents take tourism for granted), annoyance (as the destination approaches its carrying capacity and problems emerge), and antagonism (open hostility and resentment toward tourists). Similarly, the Tourism Area Life Cycle (TALC) model proposed by Butler-1980-maps the destination's trajectory from exploration to stagnation, suggesting that residents' attitudes are closely correlated with these developmental stages. In the early stages, local control and benefits are high, fostering positive perceptions. In later stages, however, external investors often dominate, and negative impacts become more pronounced, leading to community exclusion.

The simple cost-benefit calculation and SET are moderated by a host of intervening variables that explain why different individuals within the same community can hold vastly different attitudes. Key factors identified in the literature include economic dependency, whereby individuals directly employed in the tourism sector or whose businesses rely on tourist expenditure consistently hold more positive views than those who do not benefit financially (Rasoolimanesh & Seyfi, 2021). Moreover, residents with a strong emotional connection to their community and a deep sense of place may be more sensitive to the negative cultural and environmental impacts of tourism, making them more critical of its development (Lee et al., 2023). Another factor is the level of tourist contact, in which the nature and frequency of interactions between hosts and guests significantly influence attitudes. Positive, meaningful contact can foster mutual respect, while high levels of impersonal contact can exacerbate feelings of annoyance and intrusion (Giango et al., 2022). Additionally, a crucial factor is the extent to which residents feel they have a voice in the tourism planning and decision-making process. A lack of empowerment and the perception that decisions are being imposed by external authorities or corporations almost invariably lead to resentment and opposition, regardless of the economic benefits (Thieme et al., 2021).

While these frameworks effectively model residents' attitudes, a political ecology perspective offers a deeper,

more critical lens by questioning the underlying power dynamics that shape these perceptions. Political ecology analyzes how power is distributed among stakeholders (Stylidis et al., 2015), such as government bodies, external corporations, local elites, and broader communities, determining who controls resources, who influences policy, and who disproportionately bears the environmental and social costs of development (Robbins-2012). From this viewpoint, residents' attitudes are not simply a rational calculation of costs and benefits, but are fundamentally shaped by their position within these power structures and their ability to participate in decision-making. This study, therefore, draws upon insights from political ecology to interpret the findings, particularly those concerning the tension between economic development and environmental degradation in Swat Valley.

Similarly, theoretical frameworks provide a robust foundation for analysis and their explanatory power is contingent upon context. Most of the research on residents' perceptions has been conducted in relatively Western contexts, coastal destinations, or major urban centers. The necessity for a focused study on Swat Valley is underscored by its unique confluence of socio-cultural, historical, and environmental factors that standard tourism models often fail to capture. The region's distinct socio-cultural fabric, rooted in the Pashtoon identity and conservative Islamic values, creates a significant "cultural distance" that can generate social friction when encountering the more liberal behaviors of visitors.

Given the identified gap in literature, the primary purpose of this study is to conduct a comprehensive analysis of the perceptions and attitudes of the local community in Swat Valley toward the social, cultural, economic and environmental impacts of tourism. The study aims to move beyond a simple inventory of positive and negative impacts to explore the underlying factors that shape these views in this unique context. To achieve this aim, the research systematically explores the full spectrum of tourism's perceived social, cultural, economic and environmental impacts from the residents' perspective. Through a survey-based methodology, the study investigates the key factors shaping these attitudes, from economic dependency and demographics to the crucial role of community participation in planning. Ultimately, this work seeks not only to contribute new empirical knowledge to tourism studies within a unique post-conflict context but also to provide actionable insights for policymakers and local leaders in Pakistan. The goal is to inform the development of a more equitable and sustainable tourism model for Swat Valley, one that carefully balances economic aspirations with the perception of its invaluable cultural and natural heritage.

2. Methodology

2.1 Study Area

This study was conducted in Swat Valley, a popular tourism destination in northern Pakistan (Figure 1). This valley was chosen because it's a major center for inbound and outbound tourism. Geographically, the valley covers approximately 5,337 km² and features striking topography, with elevations ranging from 980 m to over 5,900 m, surrounded by snow-covered peaks, lush forests, alpine meadows and numerous lakes and waterfalls (Ali et al., 2018; Ali et al., 2019). Owing to its four-season climate, tourists visit year-round (Amin et al., 2022). This continuous and substantial influx of visitors makes Swat Valley an ideal setting to examine the perceptions and attitudes of a host community that is deeply engaged with—and affected by—the impacts of tourism, both in positive and negative ways.

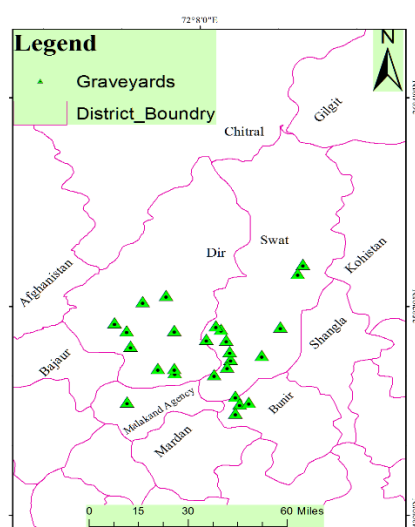


Figure 1. Map of the study area

2.2 Research Design

A quantitative research design centering on a cross-sectional field survey was adopted in this study to systematically explore residents' attitudes. This approach was chosen because of its effectiveness in measuring perceptions across a broad population and its alignment with established tourism research (Zhang et al., 2019). The research process was performed using a logical two-phase approach to ensure the instrument's validity and contextual relevance (Figure 2). Initially, an exploratory phase combined a comprehensive literature review with preliminary, informal interviews among community members in the Swat Valley. This foundation step was crucial for grounding the survey in the specific socio-cultural context and ensuring that the subsequent questions were clearly understood and pertinent to the residents' lived experiences. The research protocol was followed by taking verbal consent, deemed culturally appropriate, from all participants in the local language (Pashto). Respondents were informed of the study's voluntary nature and their right to withdraw at any time. No personally identifiable information was collected. Moreover, data were secured in a protected database.

Following this, the main data collection phase was launched using a structured questionnaire. This instrument was organized into key sections: respondent demographics, perceived tourism impacts, and overall community attitudes toward the industry, before transitioning to its core component (Kajzar et al., 2020). A series of 30 statements measured perceptions of tourism's economic, socio-cultural, and environmental impacts. To quantify these attitudes, each statement was anchored to a 5-point Likert scale, allowing participants to specify their level of agreement from 1 (strongly disagree) to 5 (strongly agree), thereby providing a robust framework for capturing the nuances of their views (Dutt et al., 2023; Kosova et al., 2023).

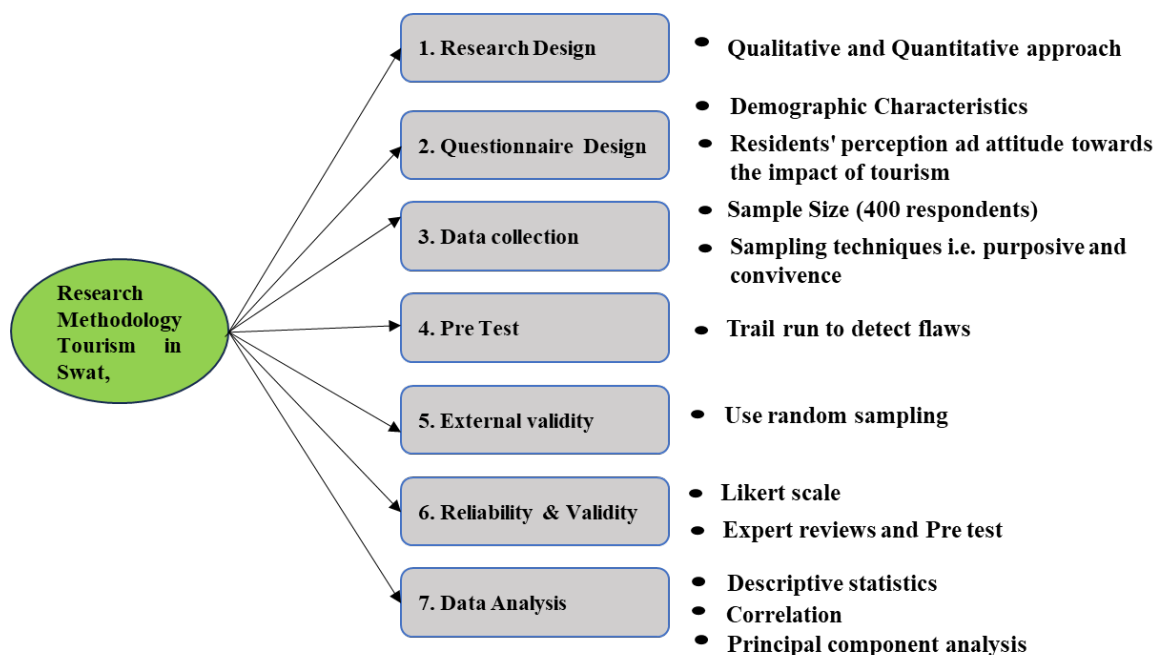


Figure 2. Process of the research methodology

2.3 Data Collection and Analysis

Data were collected through non-random selection methods. Convenience sampling and purposive sampling were used as a data collection approach. This approach was the most practical choice given the large population and due to time and resource limitations. To capture a diverse range of perspectives, 400 questionnaires were given to residents across various communities in Swat Valley. The entire data collection was completed in a one-month period. Following data collection, a multi-stage analysis was conducted to examine the environmental, socio-cultural and economic dimensions of tourism's perceived impacts. Initially, descriptive statistics were used to summarize the demographic characteristics of the respondents (Figure 3). The core of the analysis involved reducing the 29 perception variables into a smaller set of meaningful underlying factors. To achieve this, EFA was performed using Principal Component Analysis (PCA) with a Varimax rotation, a standard technique for identifying latent structures in survey data (Hair et al., 2012). The suitability of the data for this procedure was first confirmed by satisfying the required thresholds for the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and obtaining a significant result on Bartlett's Test of Sphericity (Costales et al., 2022). Subsequently,

correlation analysis was employed to investigate the relationship between these extracted perceptual factors and residents' overall attitudes toward tourism, providing deeper insight into the driver of their support or opposition (Ban & Bogdan, 2013).

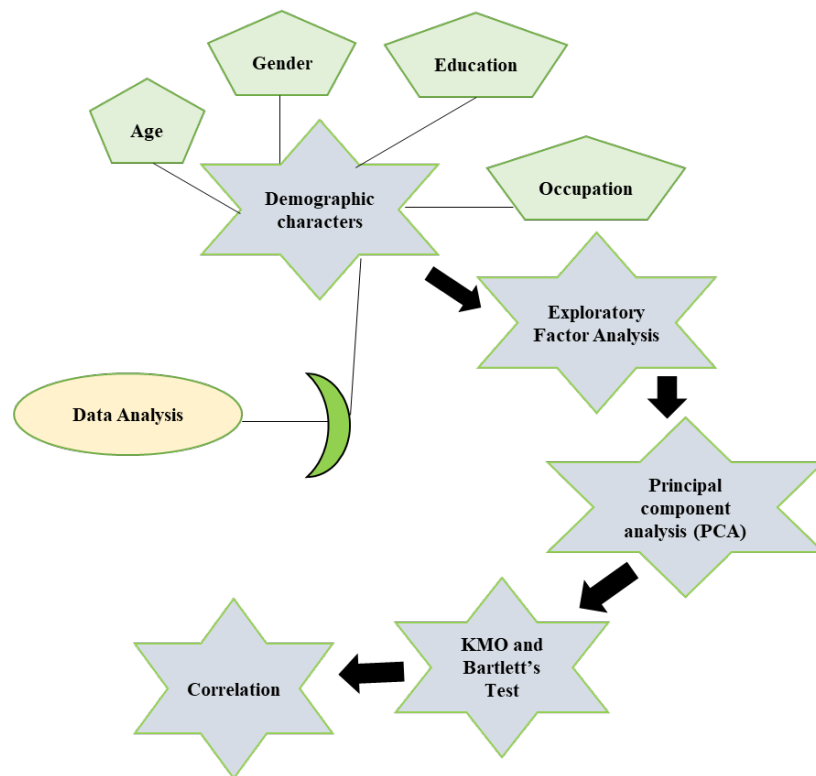


Figure 3. Data analysis procedure

3. Results

3.1 Demographic Characteristics

This section outlines the demographic characteristics of the 400 respondents surveyed in the Swat Valley. Table 1 provides a detailed breakdown of these attributes, including their frequencies and percentages. The results indicate that the majority of respondents were male residents. Key socio-economic indicators such as education, occupation, and income were also analyzed to provide a comprehensive overview of the sample. The demographic data reveal that the sample was overwhelmingly male ($n = 338$, 84.5%), with females comprising the remaining 15.5% ($n = 62$). In terms of age, the respondents were distributed across all age brackets, with the largest single group being those aged 36-40 years ($n = 71$, 17.75%). A significant majority of participants were established members of the community, as 66% ($n = 264$) reported living in the area for more than 20 years.

Regarding educational attainment, the largest proportion of respondents completed primary school and below ($n = 89$, 22.25%), followed closely by those with a junior high school ($n = 87$, 21.75%) or high school ($n = 80$, 20%) education. Occupationally, the tourism sector was the most common source of employment, accounting for 35% ($n = 140$) of respondents, with the private sector being the second largest at 32% ($n = 128$). Economically, a substantial majority of participants ($n = 302$, 75.5%) earned an average monthly income of PKR 40,001 and above. The contribution of tourism to this income was significant, as a notable 30.25% of respondents ($n = 121$) derived 51% or more of their income from tourism-related activities. Furthermore, a combined 55.25% of participants earned between 11% and 50% of their monthly income from the sector, highlighting its widespread economic influence in the community.

3.2 Reliability Analysis

To begin the analysis, the internal consistency and reliability of the 30-item questionnaire were assessed using the Cronbach alpha coefficient. This test measures the degree to which all items on the scale measure the same underlying construct. The analysis yielded a Cronbach's alpha of 0.924 (Table 2), which is well above the recommended threshold of 0.65. This exceptionally high value indicates that the measurement scale used in this

study is highly reliable and its variables are internally consistent.

Table 1. Details of demographic characteristics of the respondents from Swat Valley

No.	Variables	Demographic Characteristics	Total Number	Percentage
1	Gender	Male	338	84.5
		Female	62	15.5
2	Age	18-30	94	23.50
		31-40	129	32.25
		41-50	123	28.25
		50 and above	64	16.0
		Under 5 years	25	6.25
3	Years of residence	5-10	43	10.75
		11-20	68	17
		Above 20 years	264	66
4	Education	Primary school and below	89	22.25
		Junior high school	87	21.75
		High school	80	20
		Undergraduate	73	18.25
		Graduate	47	11.75
		Postgraduate	24	6
5	Occupation	Tourism-related sector	140	35
		Private sector	128	32
		Administration	56	14
		Others	76	19
6	Average monthly income (PKR)	20,000 and less than 20,000	8	2
		20,001-30,000	35	8.75
		30,001-40,000	55	13.75
		40,001 and above	302	75.5
		10% and less than 10%	26	6.5
7	Tourism contribution to income	11%-30%	78	19.5
		31%-40%	62	15.5
		41%-50%	81	20.25
		51% and above	121	30.25
		None	32	8

Table 1. Reliability analysis of 30 variables regarding residents' perceptions toward tourism

Reliability Analysis		
No.	Cronbach's Alpha	Number of Variables
1	0.924	30

Then the suitability of the data for EFA was confirmed using two statistical tests: the KMO measure and Bartlett's Test of Sphericity (Table 3). The KMO test assesses sampling adequacy, with values above 0.70 considered suitable. This study recorded a KMO value of 0.813, indicating that the sample size was more than adjustable for conducting factor analysis.

Table 2. KMO and Bartlett's Test of Sphericity for 30 variables regarding residents' perceptions toward tourism

No.	Tests	Values
1	KMO	0.813
	Bartlett's Test of Sphericity	
2	Chi-square (χ^2)	483.51
	Degree of freedom (df)	71
	Significance	0.00

Furthermore, Bartlett's Test of Sphericity was performed to determine if correlations between the variables were sufficient for analysis. The test was highly significant ($\chi^2 = 483.51$, $df = 71$, $p < 0.001$), allowing for the rejection of the null hypothesis that the variables are uncorrelated. Together, the results of the KMO and Bartlett's tests confirm that the dataset is robust and appropriate for factor analysis.

3.3 Factor Analysis of Residents' Perceptions

EFA was conducted using PCA with a Varimax rotation to identify the underlying dimensions of residents'

perceptions toward the impacts of tourism. Based on the analysis, a four-factor solution was extracted, which collectively explained 61.41% of the total variance. Factors with an initial eigenvalue greater than 1.0 were taken, and individual items were included if their factor loading exceeded 0.50. The four extracted factors are detailed below (Table 4).

Table 4. Factor analysis of residents' perceptions and attitudes toward the impacts of tourism

No.	Items	Factor Loading		Initial Eigenvalues	
				Total Variance (%)	Cumulative (%)
1	Increase in local income	0.817	4.185	35.53	48.94
2	Attract investments	0.801			
3	Local income development	0.725			
4	Improvement in infrastructure	0.785	1.247	21.74	51.14
5	Increase in cultural diversity	0.771			
6	Bad social atmosphere	0.701			
7	Environmental pollution	0.919	1.21	35.41	56.41
8	Destruction to wildlife	0.817			
9	Tourism development	0.788	1.02	17.51	61.41
10	Government protection policies	0.721			

Note: Extraction method: PCA; rotation method: Varimax rotation; iterations: 5

Factor 1 (economic benefits) was the most significant factor, with an initial eigenvalue of 4.185, explaining 35.53% of the variance. It comprises three variables indicating that tourism is perceived to increase residents' income (loading = 0.817), attract domestic and foreign investment (0.801), and serve as a key driver of local economic development (0.725). Factor 2 (socio-cultural impact) captured socio-cultural impacts, explaining 21.74% variance with an eigenvalue of 1.247. This dimension includes perceptions that tourism leads to improved local infrastructure (0.785) and an increase in cultural diversity (0.771), alongside the negative perception that it can create a bad social atmosphere (0.701). Factor 3 (environmental impacts), with an eigenvalue of 1.21, accounted for 35.41% of the variance and focused on environmental consequences. It was strongly defined by two variables: the view that tourism causes environmental pollution (0.919) and that it leads to the destruction of wildlife habitats (0.817). Factor 4 (development and governance) explained 17.51% of the variance with an eigenvalue of 1.02. This dimension reflects residents' attitudes toward the management of tourism, combining perceptions of tourism development (0.788) with the role of government protection policies for tourist spots (0.721).

After confirming the data's suitability, PCA identified four distinct factors that encapsulate the residents' perceptions of tourism. These factors, which are presented below in order of their explained variance, detail the primary economic, socio-cultural, environmental, and governance-related dimensions of tourism's impacts in the Swat Valley.

- **Economic benefit:** This emerged as the most influential factor, accounting for the largest portion of the variance (35.53%) with a sorting initial eigenvalue of 4.185. It is composed of three highly correlated variables indicating that residents perceive tourism as a mechanism to increase resident income (loading = 0.817), attract investments (0.801), and promote local income development (0.725). The strength of this factor demonstrates that economic considerations are central to the community's perceptions of tourism.
- **Socio-cultural impact:** The second factor explained 21.74% of the total variance with an eigenvalue of 1.247. This dimension reveals a dual perception. It combines positive views on tourism's role in the improvement of local infrastructure (0.785) and an increase in cultural diversity (0.771) with a notable negative perception of this effect on the social atmosphere (0.701). This group highlights the complex and sometimes contradictory social outcomes attributed to tourism by residents.
- **Environmental impact:** This factor captured a significant position of the variance (35.41) with an eigenvalue of 1.21, underscoring the high level of residents' concerns for the natural environment. This dimension is defined by two strongly loaded variables: the belief that tourism causes environmental pollution (an exceptionally high loading of 0.919) and leads to the destruction of wildlife (0.817). The very high loading for pollution, in particular, identifies it as a primary environmental concern for the host community.
- **Governance-related impact:** The final factor explained 17.51% of the variance with an eigenvalue of 1.02. This dimension links residents' views on tourism development (0.788) with the perceived importance of government protection policies (0.721). The emergence of these two items as a single factor suggests that, in the minds of residents, sustainable development is intrinsically connected to and dependent upon effective governmental regulation and oversight.

3.4 The Influence of Perceptions on Residents' Attitudes

To investigate the relationship between the identified perceptual dimensions and residents' overall attitudes toward tourism, a correlational analysis was performed. The results, as detailed in Table 5, quantify the strength and direction of these relationships, while subsequent qualitative findings provide deeper context on these perceptions and attitudes.

Table 5. Correlation between different dimensions of perception and attitudes towards tourism

Attitudes	Economic	Sociocultural	Environmental
Attitudes	0.804	0.707	- 0.684
Economic	1.00	0.521	- 0.818
Sociocultural	0.521	1.00	- 0.544
Environmental	- 0.818	- 0.544	1.00

3.5 Correlational Analysis of Perceptions and Attitudes

The analysis reveals statistically significant relationships between all three perceptual factors and resident attitudes. As shown in Table 5, there is a strong, significant positive correlation between perceived economic benefit and favorable attitudes toward tourism ($r = 0.804$, $p < 0.001$). A significant positive correlation was also found between the socio-cultural impact and residents' attitudes ($r = 0.707$, $p < 0.001$). These findings suggest that as residents perceive greater economic and socio-cultural benefits, their overall attitudes toward tourism become more positive.

Conversely, a strong significant negative correlation exists between the perceived environmental impact and residents' attitudes ($r = -0.684$, $p < 0.001$). This indicates that as concerns about negative environmental consequences increase, residents' support for tourism tends to decrease. Notably, the inter-factor correlations also highlight this tension, particularly the strong negative relationship between perceived economic benefit and environmental impact ($r = 0.818$), suggesting that residents view these two outcomes as being in opposition.

3.6 Qualitative Insight on Local Perceptions

The qualitative data gathered from interviews substantiate and enrich the quantitative findings, revealing nuanced views within each perceptual dimension:

- **Economic perceptions:** Residents widely acknowledged the positive economic impacts, primarily citing the creation of new job opportunities and the attraction of investment through new hotels and restaurants. This was seen as a key driver for improving living conditions. However, a counter narrative emerged regarding negative economic effects, with some residents expressing concerns over price inflation and inequitable income distribution resulting from tourism development.
- **Socio-cultural perceptions:** Participants in the study area hold a balanced view of tourism's impacts. They clearly saw the positive side, pointing to tangible improvements in their community like better infrastructure, more recreational spaces, and upgraded public services, which all contributed to a better quality of life. Furthermore, they appreciated the opportunity for cultural exchange and did not believe it harmed their local traditions. While they acknowledged drawbacks, such as traffic jams during busy seasons and lingering security concerns from the past, there was a general perception that these issues were being actively managed by the government.
- **Environmental perceptions:** Participants had divergent views of environmental impacts. Some of the participants thought that tourism created environmental awareness, but more dominant perceptions centered on its negative consequences. Residents frequently cited environmental pollution caused by tourists' behavior as a primary concern. Deeper ecological impacts, including soil erosion and habitat degradation, were also raised, alongside fears for the survival of the wildlife species facing threats from increased human activities.

3.7 Residents' Attitudes Toward Sustainable Tourism

Beyond perceptions of current impacts, residents expressed forward-looking attitudes centered on achieving long-term sustainability. A clear consensus emerged on the need for strategic management, emphasizing the importance of involving all stakeholders in tourism planning. Furthermore, residents articulated a strong desire to both preserve and promote their cultural heritage while engaging in cultural exchange. Critically, there was

widespread agreement on the need for environmental stewardship, with residents supporting adherence to governmental policies and advocating that a portion of tourism revenue be specifically allocated to environmental conservation efforts.

4. Discussion

This study's findings indicate that the relationship between Swat Valley's residents and tourism is nuanced, deeply rooted in a calculated trade-off between perceived benefits and costs. This dynamic strongly supports the framework of SET, suggesting that local attitudes are not static but are actively negotiated based on what the community stands to gain versus what it must endure. The result of this calculation is not passive acceptance, but a clear call for more sustainable and well-managed tourism development. Ultimately, the most significant insight is the dominant role of economic benefits in shaping this positive, yet conditional support, acting as the primary force that currently outweighs the associated drawbacks. This study aimed to investigate the perceptions and attitudes of Swat Valley residents toward the multifaceted impacts of tourism, revealing a complex and nuanced relationship. The findings suggest that residents' attitudes are not monolithic but are the product of a calculated trade-off between perceived gains and losses, ultimately culminating in a clear call for a more sustainable and managed approach to tourism development (Tavares de Carvalho et al., 2024). The most dominant finding is the powerful role of economic benefit in shaping positive attitudes.

With economic benefit explaining the largest portion of variance in the factor analysis (35.53%) and showing a strong positive correlation with favorable attitudes ($r = 0.804$), it is clear that financial incentives are a primary driver of support. This supports extensive research showing tourism as a key economic engine, especially for developing regions (Beerli-Palacio & Martín-Santana, 2020). This is unsurprising given the demographic context, where a significant portion of the community is directly or indirectly employed by the tourism sector. Qualitative findings reinforce this, with residents directly linking tourism to job creation, investment, and improved living conditions. However, this economic optimism is not without its warnings, as concerns regarding price inflation and inequitable income distribution echo the findings of Incera & Fernández (2015), suggesting that while tourism is seen as an economic engine, its benefits may not be perceived as being universally shared, highlighting a potential source of future community tension.

While the economic lens provides a largely positive view, residents' perceptions of socio-cultural impacts are far more ambivalent. The positive correlation with overall attitudes ($r = 0.707$) appears driven by tangible improvements in local infrastructure and public services, which directly enhance quality of life. The perceptions of positive cultural exchange, phenomena noted by Sutawa (2012) and Postma & Schmuecker (2017), indicate a level of community resilience. This positive view is, however, counterbalanced by concerns over a "bad social atmosphere," traffic congestion and security, classic symptoms of over-tourism (Oh et al., 2023). This duality reflects the core tenets of SET, wherein residents weigh the perceived rewards of tourism against its social costs, with the current balance tipping in favor of the benefits.

This nuanced socio-cultural view stands in stark contrast to the overwhelming negative perception of tourism's environmental consequences. This dimension serves as the critical counter-narrative to the pro-tourism economic argument, evidenced by a strong negative correlation with positive attitudes ($r = -0.684$) and the single highest-loading variable of the entire study, i.e., environmental pollution (0.919). The strong negative correlation between the economic and environmental factors ($r = -0.818$) statistically confirms that residents perceive a direct and troubling trade-off between economic prosperity and environmental health. The qualitative data reinforce statistical results, with residents citing specific issues like pollution from tourists, soil erosion, and the destruction of wildlife habitats, concerns that are well documented in tourism literature (Hsieh & Kung, 2013). This indicates that while residents may be reaping economic rewards, they are acutely aware that this progress is coming at a significant ecological price.

While SET provides a robust framework, its direct application in the unique socio-cultural context of Swat Valley is limited by its western individualistic paradigms. The theory's assumption of a rational, transactional exchange is challenged by the Pashtun code of hospitality (Melmastiya) which frames welcoming guests as a cultural duty rather than a calculated trade-off. Furthermore, the significant "cultural distance" between residents and tourists creates profound moral and religious costs that cannot be easily weighed against financial gain. This is compounded by the collectivist nature of society, where community honor and gender dynamics supersede the individual calculation central to SET. Consequently, the residents' perspective in Swat Valley must be understood not as a simple economic exchange, but as a complex negotiation of cultural identity, religious values and collective honor gain. Crucially, the residents of Swat Valley do not appear to be passive victims of these competing impacts. The emergence of development and government as a distinct factor indicates a sophisticated understanding that development and regulation must be intrinsically linked. Their forward-looking attitudes articulate a clear vision for the future, moving beyond unchecked growth toward strategic, sustainable management. The widespread support for involving all stakeholders in planning, and most importantly, allocating a portion of tourism revenue to environmental conservation represents a proactive stance. This aligns with calls from scholars

like Dinica (2018) to promote environmentally sustainable tourism that allows both visitors and locals to benefit.

From a political ecology perspective, the findings of this study can be interpreted as symptoms of power imbalance. The development and governance factor can be reinterpreted as community demand for greater control over their resources, not just a call for better policy. The strong negative correlation between economic benefit and environmental harm ($r = 0.818$) suggests that powerful actors are externalizing ecological costs onto residents. The conflict is therefore rooted in a struggle over who truly benefits from tourism and who pays the price. This clear vision from the community carries significant implications for various stakeholders. For policymakers, there is an urgent need to create integrated policies that do not treat economic development and environmental protection as separate domains. Actional mechanisms, such as a targeted “tourism tax” redistributed for environmental conservation and the establishment of a “local community steering committee,” must be established to mitigate the negative impacts of tourism. For operators, the message is that their long-term social license to operate depends on mitigating their environmental footprint. Similarly, community leaders are empowered to advocate for a more inclusive planning process that balances diverse local interests. This study, while offering these valuable insights, is not without limitations. The significant gender imbalance in the sample, likely due to cultural and religious norms regarding female participation in public and economic life (Tavakoli & Mura, 2021), means the perspectives of women are underrepresented.

Eventually, the Swat Valley residents hold a rational yet cautious view of tourism. They are well aware of tourism as a power tool for economic uplift but are equally concerned about the degradation of their natural environment. Their attitudes reflect a complex cost-benefit analysis. The overwhelming message from this research, echoing calls from global bodies like UNWTO (2005), is that the future of tourism in the region hinges on striking a deliberate balance. The community is not calling for a halt to tourism, but rather for a shift toward a more sustainable, inclusive, and environmentally conscious model where the benefits are maximized and the inevitable costs are carefully managed through strong governance and shared responsibility.

5. Conclusions

This study concludes that residents’ attitudes toward tourism in the Swat Valley are defined by the profound tension between perceived economic benefits and significant environmental detriments. This dichotomy results in a conditional endorsement of industry where strong support driven by economic necessity is critically undermined by concerns over ecological degradation. In addition, residents advocate for a paradigm shift that explicitly addresses the underlying power imbalance. The long-term viability of tourism in the Swat Valley is therefore contingent on moving beyond a simple cost-benefit calculus to a new model founded on environmental justice. This requires a framework that ensures the genuine empowerment of the host community in governance and more equitable sharing of development benefits.

6. Recommendations

The people of the study area largely depend on the tourism sector. Therefore, sustainable measures must be taken by government officials and other stakeholders for further growth and development of this industry in the studied area. Implementation of standard and ground-based policies will further help in strengthening the positive perceptions and attitudes of residents toward the tourism sector in the area. Future policy assessments and research initiatives should move beyond general concerns to measure specific, locally relevant environmental impacts, including water availability and quality and a solid waste management system, ensuring that policy is informed by a holistic understanding of the ecological costs of tourism. However, some negative impacts (i.e., environmental concerns in the form of pollution) of tourism have also been reported which could harm this industry in the near future if adequate steps are not taken and ignored. Therefore, there is an urgent need to raise awareness and provide education for both locals and visitors and to identify appropriate solutions to these issues.

7. Limitations

The primary limitation of this study is the gender imbalance of the sample, with male respondents comprising 84.5% of the participants. This skew is largely a reflection of the conservative socio-cultural context of the Swat Valley, where cultural norms often limit the ability of external, particularly male, researchers to engage with female respondents in public spaces. This research is limited to the Swat Valley, and the study might be replicated in the future in other tourist destinations, as well as other districts of Khyber Pakhtunkhwa, to learn more about tourism's effects. Only information for the years 2021-2022 was gathered. As a result, new research for other years may be conducted. Furthermore, the study employed descriptive statistics, PCA, and factor analysis to learn about all three aspects of sustainable tourism development (environmental, socio-cultural, and economic impacts of tourism) from the residents’ perspectives. However, it was unable to anticipate future tourist impacts or changes over time. Furthermore, the operationalization of environmental impact presents a limitation. Although the two retained

variables—pollution and wildlife habitat destruction—formed a statistically robust factor in this analysis, they do not capture the full spectrum of environmental pressures in the Swat Valley. Additionally, the perception of governance and its impact on tourism needs to be explored in future.

Author Contributions

Conceptualization, I.S.; methodology, I.S.; formal analysis, S.A.; investigation, I.S.; writing—original draft preparation, F.A.; writing—review & editing, R.N.; Supervision, L.L. All authors have read and agreed to the published version of the manuscript.

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Data Availability

The data used to support the research findings are available from the corresponding author upon request.

Conflicts of Interest

The authors declare no conflict of interest.

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