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Analysis of Natural Resources and Environment, Politico-Economic Conditions and their influences on Tourist Behavioural Intentions in Hunza: Mediating effect of Tourist Satisfaction

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ABSTRACT

This study aims to explore the influence of Natural Resources and Environment (NRE), Politico-Economic Conditions (PEC) on Tourist Behavioral Intension (TBI) in Hunza, Pakistan. The study further investigates the mediating role of Tourist Satisfaction (TS) on the given variables. Partial Least Square Structural Equation Modeling (PLS-SEM) technique has been applied to conceptualize the research frame and to test the proposed hypotheses. Primary data was collected by using convenient sampling technique for analysis from 220 tourists who visited tourism nucleus sites of Hunza. The finding of the study reveals that Natural resources and Environment, Politico-and Economic Conditions have a significant positive impact on Tourist's Behavioral Intensions. Moreover, Tourist's Satisfaction partially mediates the positive relationships among Natural Resources and Environment, Political & Economic Conditions and Tourist's Behavioral Intensions. The findings of the study extend the understanding that presence of natural resources along with healthy environment and stable political & economic conditions of a destination are the key determinants for sustainable tourism development.

Keywords
Natural Resources and Environment (NRE), Tourist Satisfaction (TS), Tourists Behavioural Intensions (TBI), Mediation

JEL Classification
P28, Z3, L83

1. Introduction

Tourism plays an important role in the economy of a country and it has become one of the global businesses and fastest emergent economic segments therefore, various

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economies consider it as an optimal tool for local development. Similarly, in recent decades, tourism has been considered as an integral area that has an influence on the economic development. Therefore, to promote tourism, it is essential to developed destinations according to the state of art infrastructure. In addition, investments in clean environment, heritage and culture are also required for tourist satisfaction. Ariya, Wishitemi and Sitati (2017), Philemon (2015), Lai, Hitchcock, Lu and Liu (2018) and Gnanapala (2015) have shown that safety and security are the major concerns for the tourist satisfaction. However, factors which influence the perception of tourists is word of mouth (Lai et al., 2018). Similarly, the other factors of tourist satisfaction and attractions are natural beauty and wildlife resource (Ariya et al, 2017). Gnanapala (2015) highlighted that disrespectful attitude of custom officials at airports and beach boys have negative effect on tourist satisfaction. Infrastructure development, online services and local transport are other services which paly vital role in selection of the destination (Rehman, 2012). However according to Alim, Ray and Hossain (2016) role of transportation is not significant in the selection of the destination whereas Alim et al., (2016) found in their study that food and beverages are the major determinants in selecting the destination.

According to a recent study conducted by Gallup Pakistan (2019, p. 7), "*tourism could be a potential game changer that could revitalize the struggling economy of the country*". Keeping this in view, Pakistan has tremendous potential in all kinds of tourism, for example religious, expedition and culture tourism. For foreign tourists, museum sites are more popular and it attracts 50% more tourists as compared to cultural sites (Gallup Pakistan, 2019). Likewise, the opening of Kartarpur Corridor will have great potential of religious tourism in Pakistan. Among the other tourist destinations, Hunza, located in northern part of Pakistan has unique and diverse seasons, culture and tradition which attracts many domestic and international tourists. In addition, the recent inflow of domestic tourists to the area is due to improvement in political stability, and improved law and order situation. Therefore, this study aimed to explore the natural environment, political and economic conditions on tourist satisfaction and tourist behaviour intention. Furthermore, this study also investigates the mediating effect of the tourist satisfaction. The current research is the first hand research in the study area using PLS-SEM technique due to which it has unique significances for the stakeholders associated with tourism sector. The study also aims to provide policy recommendations to the policy makers.

2. Literature Review

According to Ariya, Wishitemi and Sitati (2017) the most important attributes to tourist's attraction are wildlife resources, safety and security. In addition, the other key factor, which determines the destination attractiveness is the quality of the infrastructure. The attributes which displeasure tourists are various fees e.g. high park fees and inflated facilities. Improving the accessibility and enhancing the quality of the roads for better choice for the tourists. Li et al., (2017) used the "second order structural equation model" to analyze the tourist's perception whereas in this study, the authors discussed the various dimensions of the crowding and congestions in the study area. The outcome of the research showed the negative effect on attractiveness of the destination due to perception of crowding and its direct effect on tourists' satisfaction. Neuts and Nijkamp (2012) also emphasized on the high-density destination crowding and recommended to improve the infrastructure of the destinations which increases the positive tourists' perception about the destination. They also highlighted that a positive influence of attractions, ancillary services, amenities and accommodation on memorable travel experience.

Alim, Ray and Hossain (2016) explored the significant factors which attract the tourist in selection of the destination. The findings have shown that the major factors which paly role in selection of destination is food and beverage while transportation has minor role in selection of the destination. Philemon (2015) findings showed that international tourists have better perception in some areas i.e. landscape, culture and landscape, however the results have shown the concerns of tourists on tour guiding quality, safety and security. The authors suggested that the policy makers should improve the weak areas and further improve the developed areas of the tourism. In addition, they emphasized on the promotion of positive image of the destination in the national media to counter the negative propaganda. Banki et al., (2014) explored the moderating role of the affective image (AI) of destination in examining the association between tourists' behavioral intention (TBI) and tourist satisfaction (TS). For empirical analysis, the authors conducted their study in the mountain tourism destination by using SEM modeling. The results revealed an insignificant relationship between AI and TBI. In addition, the study showed that AI has a moderating effect in explaining the relationship between TBI and TS. Canny (2013) conducted a study to explore the various dimensions of tourists' service quality on satisfaction of the tourists. He also examined the tourist satisfaction on future intentions of the tourists. The results showed a positive and influential influence of service quality on perception of the tourists. Similar relation has been observed between tourists' intention and tourist satisfaction.

Bertan and Altintaş (2013) used the one-way variance analysis to assess the effects of various demographic characteristics on their perception about the destination. The outcomes of the study revealed the significant difference between demographic characteristics and perception of the destination. The study suggested that service quality, the employee should be trained and educated in various services, facilities and designed of rooms to enhance the tourism business. Rahman (2012) carried out the study about tourist perception of Bangladesh as a tourist destination by using SEM. The author also examined the most influential features, which are essential for tourists. The results of the SEM has shown that in choosing destination brand the influential factors are; "*brand image, internet adoption and customers satisfaction*" Rahman (2012, p. 86). In addition, the important factors of needs and satisfaction of tourist in selection of destination are reputation of visiting place, online services and the system of local transport. Similarly, to attract more domestic and international tourists there is need to enhance the infrastructure, which is required for tourism development (Dragicevic, Stankov & Arsenovic, 2011). Wong and Yeh (2009) investigated the relationship among tourist risk perception, hesitation and knowledge using Structural Equation Modelling. The results showed that tourist risk is influencing the tourist hesitation however; the knowledge of tourist can moderate the association between tourist risk perception and hesitation. In addition, "*Hesitating tourists represent fish that have not yet been caught by the nets of tourism managers*" (Wong & Yeh, 2009, p. 18).

3. Theoretical Framework and Research Methodology

3.1 Conceptual Model and Hypotheses Development

Assaf and Josiassen (2012) used tourism performance theory to determine the drivers of tourism destination image and perception. Moreover, authors analyzed the determinants of tourism performance of destination by measuring various factors; economics conditions, environmental aspects, infrastructure, natural and cultural resources. The current research used tourism performance theory to conceptualize the model. The current research model consists of three exogenous latent constructs i.e. Natural Resources and Environment (NRE) with eight observed variables, Politico-Economic Conditions (PEC) with five items and Tourists satisfaction (TS) with eight indicators. The model also includes one endogenous latent construct, named Tourists Behavioral Intensions (TBI) with five indicators. Conceptual model of the study and the hypothesized relationships among dependent and independent latent constructs are given in the Schematic Diagram as under:

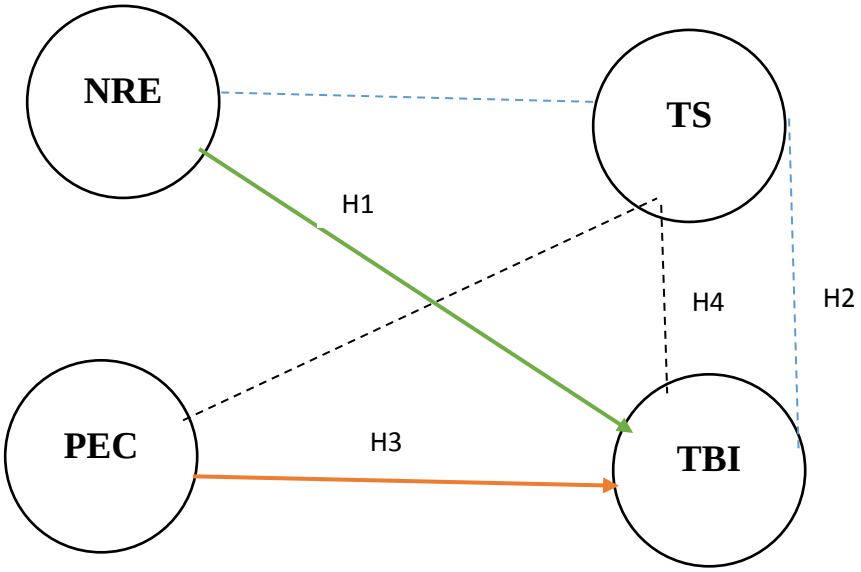

Figure 1: Conceptual Model (Schematic Diagram)

From the above schematic diagram, we can draw following four hypotheses**:**

H1: Natural Resources and Environment (NRE) have a significant positive effect on Tourists Behavioral Intentions (TBI)

H2: Tourists satisfaction (TS) will mediate the positive relationship between Natural Resources and Environment (NRE) and Tourists' Behavioral Intentions (TBI)

H3: Politico-economic conditions (PEC) have a significant positive effect on Tourists Behavioral Intentions (TBI)

H4: Tourists satisfaction (TS) will mediate the positive relationship between Politico-Economic Conditions (PEC) and Tourists' Behavioral intentions (TBI)

3.2 Research Methodology

The study proposed "Partial Least Squares Structural Equation Modelling" (PLS-SEM) technique to explore the relationships between natural resources & politico-economic and environmental conditions, tourists' satisfaction and tourist's behavioral intensions in Hunza, Pakistan. PLS-SEM is a multivariate statistical method that evaluates both measurement and structural model in order to find the relationships between study constructs and their observed indicators and among the latent constructs all together (Hair, Hult, Ringle, & Sarstedt, 2013). In the Tourist Behavioral Intension Model, Tourist Satisfaction (TS) was introduced as a mediator variable to examine its indirect role on the direct relationship between Natural Resources and Environment (NRE), Politico-Economic Conditions (PEC) and Tourist's Behavioral Intensions

(TBI). The study identified influencing factors of Natural Resources and Environment, Politico-Economic Conditions, Tourist's Satisfaction and Tourist Behavioral Intensions after an extensive literature review of some previous studies like Lai et al. (2018), Tukamushaba, Xiao & Ladkin (2016), Banki et al. (2014), Wong and Yeh (2009), Beerli and Martın (2004), Baker and Crompton (2000) etc. Finally, we developed eight items for Natural Resources & Environment (NRE), five items for Political & Economic Conditions (PEC), eight items for Tourist's Satisfaction and five items for Tourist's Behavioral Intensions (TBI).

3.2 Latent Constructs (List of Influencing Factors)

The study identified influencing factors for Tourist Satisfaction (TS), Natural Resources and Environment (NRE), Political and Economic Conditions (PEC) and Tourists Behavioral Intentions (TBI) after an extensive literature review. Finally, we developed eight items for Tourist Satisfaction (TS), eight items for Natural Resources and Environment (NRE) and five items for Political and Economic Conditions (PEC) and Tourists Behavioral Intentions (TBI) each. Details are given in Table 1 as under.

Table 1: List of factors

Items Codes	Tourist Satisfaction (TS)
TS1	I am satisfied from the quality of hotels and accommodation
TS2	Vacation met all expectations
TS3	Perform services right at the first time
TS4	Well established on line transaction
TS5	Offering multiple choices in travel services
TS6	Ease of access to destination
TS7	I am satisfied from the food available in restaurants
TS8	Health services and facilities are available
	Natural Resources and Environment (NRE)
NRE1	Weather is good in Hunza valley
NRE2	There are protected nature reserves, lakes and mountains.
NRE3	Variety and uniqueness of flora and fauna
NRE4	Hunza valley is naturally attractive and beautiful
NRE5	The environment is neat and clean
NRE6	There is overcrowding in the area
NRE7	There is no air and noise pollution
NRE8	There is traffic congestion in the area
	Political and Economic Conditions (PEC)
PEC1	Political stability in the area

PEC2	Economic development is more in Hunza
PEC3	The crime rate is low in Hunza
PEC4	No fear of terrorist attacks
PEC5	Prices of the goods and services are affordable in Hunza
	Tourists Behavioral Intensions (TBI)
TBI1	If I had to decide again, I would choose this destination
TBI2	I will recommend this destination to friends and family
TBI3	I will speak highly of this destination to friends and relatives
TBI4	I intend to holiday in this destination within the next year
TBI5	Consider Hunza as your choice to visit in the future

3.3 Data Collection

Before going to data collection, a pilot study was conducted to test the reliability of the questionnaire items. After clear understanding and testing of questionnaire for reliability, we executed the final survey in the study area. In order to collect micro data from the respondents we developed questionnaire, which consisted of two sections. Section one of the questionnaire was designed to receive the data regarding respondent's demographic variables like gender, age education and marital status etc. Section two consisted items related to the influencing factors of natural resources & environment, political and economic conditions, tourists' satisfaction and tourists' behavioral intentions. The statements in this section were designed in to five-point Likert-scale and respondent's responses were recorded from "strongly disagree = 1 to strongly agree = 5 (strongly disagree = 1, disagree = 2, Neutral = 3, agree = 4, and strongly agree = 5)".

The target population for this study consisted all those national tourists who were present in the restaurants, guesthouses, tourist huts, and tourist spots in the famous tourist destinations of Hunza and Gojal valleys (Aliabad, Altit, Karimabad and Gulmit) in Gilgit Baltistan, Pakistan in the month of July 2019 at different times. Using convenience-sampling technique only those tourists were approached who were willing to participate in the survey. Respondents were informed about the objectives of the research and confidentiality of the data before the questionnaires' distribution. A total of 220 questionnaires were returned, and all were deemed fit for further analysis. This sample size not only fulfills the widely used minimum sample size criteria (10 responses per indicator) but also fulfil the preferred sample size criteria (20 responses per indicators). The current research used SPSS for descriptive analysis and to evaluate the demographic profile of the respondents. Similarly, Smart PLS-SEM is used for investigation of the research model. To ensure reliability and validity, we investigated

reflective measurement model first and after then we examined structural model (Hair et al., 2017). For quality assurance of outer model, we used PLS algorithm method.

4. Results

Following table describes descriptive statistical analysis i.e. Mean, standard deviation, skewness and kurtosis values. Results reported in Table 2 showed satisfactory results regarding the normality of the data distribution.

Table 2. Mean, Standard Deviation, Kurtosis and Skewness values

Items	Mean	Standard Deviation	Excess Kurtosis	Skewness
TS1	2.709	1.306	-1.042	0.392
TS2	2.736	1.222	-0.954	0.381
TS3	2.759	1.308	-1.122	0.233
TS4	2.864	1.272	-1.034	0.218
TS5	2.745	1.331	-1.020	0.336
TS6	2.918	1.339	-1.144	0.185
TS7	2.773	1.349	-1.109	0.342
TS8	2.782	1.268	-1.030	0.377
NRE1	2.595	1.367	-0.957	0.535
NRE2	2.695	1.188	-0.643	0.608
NRE3	2.759	1.356	-1.147	0.313
NRE4	2.868	1.316	-1.072	0.510
NRE5	2.782	1.348	-1.083	0.415
NRE6	2.832	1.219	-0.908	0.417
NRE7	2.841	1.299	-1.013	0.311
NRE8	2.700	1.269	-0.971	0.405
PEC1	2.682	1.246	-0.963	0.268
PEC2	2.864	1.07	-0.830	0.409
PEC3	2.727	1.246	-0.897	0.303
PEC4	2.914	1.231	-0.980	0.269
PEC5	2.736	1.237	-0.951	0.281
TBI1	2.7	1.269	-0.971	0.405
TBI2	2.673	1.199	-0.787	0.399
TBI3	2.427	1.221	-0.647	0.615
TBI4	2.709	1.139	-0.703	0.46
TBI5	2.732	1.403	-1.302	0.169

Table 3 given below reports results of respondent's profile including their gender, marital status, age, academic qualifications, and their native provinces. Majority of the respondents (69%) were male while the remaining 31% were female belonged to all provinces including GB. The highest number of participants were from Panjab (41%).

These participants were all educated and some of them were employed (50%) while 30% of the respondents were self-employed and 17% of the participants were students from different universities of the country.

Table 3: Respondent's Profile

Demographic Characteristics		**Frequency**	**Percent (%)**
Gender	Male	152	69.09
	Female	68	30.91
Marital Status	Married	122	55.45
	Single	98	44.54
	Divorced	00	0.00
Age	Under 29 Years	98	44.54
	30 - 39 Years	67	30.45
	40 - 49 Years	38	17.27
	Above 49 Years	17	7.72
Qualification	Illiterate	00	0.00
	Primary	10	4.54
	Secondary	22	10.00
	Higher Secondary	53	24.09
	Bachelors	57	25.90
	Masters and above	78	35.45
Occupation	Employed	111	50.45
	Unemployed	04	1.81
	Self Employed	66	30.00
	Students	39	17.72
Province	Punjab	92	41.81
	Sindh	22	10.00
	KPK	57	25.90
	Baluchistan	04	1.81
	AJK	12	5.45
	GB	33	15.00
	Others	00	0.00
N = 220			

4.1 Evaluation of Measurement Model

The assessment of the measurement model is carried out using the criterion suggested by Hair et al. (2017, 2013). Table 4 given below shows item loadings, Cronbach's alpha, composite reliability and average variance extracted. The estimated values of items loadings, Cronbach's alpha and composite reliability exceeded the recommended value 0.7 (Hair et al., 2013 Latan & Noonan, 2017). Similarly, calculated value of average variance extracted also exceeded its recommended value 0.5 (Hair et al., 2013; Wong, 2013).

Table 4. Validity and Reliability of Constructs (Outer Loadings, Cronbach's Alpha**,** Average Variance Extracted and Composite Reliability)

Constructs	Items	Loadings	Cronbach's Alpha	AVE	CR
	NRE1	0.789	0.931	0.674	0.943
	NRE2	0.806			
	NRE3	0.861			
	NRE4	0.791			
	NRE5	0.853			
	NRE6	0.848			
	NRE7	0.837			
	NRE8	0.779			
	PEC1	0.905	0.932	0.785	0.948
	PEC2	0.889			
	PEC3	0.912			
	PEC4	0.865			
	PEC5	0.859			
	TBI1	0.852	0.852	0.629	0.894
	TBI2	0.822			
	TBI3	0.772			
	TBI4	0.798			
	TBI5	0.715			
	TS1	0.851	0.943	0.716	0.953
	TS2	0.84			
	TS3	0.867			
	TS4	0.868			
	TS5	0.853			
	TS6	0.854			
	TS7	0.832			
	TS8	0.803			

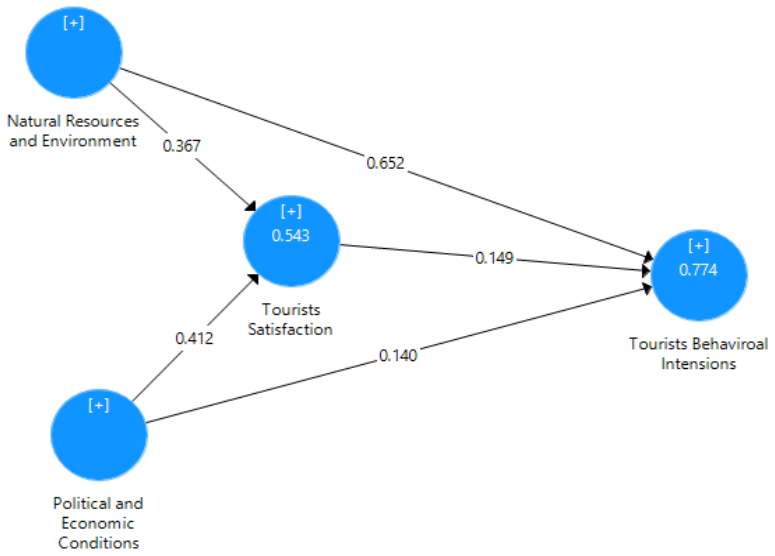

Figure 2. PLS-SEM Algorithm (Measurement Model)

Criterions like Forner-Lacker criterion and Heterotrait-monotrait are commonly used to test discriminant validity of the measurement model (Franke & Sarstedt, 2019; Hair et al., 2017). Fornell-Larcker criterion ensures discriminant validity through the examination of square root of average variance extracted for every latent variable included in the model. This criterion suggested that square root of average variance extracted for every latent variable must exceed than its correlation with other latent variable (Hair et al., 2013). Results reported in table 5 confirmed Fornell-Larcker criterion of discriminant validity.

Table 5: Fornell-Larker Criterion

Constructs	NRE	PEC	TBI	TS
NRE	**0.821**			
PEC	0.788	**0.886**		
TBI	0.785	0.758	**0.793**	
TS	0.692	0.701	0.698	**0.846**

Note: "Values on the diagonal (bolded) are square root of the AVE while the off-diagonals are correlations"

Henseler, Ringle, and Sarstedt, 2015 suggests that Fornell and Larcker method is not a reliable technique to validate the discriminant validity. Therefore, Henseler et al. (2015) proposed a reliable method i.e. Heterotrait-Monotrait Ratio (HTMT) method. The results reported in the table shows that the values of the Heterotrait-Monotrait Ratio (HTMT) method are less than 0.90 which is threshold value (Henseler et al., 2015).

Table 6. Heterotrait-monotrait (HTMT)

Constructs	NRE	PEC	TBI	TS
NRE				
PEC	0.844			
TBI	0.861	0.848		
TS	0.734	0.745	0.775	

4.2 Evaluation of Structural Model

Table 7: Collinearity Assessment (Inner VIF Values)

Constructs	NRE	PEC	TBI	TS
NRE			2.934	2.639
PEC			3.011	2.639
TBI				
TS			2.188	

The results in Table 7 indicate the absence of collinearity among independent variables. It explains overall variations in the dependent variables/endogenous constructs due to any change in independent variables/ exogenous constructs in the model. The value of R^2 is considered substantial at 0.75, moderate at 0.50, and weak at

0.26, respectively (Hair et al., 2017; Henseler et al., 2015). The endogenous latent constructs i.e. tourist's behavioral intensions and tourist's satisfaction have R^2 values 0.771 and 0. 543 respectively. It means that 77 percent variation in the model's dependent construct tourist's behavioral intension (TBI) is caused by the model's independent constructs i.e. natural resources & environment (NRE), political & economic conditions (PEC) and the mediator tourists satisfaction (TS). Similarly, two independent variables (NRE & PEC) caused 54 percent variation in the dependent variable tourist satisfaction (TS). For the present study, we found significant values of R^2.

Table 8: Results Coefficient of Determination (R^2)

Constructs	R Square	R Square Adjusted
TBI	0.774	0.771
TS	0.543	0.539

4.3 Mediation Test

According to Hair et al., (2013) three basic condition are required to meet for variable to accts a mediator. First, a significant relationship must be identified between dependent and independent variables without including the mediator. It implies that direct path relationship from NRE and PEC to PBI must be significant without including TS. Second, the indirect relationship between dependent, mediator and independent variable (after inclusion of mediator variable in the model) must be significant. It means that indirect relationship between NRE-TS-TBI and PEC-TS-TBI must be significant. Significance level of relationships among different variables in a model is tested through the calculation of beta (β) and associated (t) and (p) values. Results reported in table 9 revealed that our mediation model fulfilled first two crucial conditions for mediation analysis. The direct effect from NRE to TBI without including TS is highly significant (β = 0.867, t = 50.051 and p = 0.000). The indirect effect from NRE-TBI through TS (after including mediator TS) is also significant at 5% (β = 0.055, t = 2.077 and p = 0.038). In the similar lines, direct effect from PEC to PBI (β = 0.757, t = 27.978 and p = 0.000) and statically significant at 1 %. The indirect effect from PEC -TBI through TS is also statically significant at 5 % (β = 0.062, t = 2.271 and p = 0.024).

Table 9: Mediation Test Results

Constructs	Beta (β)	t-Value	p-Value
NRE → TBI	0.867	50.051	0.000
PEC → TBI	0.757	27.978	0.000
NRE → TS → TBI	0.055	2.077	0.038
PEC → TS → TBI	0.062	2.271	0.024

Notes: *(P < 0.01); **(P < 0.05)

4.4 Structural estimates (Hypotheses Testing)

Mostly beta (β) value is used to test the significance of hypotheses in a model. The value of Beta (β) in a model shows variation in the dependent variable to a unit change in independent variable. To test whether Beta (β) value is significant or not we use t-test and p-value. Table 10 given below shows analysis of the structural model i.e. proposed hypotheses and their decisions along with Beta (β), (t) and (p) values (also see Figure 3).

Table 10. Hypotheses Testing

Hypotheses	Beta (β)	t-Value	p-Value	Decision
H1: NRE → TBI	0.652	10.156	0.000	Supported
H2: NRE → TS → TBI	0.055	2.077	0.038	Supported
H3: PEC → TBI	0.14	2.078	0.038	Supported
H4: PEC → TS → TBI	0.062	2.271	0.024	Supported

Notes: *(P < 0.01); **(P < 0.05)

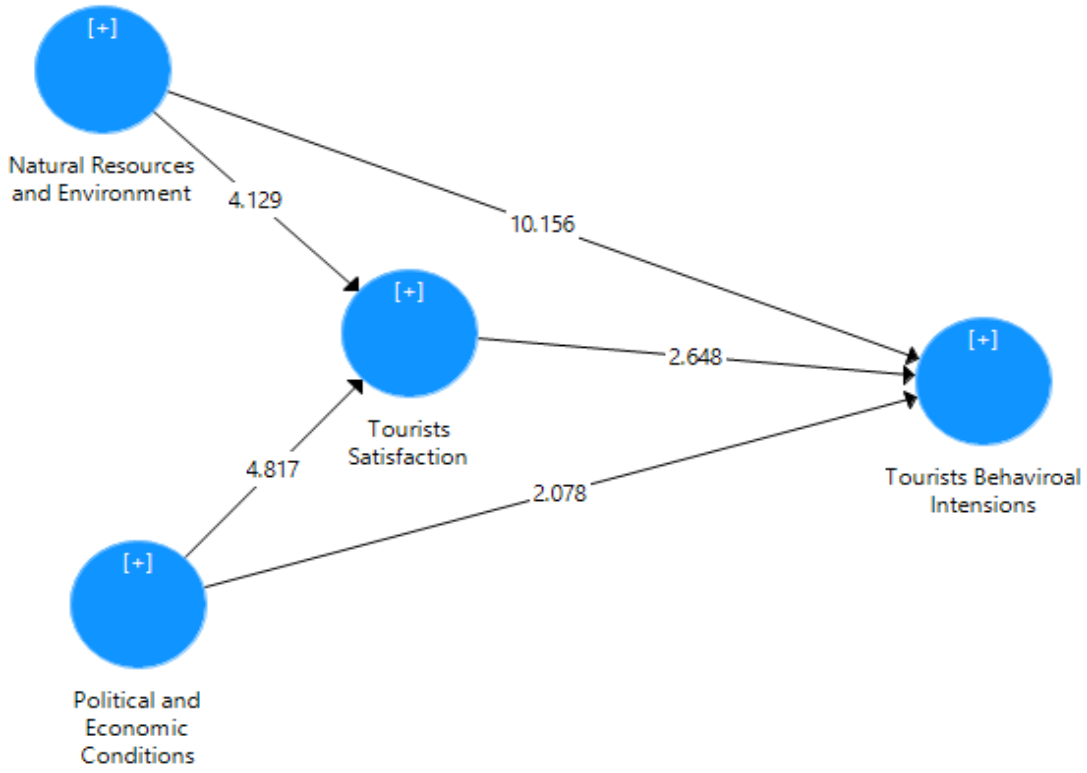

Figure 3: Bootstrapping Results

The results reported in table 10 revealed that natural resources & environment have a significant positive impact on tourists' behavioral intension (H1) and was significant statically at 1% level of significance (β = 0.652, t = 10.156 and p = 0.000). Thus, the results supported hypothesis 1. Similarly, the results also supported hypothesis 3, which stated that political and economic conditions (PEC) have a significant positive effect on tourists' behavioral intensions ((β = 0.14, t = 2.078 and p = 0.038). This relationship was also significant statically at 5% level of significance. Thus, based on study results we conclude that the condition of natural resources & environment (NRE) and stable political & economic conditions are the key factors, which further attracts tourists and future growth of tourism industry in the region.

4.5 Mediation Analysis

The Smart PLS-SEM results also endorsed our hypothesis (H2) and (H4). H2 stated that tourist's satisfaction (TS) would mediate the positive relationship between natural resources & environment (NRE) and tourists' behavioral intensions (TBI). The results of the indirect effect from NRE-TS-TBI (β = 0.055, t = 2.077 and p = 0.038) in table 10 supported this hypothesis. To test the strength of mediation the researchers have uses variance accounted for (VAF) method. The VAF value is 0.224 (0.055/0.243=0.224) which indicates that partial mediation because VAF value lies between 0.20 and 0.80 shows partial mediation (Hair et al., 2013). Similarly, (H4) described that tourists' satisfaction (TS) will mediate the positive relationship between political & economic conditions (PEC) and tourists' behavioral intensions (TBI). The results presented in table 11 also supported this hypothesis i.e. the indirect effect from PEC-TS-TBI (β = 0.062, t = 2.271 and p = 0.024). The strength of mediation in this case was (0.062/0.201=0.308). Therefore, we conclude that tourist's satisfaction (TS) partially mediate the positive relationships between natural resources and environment (NRE), political & economic conditions (PEC) and tourist's behavioral intensions (TBI).

The results reported in table 11 has shown that the relationship between natural resources and environment (NRE) and tourist's behavioral intensions (TBI) is strong (0.64) while all other variables included in the model have moderate relationships among each other. According to the (Cohen, 2013) the size effect (f^2) value at 0.35, 0.15 and 0.02 shows strong, moderate and weak effect respectively.

Table 11: Effect Size (f^2)

Constructs	TBI	TS
NRE	0.64	0.112
PEC	0.030	0.141
TS	0.045	

Quality of path model's endogenous latent constructs is assessed by predictive relevance (Q^2). Predictive relevance is estimated via blindfolding technique (Chin, Peterson, & Brown, 2008; Tenenhaus et al., 2005). If the calculated value of predictive relevance exceeds zero, then predictive relevance of a model is guaranteed (Aman et al., 2019). The value of predictive relevance less than zero is an indication of lacking model's predictive relevance (Ali et al., 2016). It is evident from Q^2 value reported in table 12 (also see fig. 4) that our endogenous variables have acceptable values of predictive relevance.

Table 12. Results of blindfolding

Constructs	SSO	SSE	Q^2 (=1-SSE/SSO)
TBI	1100	602.597	0.452
TS	1760	1125.87	0.36

Figure 4. PLS-SEM Blindfolding (Construct Cross-Validated Redundancy)

4.6 Model Fit

Standardized Root Mean Square Residual (SRMR) measures goodness of fit of a projected and estimated model (Brown, 2006). An SRMR value less than or equal to 0.08 indicates that the designed model is good fit and acceptable (Aman et al., 2019).

The results reported in table 13 showed an SRMR value 0.061, which is less than the threshold value 0.08. Thus based on SRMR value, we conclude that our designed model is well fitted.

Table 13: Model Fit **(**Standardized Root Mean Square Residual)

Test	Saturated Model	Estimated Model
SRMR	0.061	0.061

5. Discussion

Tourism development in a country positively contributes to human functioning (beings and doings) which ultimately lead to improved quality of life in a society through the provision of better education, higher standards of health and nutrition, more equality of opportunities, higher incomes and less poverty, improved infrastructure facilities and greater individual freedom etc. Tourists satisfaction can influence the perception level of tourist regarding tourism development (Aman et al. 2019). We developed three hypotheses to test our "Model". The first hypothesis (H1) stated that Natural Resources and Environment (NRE) have a significant positive effect on Tourists Behavioral Intentions (TBI). The study results supported this hypothesis ($\beta = 0.652$, $t = 10.156$, $p = 0.000$). Study results also endorsed hypothesis 2 (H2) which postulated that Tourists satisfaction (TS) will mediate the positive relationship between Natural Resources and Environment (NRE) and Tourists' Behavioral Intentions (TBI) ($\beta = 0.055$, $t = 2.077$, $p = 0.038$). Similarly study results also recognized, hypotheses 3 (H3) which stated that Politico-economic conditions (PEC) have a significant positive effect on Tourists Behavioral Intentions (TBI) ($\beta = 0.14$, $t = 2.078$, $p = 0.038$). Hypothesis 4 which postulates that Tourists satisfaction (TS) will mediate the positive relationship between Politico-Economic Conditions (PEC) and Tourists' Behavioral intentions (TBI). The results of the study also endorsed this hypotheses i.e. ($\beta = 0.62$, $t = 2.271$, $p = 0.0024$). From the study results we established that higher level of tourist satisfaction in Hunza valley favored tourism development and expansion, therefore, tourists' satisfaction is an important indicator of sustainable tourism development in the study area.

6. Conclusions

This study explored the key factors, which influence tourists' satisfaction, which ultimately has effect on tourists' behavioral intention or "Word to Mouth" in Hunza a famous tourist destination for foreign and domestic tourists. Furthermore, the current research also investigated the mediating effect of the tourism satisfaction in the study area. Recently, the initiatives of China Pakistan Economic Corridor and the

improvement in law and order situation caused attracting influx of domestic tourists to the region. The large number of tourists' inflow to the region has on one hand created many business and employment opportunities while on the other hand, the negative externalities include unplanned development, congestion and conflicts with residents etc. The outcomes of the study have shown that the significant elements of the tourists' satisfaction (TS) and tourist behavioural intentions (TBI) are natural resources environment (NRE), political and economic conditions (PEC). In addition, tourists' satisfaction is mediating the relationship between NRE and TBI. Similarly, tourists' satisfaction is mediating the relationship between PEC and TBI. Therefore, the findings suggest that all stakeholders' i.e. local people, hotel owners and government should take care of the natural environment. Likewise, government should improve safety and security of the tourist. Lastly, maintaining and regulating the prices of commodities and room rents of hotel are also important to control prices in peak season.

References

Ali, F., Kim, W. G., & Ryu, K. (2016). The effect of physical environment on passenger delight and satisfaction: Moderating effect of national identity. *Tourism Management, 57*, 213-224.

Alim, M, A., Ray, R., & Hossain, M, E. (2016). Visitors' Perception towards Tour Destinations: A Study on Padma Garden. *Journal of Business Studies*, 9.

Aman, J., Abbas, J., Mahmood, S., Nurunnabi, M., & Bano, S. (2019). The Influence of Islamic Religiosity on the Perceived Socio-Cultural Impact of Sustainable Tourism Development in Pakistan: A Structural Equation Modeling Approach. *Sustainability, 11*(11), 3039.

Ariya, G., Wishitemi, B., & Sitati, N. (2017). Tourism Destination Attractiveness as Perceived by Tourists Visiting Lake Nakuru National Park, Kenya. *International Journal of Research in Tourism and Hospitality (IJRTH)*. 3(4), 1-13. Doi: 10.20431/2455-0043.0304001.

Assaf, A. G. and Josiassen, A. (2012). Identifying and Ranking the Determinants of Tourism Performance: A Global Investigation. *Journal of Travel Research*. 51(4) 388–399. DOI: 10.1177/0047287511426337.

Baker, D, A., & Crompton, J, L. (2000). Quality, satisfaction and behaviour intention. *Annals of Tourism Research*, 27 (3), 785-804. PII: S0160-7383(99)00108-5.

Banki, M, B., Ismail, H, N., Dalil, M., & Kawy, A. (2014). Moderating Role of Affective Destination Image on the Relationship between Tourists Satisfaction

and Behavioural Intention: Evidence from Obudu Mountain Resort. *Journal of Environment and Earth Science,* 4(4).

Beerli, A., & Martın, J, D. (2004a). Factors influencing the destination image. *Annals of Tourism Research*, 31 (3), 657–681. doi:10.1016/j.annals.2004.01.010.

Beerli, A., & Martin, J.D. (2004b). Tourists' characteristics and the perceived image of tourist destinations: a quantitative analysis—a case study of Lanzarote, Spain. *Tourism Management*, 25,623–636. doi:10.1016/j.tourman.2003.06.004.

Bertan, S., & Altintaş, V. (2013). Visitors perception of a tourism Destination. The case of a Pamukkale. Tourismos: *An International Multidisciplinary Journal of Tourism,* 8, (1), 115-132.

Brown, T.A. Confirmatory Factor Analysis for Applied Research; Guilford Publications: New York, NY, USA, 2006.

Canny, I, U. (2013). An Empirical Investigation of Service Quality, Tourist Satisfaction and Future Behavioral Intentions among Domestic Local Tourist at Borobudur Temple. *International Journal of Trade, Economics and Finance*, 4 (2).

Chin, W. W., Peterson, R. A., & Brown, P. S. (2008). Structural equation modelling in marketing: Some practical reminders. *Journal of Marketing Theory and Practice, 16*(4), 287e298.

Cohen, J. Statistical Power Analysis for the Behavioral Sciences; Taylor & Francis: Abingdon, UK, 2013.

Dragicevic, V., Stankov, U., & Arsenovic, D. (2011). The attractiveness of Vojvodina Province as a tourist destination on the basis of domestic tourist's perception, *Geographica Timisiensis*, 20(1), 59-67.

D'Silva, B., & D'Silva, S. (2008). Perception of tourists towards India as a Preferred Tourist Destination: An Empirical Research. Conference on Tourism in India – Challenges Ahead, IIMK.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*, 39-50.

Franke, G.R., Sarstedt, M., 2019. Heuristics versus statistics in discriminant validity testing: a comparison of four procedures. Internet Res. in press.

Gnanapala, W, K, A. (2015) .Tourists Perception and Satisfaction: Implications for Destination Management. *American Journal of Marketing Research*, 1 (1), 7-19.

Gallup Pakistan (2019). "*Cultural heritage and museum visits in Pakistan*".

Haenlein, M. & Kaplan, A. M. (2004). A beginner's guide to partial least squares analysis, *Understanding Statistics*, *3*(4), 283–297.

Hair, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2013). *A primer on partial least squares structural equation modelling (PLS-SEM)*. Los Angeles: SAGE Publications.

Hair, J.F., Risher, J.J., Sarstedt, M., Ringle, C.M. ,2019. When to use and how to report the results of PLS-SEM. *Eur. Bus. Rev. 31,* 2–24.

Hair, J.F.; Sarstedt, M.; Ringle, C.M.; Gudergan, S.P. (2017). *Advanced Issues in Partial Least Squares Structural Equation Modeling*. Thousand Oaks, CA, USA: SAGE Publications.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43,* 115-135.

Lai, I, K, W., Hitchcock, M., Lu, D., & Liu, Y. (2018).The Influence of Word of Mouth on Tourism Destination Choice: Tourist–Resident Relationship and Safety Perception among Mainland Chinese Tourists Visiting Macau. *Sustainability*, 10, 2114. Doi: 10.3390/su10072114.

Latan, H., Noonan, R. (Eds.), 2017. Partial Least Squares Structural Equation Modeling: Basic Concepts, Methodological Issues and Applications. Springer, Heidelberg.

Li, L, Zhang, J., Nian, S., & Zhang, H. (2017). Tourists' perceptions of crowding, attractiveness, and satisfaction: a second-order structural model, *Asia Pacific Journal of Tourism Research*, 22:12, 1250-1260, DOI: 10.1080/10941665.2017.1391305.

Mohamad, M., Ali, A, M., & Ghani, N, I, A. (2011). A structural model of destination image, tourists satisfaction and destination loyalty. *International Journal of Business and Management Studies*, 3 (2).

Neuts, B., & Nijkamp, P. (2012). Tourist crowding perception and acceptability in cities: An Applied Modelling Study on Bruges. *Annals of Tourism Research*, Vol. 39, No. 4, pp. 2133–2153, 2012. doi.org/10.1016/j.annals.2012.07.016.

Petter, S., Straub, D., and Rai, A. (2007). Specifying formative constructs in information systems research, *MIS Quarterly, 31* (4), 623-656.

Philemon, J, R, M. (2015). Assessment of tourist's perception and satisfaction of the Tanzanian Destinations. *European Scientific Journal*, 11 (13).

Rahman, M.S. (2012). Exploring the tourist's perception: The case of Bangladesh. *Tourismos: An International Multidisciplinary Journal of Tourism*, 7 (1), 81-98.

Tapachai, N., & Waryszak, R. (2000). An Examination of the Role of Beneficial Image in Tourist Destination Selection. *Journal of Travel Research*, 39 (37). DOI: 10.1177/004728750003900105.

Tenenhaus, M.; Vinzi, V.E.; Chatelin, Y.M.; Lauro, C. PLS path modeling. Comput. Stat. Data Anal. 2005, 48, 159–205.

Tukamushaba, E, K., Xiao, H., & Ladkin, A. (2016). The effect of tourists' perceptions of a tourism product on memorable travel experience: Implications for destination branding. *EJTHR*, 7(1):2-12. DOI 10.1515/ejthr-2016-0001.

Wong, J, Y., & Yeh, C. (2009). Tourist hesitation in destination decision-making. *Annals of Tourism Research*, 36 (1), 6–23. doi: 10.1016/j.annals.2008.09.005.