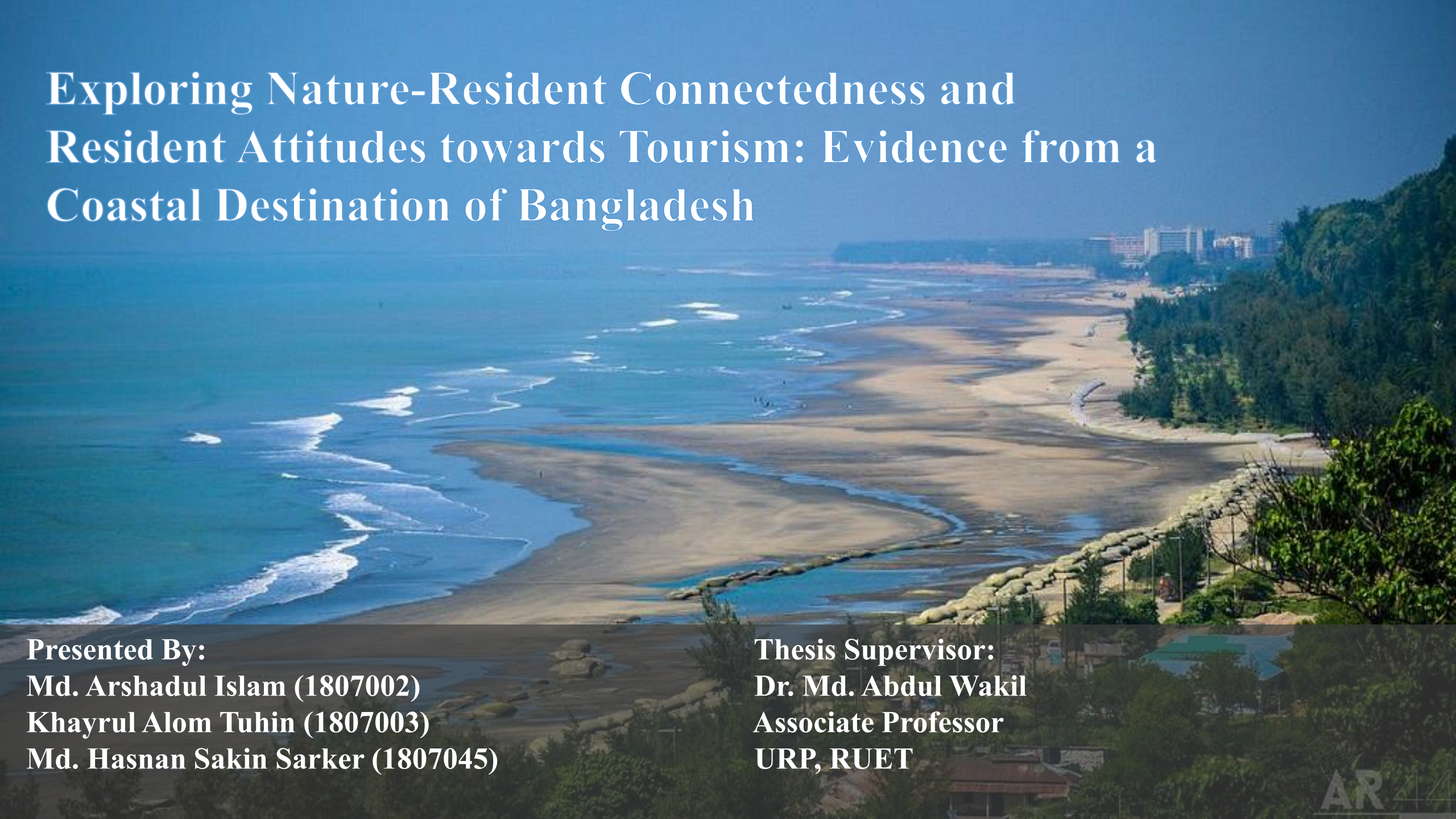




Exploring Nature-Resident Connectedness and Resident Attitudes towards Tourism: Evidence from a Coastal Destination of Bangladesh

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Background of the Study

- Tourism is **one of the most promising sectors for Bangladesh** with her huge natural beauty, heroic, historical background and archaeological resources (Das & Chakraborty, 2012).
- **Residents' interactions with nature** are vital in comprehending their **perspectives and remarks on tourism** (Strzelecka et al., 2021).

Rationale of the Study

- **Residents' connectedness to nature** is an emerging area of research, and its implications on their **attitudes and behaviours** related to tourism are **not well-explored in the context of Cox's Bazar**.
- This research addresses a gap specifically examining the relationship between nature-connectedness and resident attitudes towards tourism in Bangladesh. The findings will provide valuable empirical evidence to support and **provide a foundation for evidence-based decision-making in Cox's Bazar**.

Objectives

- To assess the level of nature connectedness among residents
- To analyze the impact of residents' connectedness to nature on their perceptions of empowerment from tourism.

Study Area

Total Sample Size = 384

Sample distribution:

Northern = 128

Central = 128

Southern = 128

Sampling Method:

Random Sampling

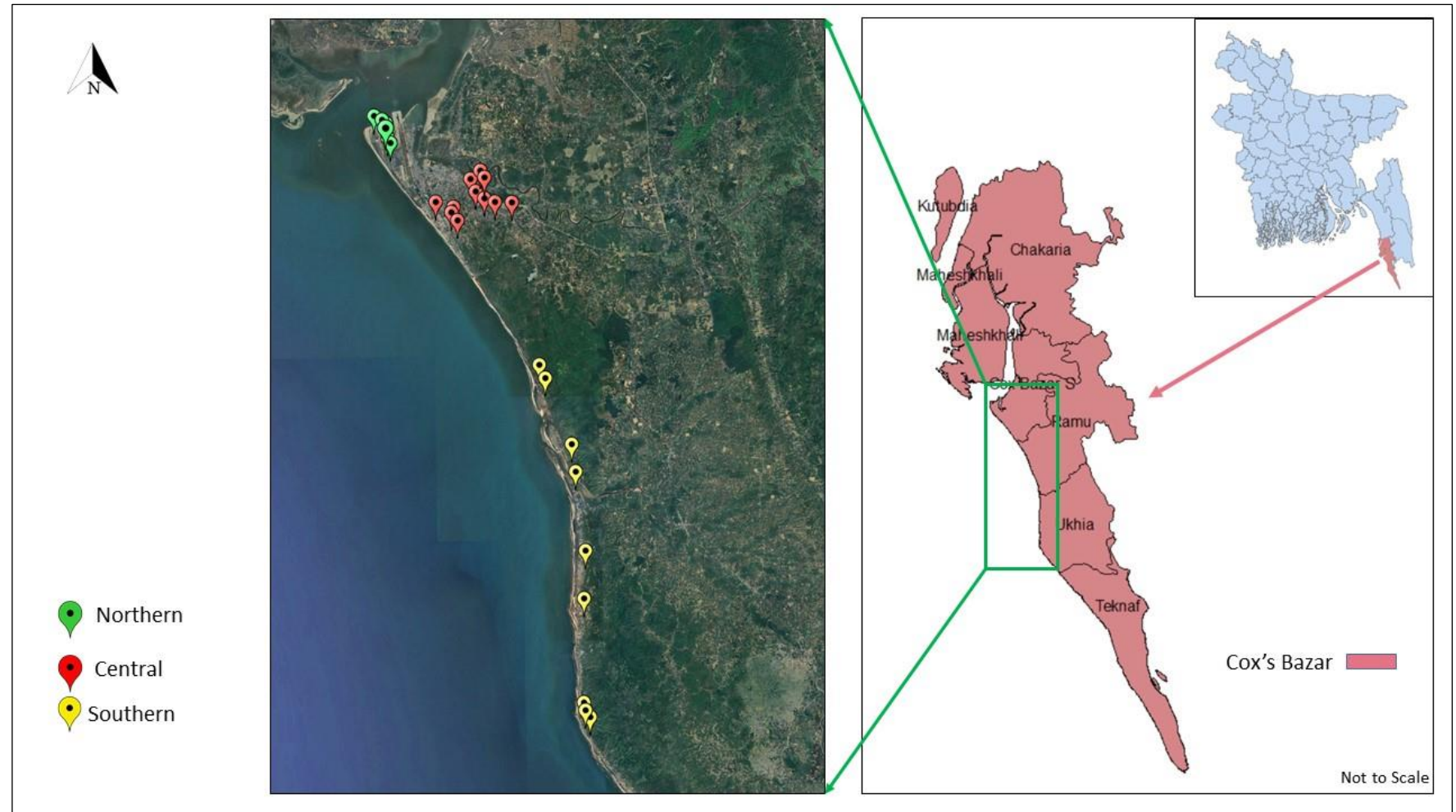


Figure: Study Area

Source: Prepared by Authors, 2024

Research Questions

Objectives	Research Questions
➤ To assess the level of nature connectedness among residents	How do residents' backgrounds and interactions with the natural environment influence their level of nature connectedness?
	How does the level of nature connectedness vary among residents across the different parts of the study area?
➤ To analyze the impact of nature connectedness on residents' perceptions of empowerment from tourism	Do residents with a higher level of nature connectedness feel more empowered to manage tourism in their community?
	Do residents with a higher level of nature connectedness have a higher willingness to support tourism development in their community?

Table: Research Questions

Source: Prepared by Authors, 2024

Research Hypotheses

- ❖ **H1:** Nature connectedness is a significant predictor of the perceived psychological empowerment through nature tourism.
- ❖ **H2:** Nature connectedness is a significant predictor of perceived social empowerment through nature tourism.
- ❖ **H3:** Nature connectedness is a significant predictor of the perceived political empowerment through rural nature tourism.
- ❖ **H4:** Nature connectedness is a significant predictor of perceived economic benefits from nature tourism.
- ❖ **H5:** Connection to nature is a significant predictor of support for tourism
- ❖ **H6:** Psychological empowerment is a significant predictor of support for tourism
- ❖ **H7:** Social empowerment is a significant predictor of support for tourism
- ❖ **H8:** Political empowerment is a significant predictor of support for tourism
- ❖ **H9:** Personal economic benefits from tourism is a significant predictor of support for tourism

Source: Adapted from Strzelecka et al., (2021)

Research Hypotheses (Contd.)

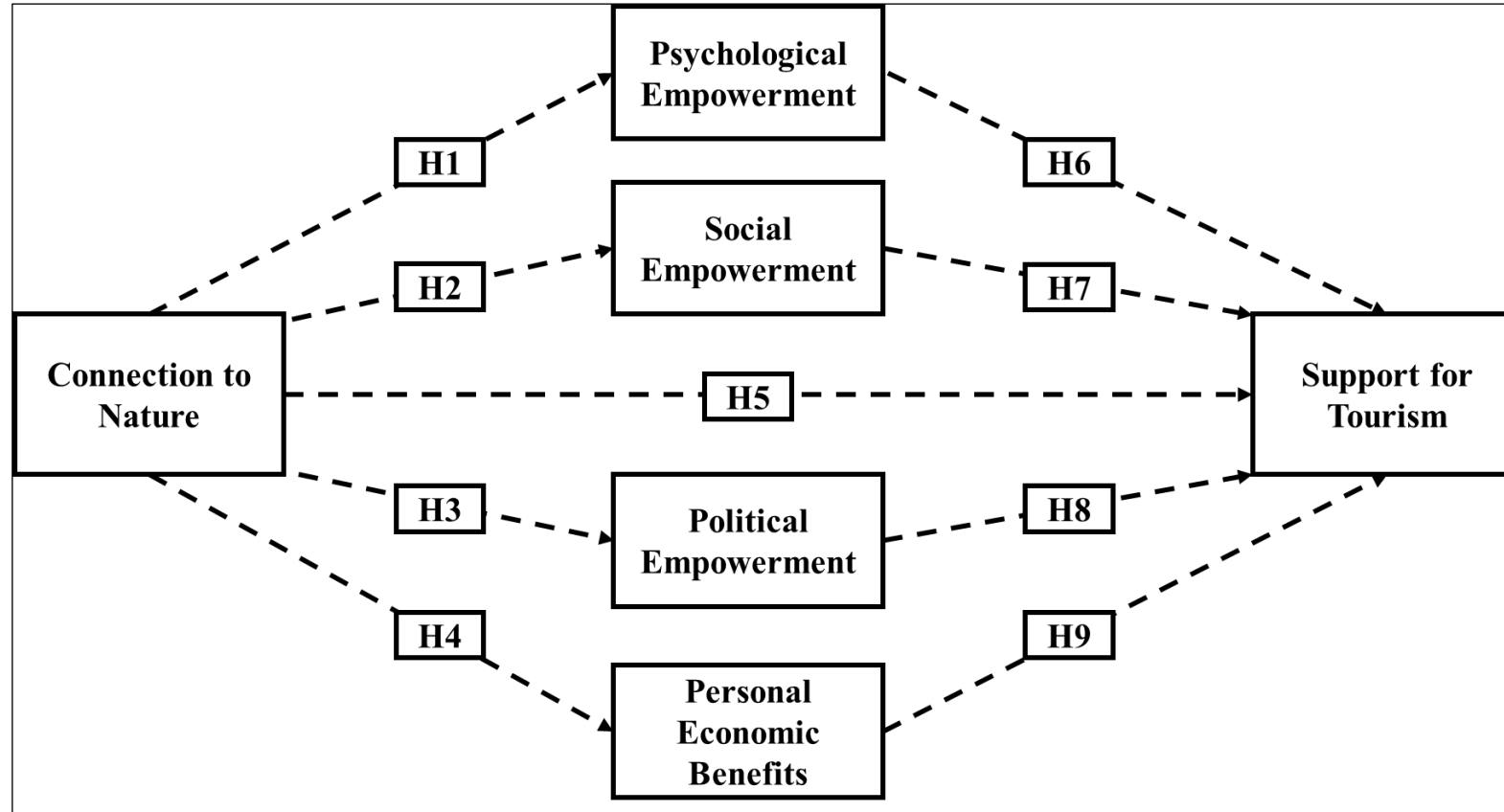
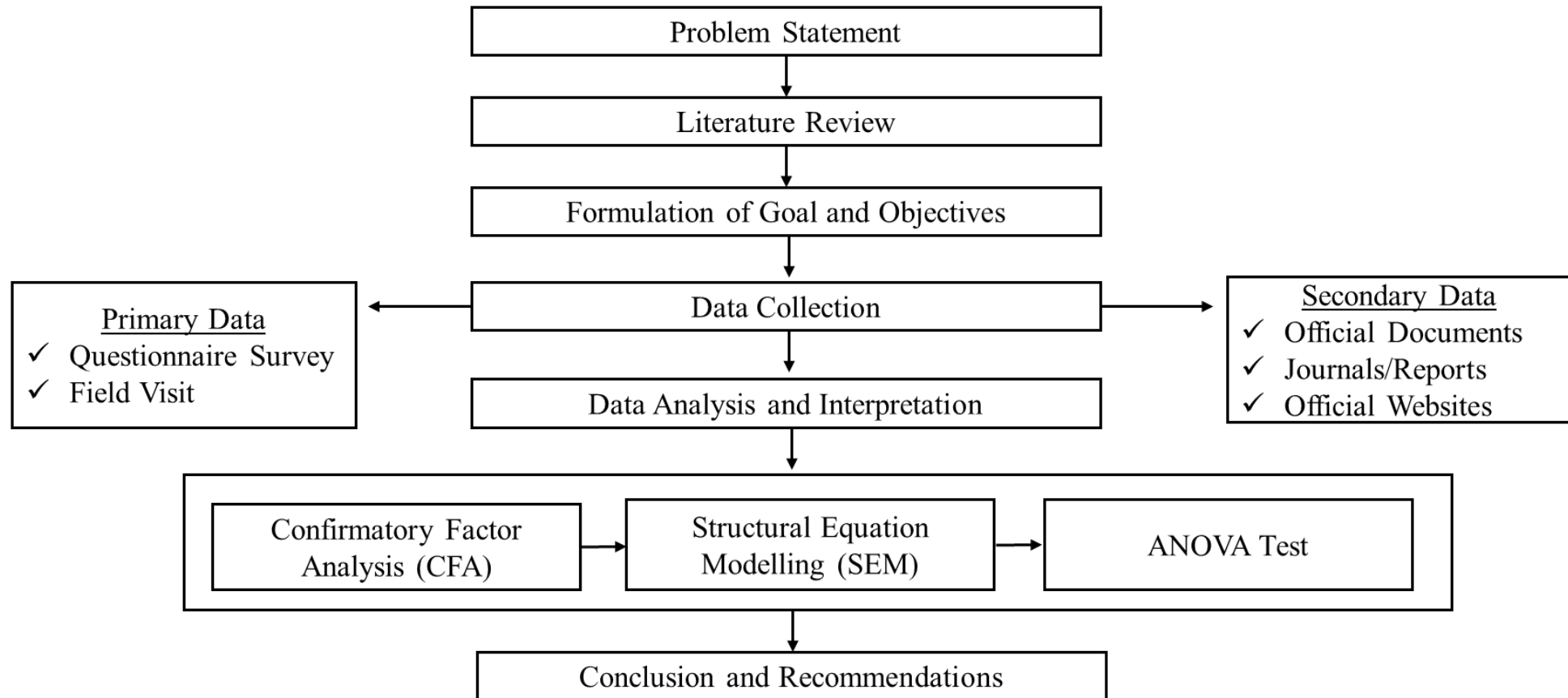


Figure: Model of Connection to Nature’s Influence on Resident Empowerment and Support for Tourism

Source: Adapted from Strzelecka et al., (2021)

Research Flowchart



Source: Prepared by Authors, 2024

Coordination Schema

Objectives	Complex Variables	Simple Variables	Data Types	Data Sources
➤ To assess the level of nature connectedness among residents	Nature Connectedness	Resident's Self-Reported Connection to Nature	Ordinal (1-6 range Likert Scale)	Questionnaire Survey
➤ To analyze the impact of residents' connectedness to nature on their perceptions of empowerment from tourism.	- Psychological Empowerment - Social Empowerment - Political Empowerment - Economic Benefits - Support for Tourism	Resident's Perception of Psychological Empowerment, Social Empowerment, Political Empowerment, Economic Benefits, Support for Tourism	Ordinal (1-6 range Likert Scale)	Questionnaire Survey

Table: Coordination Schema

Source: Prepared by Authors, 2024

Measures and variables (For achieving first objective)

Connectedness To Nature Scale (CNS)

Connectedness To Nature

1. I often feel a sense of oneness with the natural world around me.
2. I think of the natural world as a community to which I belong.
3. I recognize and appreciate the intelligence of other living organisms.
4. I often feel disconnected from nature.
5. When I think of my life, I imagine myself to be part of a larger cyclical process of living.
6. I often feel a kinship with animals and plants.
7. I feel as though I belong to the Earth as equally as it belongs to me.
8. I have a deep understanding of how my actions affect the natural world.
9. I often feel part of the web of life.
10. I feel that all inhabitants of Earth, human, and nonhuman, share a common 'life force'.
11. Like a tree can be part of a forest, I feel embedded within the broader natural world.
12. When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature.
13. I often feel like I am only a small part of the natural world around me, and that I am no more important than the grass on the ground or the birds in the trees.
14. My personal welfare is independent of the welfare of the natural world.

Source: Adapted from Mayer and Frantz (2004)

Measures and variables (For achieving second objective)

Resident Empowerment Through Tourism Scale (RETS)

Psychological Empowerment

Tourism in _____.

1. Makes me proud to be a _____ resident
2. Makes me feel special because people travel to see my county's unique features.
3. Makes me want to tell others about what we have to offer in _____.
4. Reminds me that I have a unique culture to share with visitors
5. Makes me want to work to keep _____ special

Social Empowerment

Tourism in _____.

1. Makes me feel more connected to my community
2. Fosters a sense of 'community spirit' within me
3. Provides ways for me to get involved in my community

Political empowerment

I feel like

1. I have a voice in Floyd/Franklin/Botetourt County tourism development decisions
2. I have access to the decision making process when it comes to tourism in _____.
3. My vote makes a difference in how tourism is developed in _____.
4. I have an outlet to share my concerns about tourism development in _____.

Source: Adapted from Boley and McGehee (2014)

Measures and variables (For achieving second objective)

Economic Benefit from Tourism Scale (EBTS)

Economic Benefit

1. Tourism in _____ helps me pay my bills
2. A portion of my income is tied to tourism in _____.
3. I would economically benefit from more tourism development in ____.
4. My family's economic future depends on tourism in _____.

Source: Adapted from Boley et al., (2018)

Support for Tourism Scale (SFT)

Support for Tourism

1. I support tourism and want to see it remain important to _____.
2. I believe tourism should be actively encouraged in _____.
3. _____ should support the promotion of tourism.
4. _____ should remain a tourist destination.
5. In general, the positive benefits of tourism outweigh negative impacts in _____.

Source: Adapted from Boley and Strzelecka (2016)



Data Analysis and Interpretation

Cronbach's Alpha Analysis of Questionnaire Items

Scale and Items	Cronbach's Alpha (α)	Reliability
CNS (14 items)	0.744	Moderate
EB (4 items)	0.965	High
PE (5 items)	0.978	High
PLE (5 items)	0.986	High
SE (3 items)	0.971	High
SFT (4 items)	0.964	High

Table: Cronbach's Alpha Analysis

Source: Prepared by Authors, 2024

- ❑ According to Robinson et al. (1991), a Cronbach's alpha value $\alpha \geq 0.80$ indicates strong, $\alpha = 0.60 - 0.79$ indicates moderate and $\alpha < 0.60$ indicates weak reliability and validity respectively.
- ❑ It is evident that except for the **CNS scale** which shows **moderate reliability**, all other scales display high reliability. All these scores are acceptable and hence strengthens the acceptability of the study.

Skewness and Kurtosis

- According to Hair et al. (2014), every item in this model showed an acceptable range of skewness (-2 to +2) and kurtosis (-7 to +7), indicating suitable data normality for additional CFA and SEM analysis.

[Table shown in appendix section]

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.859
Bartlett's Test of Sphericity	Approx. Chi-Square	17891.328
	Df	406
	Sig.	.000

Table: KMO and Bartlett's Test

Source: Prepared by Authors, 2024

- ❑ The above result indicates that the dataset is suitable for factor analysis, as shown by a **high Kaiser-Meyer-Olkin (KMO)** measure of sampling adequacy (0.859) and a **significant Bartlett's Test of Sphericity** ($\chi^2=17891.328$, $df = 406$, $p<0.001$).
- ❑ The KMO value shows that the variables exhibit **significant common variance**, while Bartlett's Test confirms that the **correlation matrix significantly differs from the identity matrix**, specifying interrelatedness among the variables.
- ❑ These findings **confirm the potential for further exploration** of the dataset's underlying structure using factor analysis techniques.

Rotated Component Matrix

	Component							
	1	2	3	4	5	6	7	8
CNS1	.848							
CNS2	.868							
CNS3	.852							
CNS4								
CNS5	.850							
CNS6	.837							
CNS7	.829							
CNS8							.697	
CNS9	.724							
CNS10								
CNS11	.748							
CNS12								-.795
CNS13							.673	
CNS14								
PE1			.953					
PE2			.968					
PE3			.968					
PE4			.937					
PE5			.961					

Table: Rotated Component Matrix

Sources: Prepared by Authors, 2024

Table: Abbreviated Measures

	Component					
	1	2	3	4	5	6
CNS1	.851					
CNS2	.870					
CNS3	.853					
CNS5	.851					
CNS6	.838					
CNS7	.832					
CNS9	.729					
CNS11	.744					
PE1			.954			
PE2			.969			
PE3			.968			
PE4			.936			
PE5			.960			

Sources: Prepared by Authors, 2024

- ❑ PCA identified some **problematic items within the CNS** (CNS4, CNS8, CNS10, CNS12, CNS13 and CNS14) that did not load with the same strength.
- ❑ An **abbreviated 8-item CNS** was used for the further CFA analysis that demonstrated reliability and validity for the study area.

Table: Rotated Component Matrix (Contd.)

SE1						.946		
SE2						.941		
SE3						.957		
PLE1		.970						
PLE2		.979						
PLE3		.976						
PLE4		.894						
PLE5		.982						
EB1				.975				
EB2				.972				
EB3				.852				
EB4				.972				
SFT1					.965			
SFT2					.957			
SFT3					.971			
SFT4					.878			
Extraction Method: Principal Component Analysis.								
Rotation Method: Varimax with Kaiser Normalization ^a								
a. Rotation converged in 5 iterations.								

Table: Abbreviated Measures (Contd.)

SE1						.948
SE2						.944
SE3						.960
PLE1		.971				
PLE2		.979				
PLE3		.977				
PLE4		.892				
PLE5		.983				
EB1				.976		
EB2				.973		
EB3				.852		
EB4				.972		
SFT1					.966	
SFT2					.957	
SFT3					.971	
SFT4					.880	
Extraction Method: Principal Component Analysis.						
Rotation Method: Varimax with Kaiser Normalization ^a						
a. Rotation converged in 5 iterations.						

CFA Analysis

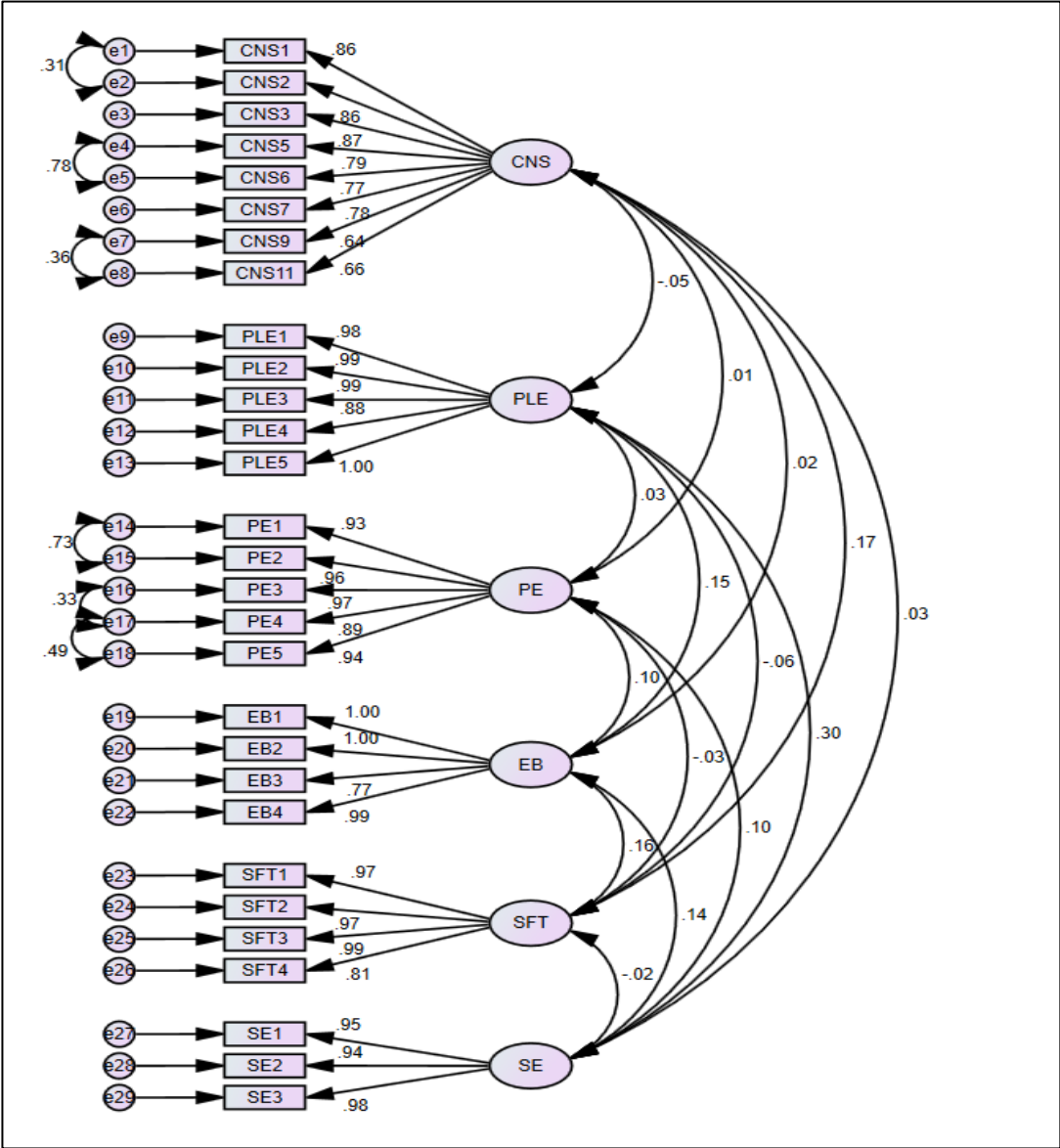


Fig: CFA Path Diagram

Source: Prepared by Authors, 2024

Table: Model Fit Measures

Measure	Estimate	Threshold	Interpretation
CMIN	681.086	--	--
DF	356	--	--
CMIN/DF	1.913	Between 1 and 3	Excellent
CFI	0.982	>0.95	Excellent
SRMR	0.035	<0.08	Excellent
RMSEA	0.049	<0.06	Excellent
PClose	0.629	>0.05	Excellent

Source: Prepared by Authors, 2024

Table: Cutoff Criteria

Measure	Terrible	Acceptable	Excellent
CMIN/DF	> 5	> 3	> 1
CFI	< 0.90	< 0.95	> 0.95
SRMR	> 0.10	> 0.08	< 0.08
RMSEA	> 0.08	> 0.06	< 0.06
PClose	< 0.01	< 0.05	> 0.05

Source: Adapted from Hu and Bentler (1999)

Model Validity Measures

	CR	AVE	MSV	MaxR(H)	NCS	PLE	PE	EB	SFT	SE
NCS	0.927	0.615	0.029	0.938	0.784					
PLE	0.986	0.935	0.088	0.996	-0.051	0.967				
PE	0.974	0.883	0.011	0.979	0.008	0.028	0.940			
EB	0.969	0.889	0.024	0.998	0.018	0.154**	0.099†	0.943		
SFT	0.967	0.881	0.029	0.987	0.169**	-0.059	-0.030	0.156**	0.938	
SE	0.972	0.921	0.088	0.978	0.026	0.297***	0.103*	0.140**	-0.018	0.960

Significance of
Correlations:

† $p < 0.100$

* $p < 0.050$

** $p < 0.010$

*** $p < 0.001$

❑ No validity
concerns here.

Table: Model Validity Measures

Source: Prepared by Authors, 2024

- ❖ The composite reliability (CR) scores vary from 0.927 to 0.986, which **exceeds the required threshold of 0.7** and confirms the internal consistency of the constructs.
- ❖ Average Variance Extracted (AVE) values, ranging from 0.615 to 0.935, exhibits that **the constructs explain a substantial proportion of the variance in their respective items**.
- ❖ Additionally, the Maximum Shared Variance (MSV) and Maximum Redundancy (MaxR(H)) values recommend **minimal issues with multicollinearity and satisfactory discriminant validity**.
- ❖ The bold diagonal values surpass others within their corresponding rows and columns, a condition evidently fulfilled by the table.
- ❖ Overall, these findings **support the reliability and convergent validity, discriminant validity of the measured constructs**, indicating their suitability for subsequent analysis in the study.

SEM Analysis

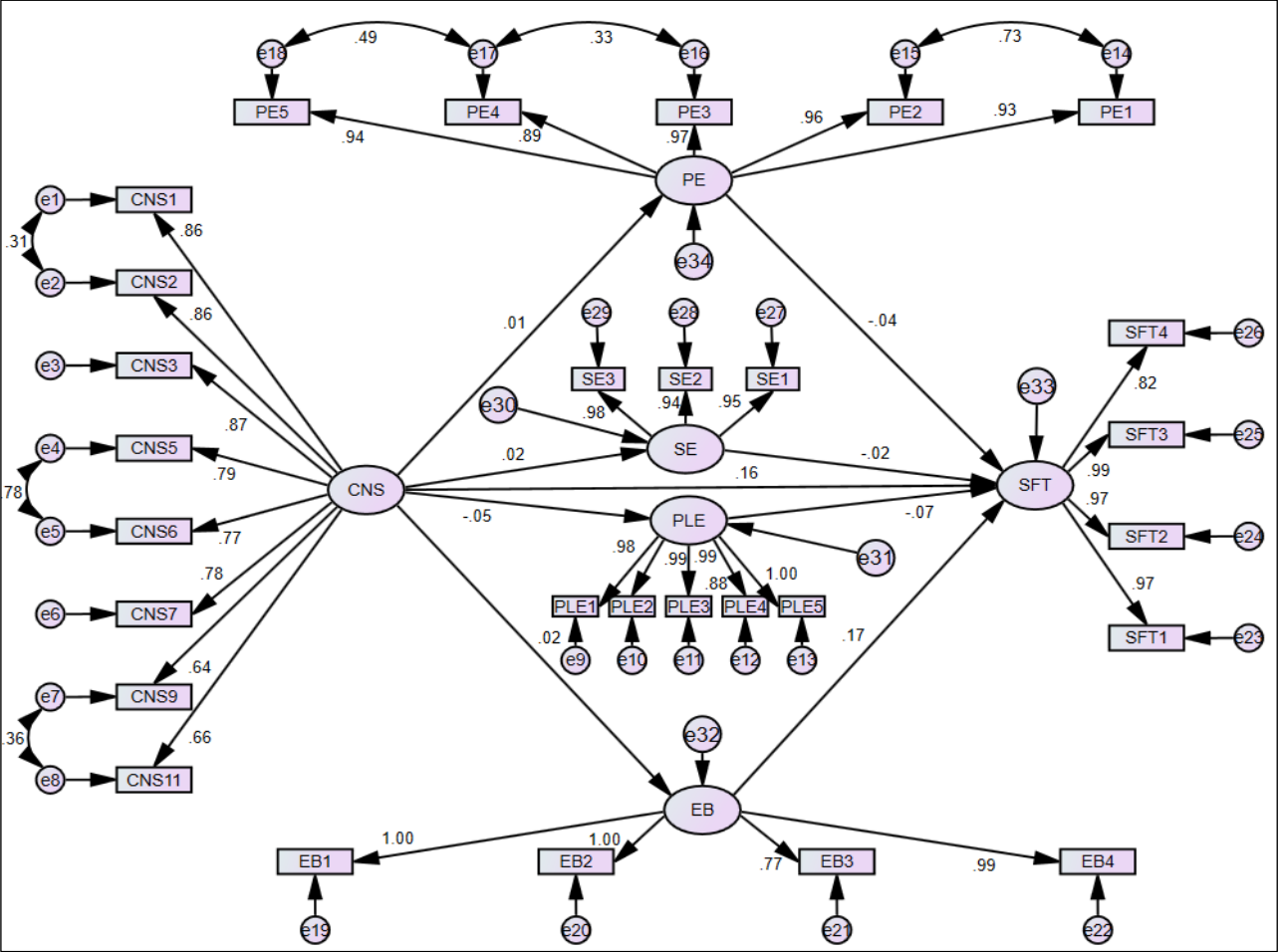


Fig: SEM Path Diagram

Source: Prepared by Authors, 2024

Table: SEM Model Fit Measures

Measure	Estimate	Threshold	Interpretation
CMIN	735.591	--	--
DF	362	--	--
CMIN/DF	2.032	Between 1 and 3	Excellent
CFI	0.979	> 0.95	Excellent
SRMR	0.083	< 0.08	Acceptable
RMSEA	0.052	< 0.06	Excellent
PClose	0.274	> 0.05	Excellent

Table: SEM Cutoff Criteria

Source: Prepared by Authors, 2024

Measure	Terrible	Acceptable	Excellent
CMIN/DF	> 5	> 3	> 1
CFI	< 0.90	< 0.95	> 0.95
SRMR	> 0.10	> 0.08	< 0.08
RMSEA	> 0.08	> 0.06	< 0.06
PClose	< 0.01	< 0.05	> 0.05

Source: Adapted from Hu and Bentler (1999)

Regression Path and Associated Metrics

H. No.	Regression Paths	Estimate (β)	P	Support
H1:	CNS $\rightarrow$ PE	.009	.876	NO
H2:	CNS $\rightarrow$ SE	.034	.644	NO
H3:	CNS $\rightarrow$ PLE	-.078	.345	NO
H4:	CNS $\rightarrow$ EB	.034	.737	NO
H5:	CNS $\rightarrow$ SFT	.268	.002*	YES
H6:	PE $\rightarrow$ SFT	-.069	.386	NO
H7:	SE $\rightarrow$ SFT	-.025	.680	NO
H8:	PLE $\rightarrow$ SFT	-.074	.161	NO
H9:	EB $\rightarrow$ SFT	.147	***	YES
$\chi^2 = 735.591$, $df = 362$, $\chi^2 / df = 2.032$, RMSEA = 0.052, SRMR = 0.083, CFI = 0.979 PE ($R^2 = 0.000$), SE ($R^2 = 0.001$), PLE ($R^2 = 0.003$), EB ($R^2 = 0.000$), SFT ($R^2 = .065$), ***Represents a significance of < 0.001 *Represents a significance of < 0.05				

Table: Regression Path and Associated Metrics

Source: Prepared by Authors, 2024

- ☐ Hypothesis 5 (H5) regarding **Connectedness to Nature and Support for Tourism was partially supported.**
- ☐ There was a positive and statistically significant relationship between Personal Economic Benefits from tourism and overall Support for Tourism (**H9**).

Mediation Testing

Parameter	Estimate	Lower	Upper	P
CNS>PLE>SFT	.006	-.004	.036	.228
CNS>EB>SFT	.005	-.023	.044	.657
CNS>PE>SFT	-.001	-.021	.009	.685
CNS>SE>SFT	-.001	-.019	.007	.544
Total Indirect Effect	.009	-.024	.052	.532
Total Effect	.277	.109	.455	.003

- ❖ Bootstrap Samples (2000)
- ❖ Bootstrap Confidence Interval (95%)

Table: Mediation Analysis Output

Source: Prepared by Authors, 2024

- ❑ **None** of the indirect relationships between CNS and SFT are significant based on the p-value.
- ❑ **Empowerment factors are not mediating the relationship between CNS and SFT** in the study area.

ANOVA and Bonferroni Post-Hoc Analysis

	Northern ^a (n = 128) $\bar{x}$	Central ^b (n = 128) $\bar{x}$	Southern ^c (n = 128) $\bar{x}$	F	P
Connectedness To Nature (CNS) ¹	4.35 ^c	4.34 ^c	4.52 ^{ab}	4.99	.007*
Psychological Empowerment (PE)	5.41	5.45 ^c	5.26 ^b	3.347	.036*
Social Empowerment (SE)	4.05 ^c	3.92 ^c	3.31 ^{ab}	39.58	.000*
Political Empowerment (PLE)	3.27 ^{bc}	3.72 ^{ac}	2.56 ^{ab}	69.94	.000*
Economic Benefits (EB)	4.04 ^c	3.99 ^c	3.66 ^{ab}	6.078	.003*
Support For Tourism (SFT)	5.02 ^c	4.97 ^c	5.27 ^{ab}	5.194	.006*
¹ Questions asked on a 6-point Likert Scale with 1 = Strongly Disagree and 6 = Strongly Agree. ^{abc} Superscripts represents statistically significant differences examined by Bonferroni Post-Hoc analysis. [*] Represents a significance level of 0.05.					

Table: ANOVA and Bonferroni Post-Hoc Analysis

Source: Prepared by Authors, 2024

Interpretation

Area	Results	Ground Validation/ Residents' Concerns or comments/ Probable Reasons
Southern Part	Higher levels of nature connectedness	☐ Situated alongside the marine drive road and bordered by hills on one side and the sea on the other , this part of Cox's Bazar is distanced from the city's congestion, providing residents and visitors with a closer connection to nature , thus fostering increased support for tourism initiatives. ☐ The widening of the marine drive road project may potentially impact tourism-related activities in this particular area. ☐ Locals predominantly engage in agricultural pursuits such as banana and areca nut farming, alongside related businesses . While a minority are involved in tourism-related activities, there is a growing desire for more tourism initiatives in the area. ☐ Residents feels that their voices are marginalized in the decision-making process for tourism development .
	Greater support for tourism	
	Lower levels of social empowerment	
	Lower levels of political empowerment	

Table: Area wise Validation of ANOVA and Post-Hoc Analysis Results

Source: Prepared by Authors, 2024

Interpretation (Contd.)

Area	Results	Ground Validation/ Residents' Concerns or comments/ Probable Reasons
Central Part	Tourism activity is more pronounced	☐ Establishments of hotels, restaurants, fish markets, and beach-related businesses. ☐ Many residents in this area have migrated for employment opportunities from other regions.
	Less inherent nature connectedness	☐ Face over tourism in different seasons or occasions.
	Higher degree of political empowerment	☐ Residents perceive their voices to hold some importance in the decision-making process, reflecting a sense of influence and engagement in local governance despite their potentially transient status in the community.

Table: Area wise Validation of ANOVA and Post-Hoc Analysis Results

Source: Prepared by Authors, 2024

Interpretation (Contd.)

Area	Results	Ground Validation/ Residents' Concerns or comments/ Probable Reasons
Northern Part	Higher level of economic empowerment	☐ A significant number of households are engaged in fishing-related activities and businesses, including fishermen, workers in fishing-related industries, and business owners. ☐ While some perceive their involvement as part of the local tourism sector due to tourists visiting the area and purchasing their fish products , others view themselves as suppliers of fish not only within the country but also to foreign markets. ☐ The fulfilment of their desires for improved roads and other infrastructure has contributed to economic growth and enhanced political empowerment within their community.
	Higher level of Social empowerment	
	Moderate levels of political empowerment	

Table: Area wise Validation of ANOVA and Post-Hoc Analysis Results

Source: Prepared by Authors, 2024

Interpretation (Contd.)

Area	Results	Ground Validation/ Residents' Concerns or comments/ Probable Reasons
Overall Cox's Bazar Study Area	"Connectedness to Nature" Supports "Support for Tourism"	☐ The longest sea beach, the hilly landscape, the marine drive road with its scenic surroundings, and the natural scene of the sea meeting the sky all attract tourists to visit Cox's Bazar. ☐ All respondents expressed pride in tourism in Cox's Bazar, feeling a sense of uniqueness and specialness as people travel to experience the county's distinctive features. ☐ The most of the people also very strongly agreed that tourism should be actively encouraged and support and they want to see it remain important to Cox's Bazar ☐ But there are dissenting voices who oppose the promotion of tourism due to concerns about over-tourism in Cox's Bazar during certain seasons, leading to environmental degradation ☐ According to Daily Sun (2022), over tourism in Cox's Bazar imposes significant social, economic, and environmental challenges . Locals face price hikes in essentials, economic disparities emerge due to competitive pricing, and environmental degradation, including pollution and increased mortality of sea animals, poses threats to both wildlife and tourism sustainability .
	"Economic Benefits" Supports "Support for Tourism"	

Table: Area wise Validation of ANOVA and Post-Hoc Analysis Results

Source: Prepared by Authors, 2024

[Research objective 1 and 2 achieved]

Conclusion

- **Residents' connection to nature is crucial for shaping their views on tourism development,** necessitating sustainable approaches that align with local values.
- **Previous researchers solely used quantitative methods,** while **this study employs qualitative approaches** to **validate** the findings and address concerns.
- **Integrating residents' relationship with nature into tourism planning frameworks** is essential to foster **positive engagement** and **mitigate conflicts** in rural communities.
- This research highlights the importance of considering nature-based tourism **not just for economic gain,** but also for **resident empowerment and environmental preservation.**

Recommendations

- **Tourism planners should advocate for a model of tourism development that respects and integrates residents' ties to the natural environment.**
- **Authorities should assess residents' connections to local natural surroundings before implementing tourism initiatives and tailor communication strategies accordingly.**
- **Efforts to enhance residents' psychological, social, or political empowerment through tourism should align with their existing relationship with nature to ensure effectiveness and long-term sustainability.**

Way Forward

- **The study can be replicated to assesses resident-nature connectivity and community empowerment regarding tourism development, ensuring sustainability.**
- **Past studies as well as this study suggested a lack of or negative correlation between Political Empowerment and Support for Tourism (PLE-SFT), using quantitative methods. Future research could enhance understanding by validating these findings.**

Limitations of the Study

- ❑ Study primarily focused on Cox's Bazar, a prominent coastal destination in Bangladesh. Other coastal destinations in the country were not considered due to **limitations in scope, time, and resources**.
- ❑ Additionally, within Cox's Bazar itself, **certain locations were not covered** due to similar constraints, potentially impacting the comprehensiveness of the findings
- ❑ **Difficulty in identifying and excluding non-local residents**, such as temporary workers, could distort findings regarding resident attitudes toward tourism and nature-connectedness.
- ❑ This research relies heavily on **self-reported data**, which may be subject to **response bias and social desirability effects** etc.
- ❑ Some external factors such as **socio-economic conditions, political dynamics, and environmental policies** may also influence resident attitudes toward tourism.
- ❑ Contextual factors such as **seasonal variations** in tourism activity or **specific events** may influence residents' perceptions but not be fully accounted for in the study design.

Thank You

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Appendices

Descriptive Statistics					
	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
CNS1	384	.119	.125	-.113	.248
CNS2	384	.074	.125	-.221	.248
CNS3	384	.066	.125	-.143	.248
CNS4	384	.350	.125	-.141	.248
CNS5	384	.092	.125	-.285	.248
CNS6	384	.099	.125	-.214	.248
CNS7	384	-.007	.125	-.480	.248
CNS8	384	-.031	.125	-.282	.248
CNS9	384	.063	.125	-.427	.248
CNS10	384	-.405	.125	-.261	.248
CNS11	384	.279	.125	-.514	.248
CNS12	384	.106	.125	.229	.248
CNS13	384	-.996	.125	1.926	.248
CNS14	384	.170	.125	-.496	.248
PE1	384	-.735	.125	-.479	.248
PE2	384	-.695	.125	-.556	.248
PE3	384	-.551	.125	-.691	.248
PE4	384	-.333	.125	-.683	.248
PE5	384	-.483	.125	-.693	.248
SE1	384	.122	.125	-.407	.248
SE2	384	.147	.125	.169	.248
SE3	384	.194	.125	-.232	.248
PLE1	384	.137	.125	-.622	.248
PLE2	384	.137	.125	-.733	.248
PLE3	384	.150	.125	-.727	.248
PLE4	384	-.008	.125	-.383	.248
PLE5	384	.114	.125	-.717	.248
EB1	384	.587	.125	-.340	.248
EB2	384	.551	.125	-.334	.248
EB3	384	.539	.125	-.135	.248
EB4	384	.627	.125	-.268	.248
SFT1	384	-.546	.125	-.758	.248
SFT2	384	-.322	.125	-1.032	.248
SFT3	384	-.431	.125	-.830	.248
SFT4	384	-.755	.125	-.122	.248

Fig: Skewness and Kurtosis

Source: Prepared by Authors, 2024

SEM Analysis

Exogenous Constructs	Endogenous Constructs
Connectedness to Nature (CNS)	Support for Tourism (SFT)
	Personal Economic Benefits (EB)
	Political Empowerment (PLE)
	Psychological Empowerment (PE)
	Social Empowerment (SE)

Fig: SEM Construct Categories

Source: Prepared by Authors, 2024

Questionnaire

Department of Urban & Regional Planning
Rajshahi University of Engineering & Technology
Kazla, Rajshahi-6204, Bangladesh.



Exploring Nature-Resident Connectedness and Resident Attitudes towards Tourism:
Evidence from a Coastal Destination of Bangladesh

Questionnaire

(The information collected will be used solely for academic purposes.)

Serial No:Date:/...../.....

Name:Age:Gender: ☐ Male ☐ Female

Address:Occupation:Household Size:

	SL	Questions	1	2	3	4	5	6
CNS	1	I often feel a sense of oneness with the natural world around me.						
	2	I think of the natural world as a community to which I belong.						
	3	I recognize and appreciate the intelligence of other living organisms.						
	4	I often feel disconnected from nature.						
	5	When I think of my life, I imagine myself to be part of a larger cyclical process of living.						
	6	I often feel a kinship with animals and plants.						
	7	I feel as though I belong to the Earth as equally as it belongs to me.						
	8	I have a deep understanding of how my actions affect the natural world.						
	9	I often feel part of the web of life.						
	10	I feel that all inhabitants of Earth, human, and nonhuman, share a common 'life force'.						
	11	Like a tree can be part of a forest, I feel embedded within the broader natural world.						
	12	When I think of my place on Earth, I consider myself to be a top member of a hierarchy that exists in nature.						
	13	I often feel like I am only a small part of the natural world around me, and that I am no more important than the grass on the ground or the birds in the trees.						
	14	My personal welfare is independent of the welfare of the natural world.						
PE	15	Tourism in Cox's Bazar makes me proud to be a resident of Cox's Bazar						
	16	Tourism in Cox's Bazar makes me feel special because people travel to see my county's unique features.						
	17	Tourism in Cox's Bazar makes me want to tell others about what we have to offer in Cox's Bazar.						
	18	Tourism in Cox's Bazar reminds me that I have a unique culture to share with visitors.						
SE	19	Tourism in Cox's Bazar makes me want to work to keep area special.						
	20	Tourism in Cox's Bazar makes me feel more connected to my community.						
PLE	21	Tourism in Cox's Bazar fosters a sense of 'community spirit' within me.						
	22	Tourism in Cox's Bazar provides ways for me to get involved in my community.						
	23	I feel like, I have a voice in Cox's Bazar tourism development decisions						
	24	I feel like, local leaders take into account my ideas about developing tourism in this district.						
EBTS	25	I feel like, I have access to the decision-making process when it comes to tourism in Cox's Bazar.						
	26	I feel like, my vote makes a difference in how tourism is developed in Cox's Bazar						
	27	I feel like, I have an outlet to share my concerns about tourism development in Cox's Bazar						
	28	Tourism in Cox's Bazar helps me pay my bills						
SFT	29	A portion of my income is tied to tourism in Cox's Bazar						
	30	I would economically benefit from more tourism development						
	31	My family's economic future depends on tourism in Cox's Bazar						
	32	I believe tourism should be actively encouraged in Cox's Bazar						
	33	I support tourism and want to see it remain important to Cox's Bazar						
	34	Cox's Bazar should support the promotion of tourism.						
	35	Cox's Bazar should remain a tourist destination.						

1

2

3

4

5

6

Strongly Disagree

Disagree

Slightly Disagree

Slightly Agree

Agree

Strongly Agree

Figure : Questionnaire (English)

Source: Prepared by Authors, 2024

নগর ও অঞ্চল পরিকল্পনা বিভাগ
রাজশাহী প্রকৌশল ও প্রযুক্তি বিশ্ববিদ্যালয়
কাজলা, রাজশাহী- ৬২০৪, বাংলাদেশ।



Exploring Nature-Resident Connectedness and Resident Attitudes towards Tourism:
Evidence from a Coastal Destination of Bangladesh

প্রশ্নপত্র

(সংগৃহীত তথ্য শুধুমাত্র একাডেমিক উদ্দেশ্যে ব্যবহার করা হবে)

ক্রমিক নং:তারিখ:/...../.....

নাম:বয়স:লিঙ্গ: ☐ পুরুষ ☐ মহিলা

ঠিকানা:পেশা:পরিবারের আকার:

ক্রমিক নং	প্রশ্ন	১	২	৩	৪	৫	৬
CNS	১	আমি প্রায়ই আমার চারপাশের প্রাকৃতিক জগতের সাথে একত্বের অনুভূতি অনুভব করি।					
	২	আমি প্রাকৃতিক জগতকে একটি সম্ভ্রম হিসাবে মনে করি যার সাথে আমি জড়িত।					
	৩	আমি অন্যান্য জীবিত প্রাণীর বুদ্ধিমত্তা উপলব্ধি করি এবং প্রশংসা করি।					
	৪	আমি প্রায়ই প্রকৃতি থেকে বিচ্ছিন্ন বোধ করি।					
	৫	আমি যখন আমার জীবন সম্বন্ধে চিন্তা করি, তখন আমি কল্পনা করি যে, আমি এক বিরাট চক্রের জীবনধারার অংশ।					
	৬	আমি প্রায়ই পশুপাখি এবং উদ্ভিদের সাথে সম্পর্ক অনুভব করি।					
	৭	আমার মনে হয়, আমি যেমন পৃথিবীর, তেমনই আমারও।					
	৮	আমার কাজগুলি কীভাবে প্রাকৃতিক জগতকে প্রভাবিত করে সে সম্পর্কে আমার গভীর ধারণা রয়েছে।					
	৯	আমি প্রায়ই জীবনের একটি অংশ অনুভব করি।					
	১০	আমি মনে করি, পৃথিবীর সকল অধিবাসী, মানুষ এবং মানুষ নয়, তারা একটি সাধারণ জীবনশক্তি'র অংশীদার।					
	১১	যেমন একটি বাঘ বনের অংশ হতে পারে, আমি বৃহত্তর প্রাকৃতিক জগতে বাস করছি।					
	১২	আমি যখন পৃথিবীতে আমার স্থানের কথা ভাবি, তখন আমি নিজেকে প্রকৃতিতে বিদ্যমান একটি শ্রেণিবিন্যাসের শীর্ষ সদস্য হিসাবে বিবেচনা করি।					
PE	১৩	আমি প্রায়ই অনুভব করি যে আমি আমার চারপাশের প্রাকৃতিক জগতের একটি ছোট অংশ, এবং আমি মাটিতে ঘাস বা গাছের পাখির চেয়ে বেশি গুরুত্বপূর্ণ নই।					
	১৪	আমার ব্যক্তিগত কল্যাণ প্রাকৃতিক জগতের কল্যাণ থেকে স্বাধীন।					
	১৫	কল্পবাজারের পর্যটন আমাকে কল্পবাজারের বাসিন্দা হিসেবে গণিত করে।					
	১৬	কল্পবাজারে পর্যটন আমাকে বিশেষ অনুভূতি দেয় কারণ নোকেরা আমার দেশের অনন্য বৈশিষ্ট্য দেখতে ভ্রমণ করে।					
SE	১৭	কল্পবাজারে পর্যটন আমাকে কল্পবাজারে সম্পর্কে অব্যস্রের জন্যে দেয়।					
	১৮	কল্পবাজার পর্যটন আমাকে মনে করিয়ে দেয় যে, পর্যটকদের সঙ্গে আমার এক অনন্য সংস্কৃতি রয়েছে।					
	১৯	কল্পবাজারে পর্যটন আমাকে এলাকাকে বিশেষ রাখতে কাজ করতে দেয়।					
	২০	কল্পবাজারে পর্যটন আমাকে আমার সম্ভ্রমদায়ের সঙ্গে আরও সংযুক্ত করে তুলেছে।					
PLE	২১	কল্পবাজারে পর্যটন আমার মধ্যে 'সাম্প্রদায়িক চেতনা'র অনুভূতি জাগিয়ে তোলে।					
	২২	কল্পবাজারে পর্যটন আমার সম্ভ্রমদায়ের সঙ্গে যুক্ত হওয়ার পথ দেখায়।					
	২৩	আমার মনে হয়, কল্পবাজারে পর্যটন উন্নয়নের সিদ্ধান্তে আমার কণ্ঠস্বর রয়েছে।					
	২৪	আমি মনে করি, স্থানীয় নেতারা এই জেলায় পর্যটন উন্নয়নের বিষয়ে আমার ধারণা বিবেচনা করে।					
EBTS	২৫	আমার মনে হয়, কল্পবাজার পর্যটনের ক্ষেত্রে আমার সিদ্ধান্ত গ্রহণের প্রবেশাধিকার রয়েছে।					
	২৬	আমি মনে করি, আমার জোট কল্পবাজারে পর্যটনের বিকাশের ক্ষেত্রে একটি পার্থক্য তৈরি করে।					
	২৭	আমার মনে হয়, কল্পবাজারে পর্যটন উন্নয়ন নিয়ে আমার উদ্বেগ শোনার করার একটি মাধ্যম আছে।					
	২৮	কল্পবাজারে পর্যটন আমাকে আমার বিল পরিশোধ করতে সাহায্য করে।					
SFT	২৯	আমার আয়ের একটি অংশ কল্পবাজারে পর্যটনের সঙ্গে যুক্ত।					
	৩০	পর্যটনের আরও উন্নয়ন হলে আমি অর্থনৈতিকভাবে উপকৃত হব।					
	৩১	আমার পরিবারের অর্থনৈতিক ভবিষ্যৎ কল্পবাজারের পর্যটনের ওপর নির্ভর করছে।					
	৩২	আমি মনে করি কল্পবাজারে পর্যটনকে সক্রিয়ভাবে উৎসাহিত করা উচিত।					
	৩৩	আমি পর্যটনকে সমর্থন করি এবং এটি কল্পবাজারের জন্য গুরুত্বপূর্ণ দেখতে চাই।					
	৩৪	কল্পবাজারকে পর্যটনের উন্নয়নে সহায়তা করা উচিত।					
	৩৫	কল্পবাজারকে পর্যটন কেন্দ্র হিসেবে ধরে রাখতে হবে।					

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অত্যন্ত অসম্মত

অসম্মত

কিছুটা অসম্মত

কিছুটা সম্মত

সম্মত

অত্যন্ত সম্মত

Figure E-2: Questionnaire (Bangla)

Fig: ANOVA and Bonferroni Post-Hoc Analysis Merged

Source: Prepared by Authors, 2024

	Northern ^a (n = 128) $\bar{x}$	Central ^b (n = 128) $\bar{x}$	Southern ^c (n = 128) $\bar{x}$	F	P
Connectedness To Nature (CNS) ¹	4.35 ^c	4.34 ^c	4.52 ^{ab}	4.99	.007*
1. I often feel a sense of oneness with the natural world around me.	4.34	4.27	4.34	.530	.589
2. I think of the natural world as a community to which I belong.	4.33 ^c	4.45	4.57 ^a	4.731	.009*
3. I recognize and appreciate the intelligence of other living organisms.	4.25	4.17	4.34	2.095	.125
5. When I think of my life, I imagine myself to be part of a larger cyclical process of living.	4.39	4.30 ^c	4.57 ^b	6.542	.002*
6. I often feel a kinship with animals and plants.	4.42	4.30 ^c	4.50 ^b	3.508	.031*
7. I feel as though I belong to the Earth as equally as it belongs to me	4.39 ^c	4.46	4.59 ^a	4.018	.019*
9. I often feel part of the web of life.	4.35 ^c	4.30 ^c	4.59 ^{ab}	8.833	.000*
11. Like a tree can be part of a forest, I feel embedded within the broader natural world.	4.36 ^c	4.48 ^c	4.66 ^{ab}	8.716	.000*
Psychological Empowerment (PE)	5.41	5.45 ^c	5.26 ^b	3.347	.036*
1. Tourism in Cox’s Bazar makes me proud to be a resident of Cox’s Bazar.	5.46	5.53	5.35	2.582	.077
2. Tourism in Cox’s Bazar makes me feel special because people travel to see my county’s unique features.	5.42	5.52	5.33	2.656	.072
3. Tourism in Cox’s Bazar makes me want to tell others about what we have to offer in Cox’s Bazar.	5.41	5.42	5.26	2.429	.089
4. Tourism in Cox’s Bazar reminds me that I have a unique culture to share with visitors.	5.36 ^c	5.37 ^c	5.14 ^{ab}	5.353	.005*
Social Empowerment (SE)	4.05 ^c	3.92 ^c	3.31 ^{ab}	39.58	.000*
1. Tourism in Cox’s Bazar makes me feel more connected to my community.	4.19 ^c	3.98 ^c	3.31 ^{ab}	47.14	.000*
2. Tourism in Cox’s Bazar fosters a sense of ‘community spirit’ within me.	3.98 ^c	3.86 ^c	3.31 ^{ab}	33.32	.000*
3. Tourism in Cox’s Bazar provides ways for me to get involved in my community.	3.98 ^c	3.92 ^c	3.31 ^{ab}	31.91	.000*
Political Empowerment (PLE)	3.27 ^{bc}	3.72 ^{ac}	2.56 ^{ab}	69.94	.000*
1. I feel like, I have a voice in Cox’s Bazar tourism development decisions.	3.09 ^{bc}	3.69 ^{ac}	2.56 ^{ab}	63.86	.000*
2. I feel like, local leaders take into account my ideas about developing tourism in this municipality.	3.23 ^{bc}	3.71 ^{ac}	2.56 ^{ab}	59.99	.000*
3. I feel like, I have access to the decision-making process when it comes to tourism in Cox’s Bazar.	3.25 ^{bc}	3.69 ^{ac}	2.56 ^{ab}	57.03	.000*
4. I feel like, my vote makes a difference in how tourism is developed in Cox’s Bazar.	3.57 ^c	3.79 ^c	2.57 ^{ab}	98.02	.000*
5. I feel like, I have an outlet to share my concerns about tourism development in Cox’s Bazar.	3.20 ^{bc}	3.70 ^{ac}	2.56 ^{ab}	61.17	.000*
Economic Benefits (EB)	4.04 ^c	3.99 ^c	3.66 ^{ab}	6.078	.003*
1. Tourism in Cox’s Bazar helps me pay my bills.	3.97 ^c	3.77 ^c	3.41 ^{ab}	8.708	.000*
2. A portion of my income is tied to tourism in Cox’s Bazar.	3.98 ^c	3.75 ^c	3.40 ^{ab}	9.769	.000*