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Tourists' Perceptions toward Sustainable Tourism at Kuakata, Bangladesh

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Keywords

Sustainable tourism, tourists' perceptions, Factor analysis, Kuakata, Bangladesh **Abstract**

Sustainable tourism and related externalities are examined from the perspective of travelers in this research. The research involved primary data collection in Kuakata during COVID-19 in March 2021. Correspondence analysis on tourists' perceptions shows that tourists have an overall concern towards sustainable tourism with respect to the quality of the destination and desirable features. However, they moderately feel that the lack of certain things (i.e. medical and first-aid services, parking areas) is making tourism activities worse and that's why tourists were unsatisfied. Tourists are also interested in sustainable tourism development. For instance, they prefer to stay in those hotels that are doing well for the environment and also spend extra money on garbage cleaning and village development. Besides, there is a significant mean difference in the perceptions of tourists towards sustainable tourism development at Kuakata sea beach with respect to tourists' house location from Kuakata sea beach and monthly family income. Furthermore, perceptions and attitudes toward sustainable tourism vary significantly dependent on the characteristics of the visitors.

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Introduction

Travel and tourism have been established as an essential element of human lives. Prior to the COVID-19 pandemic, tourism was an important activity that helped the expansion of a worldwide economy that accounts for 10.4% of global GDP (WTTC, 2021) as one of the world's third-largest export sectors, behind fuel and chemicals and ahead of automobiles and food (UNWTO, 2019). Today, tourism is a global industry and in recent decades, international tourism has seen significant growth, with technical advancements, increasing living standards, and wider processes of globalization all contributing to the fast rise in the number of tourists (Milne & Ateljevic, 2001). About 1.4 billion people of the globe have traveled across the world in 2019 (UNWTO, 2019). Indeed, it is amazing that tourism has grown and developed during the past half century as a social and economic activity (Sharpley, 2009). Tourism consists of a composite of activities, services, and businesses that provide travel experiences: transportation, lodging, eating and drinking facilities, shopping, entertainment, as well as other hospitality services that allow visitors to enjoy their time away from home (Goeldner and Ritchie, 2012).

The Bangladesh government has already opened the Padma Bridge, the largest and most expensive bridge in Bangladesh, on June 25, 2022. As a consequence, the economy of the southern part of Bangladesh will change drastically and this will have an impact on the Kuakata tourism industry. At that time, it is expected that many more tourists would visit to Kuakata than at present. If the policymakers do not understand the perception of tourists towards sustainable tourism and the tourism development of Kuakata is not conducted with a sustainable approach, the danger is imminent. It is assumed that tourists are aware of the issue of mass tourism growth and want to safeguard tourist spots. Several studies have found that travelers promote sustainable tourism in terms of socio-cultural, environmental and economic, elements (Weaver & Lawton, 2004). However, very little research has been carried out for factor analysis on Kuakata sea beach as a tourist destination. Because of globalization and the ever-increasing level of rivalry among businesses and tourist hotspots, it is essential to identify strategies to influence tourist perception toward sustainable tourism. The objective of this study is to examine the perceptions of tourists toward sustainable tourism in Kuakata sea beach. Furthermore, this paper explores the results of applying factor analysis to survey data acquired from tourists. Besides, here is develop a hypothesis named "there is no significant mean difference in the perceptions of tourists towards sustainable tourism in Kuakata Sea Beach with respect to key demographic profiles."

Review of literature

In the literature, there are several ways and definitions of sustainable tourism, and many of them begin by drawing a link to the concepts of sustainability or sustainable development (Zamfir & Corbos, 2015). The phrase "sustainable tourism" was derived from "sustainable development" and the need for the tourist industry to be sustainable (Jackson & Morpeth,

2000). The literature is developing despite the fact that the term "sustainable tourism" is connected with a post-Rio paradigm of sustainable development.

According to UNEP & UNWTO (2005, p. 12): "Sustainable tourism is a form of tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of tourists, the industry, the environment and host communities".

The purpose of the above-mentioned conventional definition of sustainable tourism established by the UNEP and the UNWTO is to limit its negative impacts and increase its positive influence on the environmental, socio-cultural, and economic aspects of sustainability.

To be deemed a sustainable tourism destination, a destination must safeguard the local economy and contribute to the preservation of the local culture. A regular flow of tourists and a positive ecological and environmental effect are required. Finally, politicians (both local and national) should assist the community (Lorant & Zoltan, 2008). The employment created by sustainable tourism does neither overwhelm the local economy nor harm the environment (Lane, 1991). While the notion of sustainable tourism acknowledges environmental and socioeconomic concerns, the term may be more narrowly defined as the economic viability of tourism over time (Jafari, 2000; Butler, 1993). Tourism has the same competing requirements for limited natural resources as any other economic activity, necessitating a broader perspective than continued viability in terms of long-term sustainability (Jafari, 2000).

In addition, sustainable tourism attempts to manage the environmental, community, and future economic impacts of tourism in order to ensure that its effects are positive rather than harmful for future generations. It is a systematic process applicable to all types of tourism, whether urban, rural, or coastal (Jahan & Amin, 2014). However, sustainable tourism decreases tensions and conflicts between the tourism industry, visitors, the environment, and locals, and it takes a long-term perspective on the development of natural and manmade resources (TETI et al., 2015). Some scholars place a focus on economic activities, while others may place an emphasis on socioeconomic and environmental factors; nevertheless, sustainable tourism places an emphasis on all three factors (Eber, 1992; Liu, 2003; McKercher, 2003). However, sustainable tourism theories, practices, and regulations should attempt to find a place for tourism within a larger holistic paradigm that incorporates the overarching framework and ideals of sustainable development.

Tourists' perceptions have the potential to have an impact on local economies, sociocultural aspects, and environments; that's why they are one of the most important stakeholders in the destination in the development of sustainable tourism (Jafari, J 2001). The sustainable tourism practices (STPs), guided by the World Tourism Organization (UNWTO), do not take into consideration the point view of the tourists. Even while it is necessary for destinations to produce their tourism products with a sustainable approach in mind, it is even more crucial for those destinations to be able to offer those products to people who could visit those locations in the future (Aydın & Alvarez, 2020). Sustainable development can only be

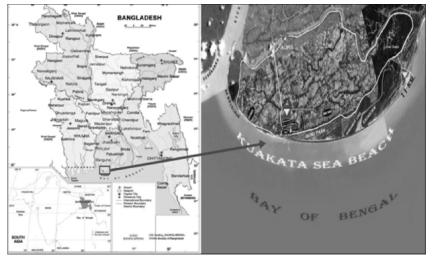
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realized when it is backed by more responsible conduct on the part of consumers, if people are ready to choose sustainable goods over less responsible ones (Font and McCabe, 2017). When trying to influence consumer behavior toward more sustainable practices, it is essential to take into account the fact that various markets have varying requirements and definitions of sustainability (Ponnapureddy et al., 2017).

Nicholas and Thapa (2010) evaluate tourist's perception on sustainable tourism based on their environmental, economic, and social attitudes toward a World Heritage Site. These authors (Nicholas and Thapa, 2010)) also found that favorable views of sustainable tourism promote support for sustainable development (Aydın & Alvarez, 2020). Therefore, it would be both rational and useful to question visitors about their impressions of the affects tourism has had on the destination, as well as what factors lead to more favorable sentiments towards the sustainable development of tourism (Joo et al., 2019). Tourists do not always have a firm grasp on the idea of sustainable tourism development, which hinders their capability of appreciating the ways in which a location demonstrates its commitment to environmental responsibility (Cottrell et al., 2004).

Kuakata as a destination

To the south of Dhaka, Kuakata is Bangladesh's second-largest sea beach (Map 1). Visitors are flocking there since it's one of the few places where they can see both the dawn and the sunset from the same beach. "Daughter of the Sea" or the Bengali name "Shagor Kannya" is how the locals refer to Kuakata. Located on the western side of the Meghna estuary, in the Kalapara upazila of the Patuakhali district. There is a story behind the name Kuakata. Many Rakhains moved along this coast in the 1780s after being banished from Arakan, a state of Myanmar. The people needed clean water, so they constructed a well and were successful in giving their people clean drinking water. So, they gave it the name Kuakata (Banglapedia, 2010). Kuakata beach is an 18-kilometer-long (11-mile-long) and 3-kilometer-wide (1.9-mile-wide) strip of sand (Rashid and Taskin, 2018). In 1784, Kuakata was a part of the larger Sundarbans Forest (BFRI, 2000). The Sundarbans are now just an hour distant by speedboat. The surrounding Fatra and Gangamati Reserved mangrove forests, which are also part of the Sundarbans, have contributed to the increase in biodiversity in this region.



Map 1: Location of Kuakata sea beach (Rahman et al., 2016)

Methodology

This field study was conducted during the COVID-19 pandemic. Survey research is one of the most often utilized methods for gathering primary data (Zikmund, 2003). Questionnaires are the most significant and widely utilized tool for collecting tourism data (Smith, 2010). In this research, it was used to produce quantitative data - the primary data set for achieving the research objectives. For questionnaire surveys, the face-to-face interview method was selected for collecting data. Pre-testing was done before the actual survey of tourists was given. The seven-point Likert scale (1 = strongly disagree to 7 = strongly agree) was utilized in the questionnaire survey conducted among the visitors to get quantitative information on sustainable tourism development in Kuakata sea beach. The tourist survey covers the following matters: i) demographic profile of tourists, ii) travel characteristic of tourists, iii) travel behavior of tourists, iv) level of satisfaction of tourists, and v) perception of sustainable tourism development (STD).

The 28 statements addressed sustainable tourism-related issues such as visitors' attitudes and interactions, marketing and advertising, conservation and preservation of the environment, and service infrastructure quality. The questions were all closed-ended. The information gathered from tourists represents the current status of the place. The interviews focused mostly on the beach area. Additionally, other places have been engaged, such as restaurants, hotel, motels, pagoda and souvenir stores. However, due to a lack of real population size and an appropriate sample frame, the current study employed non-probabilistic judgmental sampling as the sampling technique, leaving the selection of sampling units (tourists) entirely to the interviewer. The researcher had distributed 400 self-completion questionnaires to the tourists and 215 questionnaires were fully answered. The response rate was 53.75%.

COVID-19 pandemic affected the response rate throughout the study period. This study used secondary data source were: publications, brochures, fliers, billboards, academic articles, newspaper articles, maps, policy documents, manuals, handbooks, photographs, magazines, and books on sustainable tourism development, as well as internet-based information like websites, YouTube videos, and Facebook pages.

Various statistical techniques and procedures were used from the Statistical Package for the Social Sciences (SPSS) software version 25.0 for data analysis and hypothesis testing. Descriptive statistics give a more complete picture of the summary data that were used to measure tourists' opinions on sustainable tourism development in Kuakata. This research used frequency distribution, mean, and standard deviation to give a clear understanding of the data. In this study, to evaluate the hypotheses, Independent Sample T-test, Pearson Chi-Square (F-test) and one-way analysis of variance (ANOVA) were used with the threshold of statistical significance set at 95 percent ($\alpha = 0.05$).

Factor analysis was also performed in this study. Factor analysis is a "data reduction technique" by SPSS software package (Pallant, 2007). Reduce a big set of variables to a smaller set of latent components or factors using this method (Rummel, 2002, Pallant, 2007). The researcher used factor analysis to narrow down a collection of 28 variables associated with visitors' perspectives on Sustainable Tourism Development at the Kuakata sea beach to a more manageable set of factors that may be used to drive tourism development strategy. To find the structural skeleton of all variables in the study and to examine how the underlying dimensions relate to one another were the primary goals of this research. In the light of these considerations, exploratory factor analysis was determined to be suitable and justified. As a general guideline, Hair et al., (2006) recommend that the minimum number of observations be at least five times the number of variables being examined. The majority of loaded variable correlations should be 0.3 or higher (Pallant, 2007). As a result of this caution, factor loadings less than 0.30 and eigenvalues less than 1.0 were removed from the analysis; which should enhance the statistical significance of the results of this research. In order to identify the lowest number of factors that describe the highest number of variances, the Principal Component Analysis with Varimax method for orthogonal rotation was carried out as the factor extraction method. The accuracy of the data was checked using both the alpha and split-half methods. Cronbach's alpha scores over 0.70 are considered indicative of data reliability in research (Malhotra N. K., Dash S., 2016). The Cronbach Alpha score for the 28 items in this study was 0.787, indicating the data is reliable.

Results and discussion

Analysis of respondents' demographic background and travel behavior characteristics

The characteristics of the tourists are crucial for the development of sustainable tourism in any destination like Kuakata sea beach. Several authors are using demographic and travel behavior characteristics (Lee, 2011; Master & Prideaux, 2000). The demographic profiles of

the visitors say a lot about the diverse characteristics of individual respondents. **Tables 1** show the descriptive summary of the respondents on their gender, age, educational qualification, monthly income, revisiting Kuakata sea beach, recommending Kuakata sea beach to others and level of satisfaction. The respondents were predominantly male (74.9%). According to the level of education, more than 50% of the respondents were well educated, with 33.5% having completed a graduate degree and 27.9% having completed a postgraduate degree or above.

Table 1: Descriptive summary of the respondents

Issues	1	2	3	4	5	6	7
Tourist's	Male	Female					
Gender	(74.9%)	(25.1%)					
Tourist's	18-30	31-40	41-50	51-60	61<		
Age	(54.5%)	(29.5%)	(10.7%)	(3.5%)	(1.4%)		
Level of	Literate	Primary	High	College	Profes-	Graduate	Post
Education	(1.4%)	School	School	(22.3%)	sional	(33.5%)	Graduate
		(0.9%)	(4.7%)		Degree		or above
					(9.3%)		(27.9%)
Tourist's	0-50km	51-	101-150km	151-200km	201-	251 km	
House Lo-	(2.4%)	100km	(11.2%)	(14.4%)	250km	or more	
cation from		(8.4%)			(24.7%)	(38.6%)	
Kuakata							
Sea Beach							
Monthly	below	15001-	25001-	35001-	50001/-		
Income	15000	25000	35000	50000	or above		
(BDT)	(3.7%)	(6.5%)	(15.8%)	(34%)	(40%)		
Revisiting	Yes	No	Maybe				
Kuakata	(32.6%)	(6.5%)	(60.9%)				
Sea Beach							
Recom-	Yes	No					
mending	(93%)	(7%)					
Kuakata							
sea beach							
to others							
Level of	Extremely		Somewhat	Neither	Some-	Satisfied	Ex-
satisfaction	Dissatis-	fied	Dissatisfied	Satisfied	what Sat-	(53%)	tremely
	fied	(3.3%)	(6.5%)	nor Dissat-	isfied		Satisfied
	(3.7%)			isfied	(24.2%)		(7.4%)
				(1.9%)			

Source: Primary survey from Kuakata, 2021

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Majority of the respondent's monthly income were high (40%) and more than half of the tourists (61%) were not sure to revisit Kuakata sea beach in future but 93% respondents recommended Kuakata sea beach to others. Measuring visitor satisfaction plays a vital part in promoting tourism goods and services (Hassan, 2012), since destination factors have been shown to have a major impact on visitor satisfaction. Majority of 53 percent respondents were satisfied with their stay in Kuakata sea beach.

Factor and mean analysis of survey data

Prior to Factor Analysis, Kaiser-Meyer-Olkin (KMO) testing is necessary to ensure that there is adequate data to conduct the analysis. KMO and Bartlett's test measure of sampling adequacy. Generally, KMO value greater than 0.5 is desirable (Malhotra N. K., Dash S., 2016). The KMO value of 28 variables relating to Sustainable Tourism Development for this research is 0.743 (>0.5), indicating that Factor Analysis is applicable for this investigation. The significance level of Bartlett's Sphericity test is 0.000 (.0005). However, it is shown that the data is quite valid for applying Principal Component Analysis (PCA) together with a rotated component matrix of Factor Analysis. The Total Variance Explained table was helpful in estimating the number of factors among the total 28 variables. 45.46% of the variance is explained by five components whose Eigen values are larger than one. Thus, the PCA approach is utilized for extraction, while the variance approach is employed for rotation.

Five distinct factors are generated from the rotated component matrix namely 'Factor 1: Quality of Destination', 'Factor 2: Desirable Features', 'Factor 3: Condition of Supporting Service', 'Factor 4: Requisite Facilities' and 'Factor 5: Interest for STD'. **Table 2** summarizes these factors and sub-factors in terms of respective factor loadings.

Table 2: Factors and mean analysis along with respective variables pertaining to sustainable tourism development (STD)

Variables	Factor Loadings	Mean	Eigen Values	Variance (%)	Cumulative Variance (%)	Cronbach's Alpha
Factor 1: Quality of Destination		5.34	4.983	17.795	17.795	0.732
Sea water quality is good	0.639	5.38				
Kuakata Sea Beach is overcrowded with the visitors	0.636	5.42				
Accommodation facilities are good	0.61	5.49				

Variables	Factor Loadings	Mean	Eigen Values	Variance (%)	Cumulative Variance (%)	Cronbach's Alpha
Seating arrangements at the destination are sufficient	0.576	5.22				
Kuakata sea beach is neat and clean	0.571	5.14				
Kuakata is safe	0.55	5.39				
Factor 2: Desirable Features		4.22	2.763	9.868	27.663	0.708
Price of the product and service are reasonable	0.7	4.26				
Visitors mostly use the dustbins	0.634	3.22				
Quality of food is good	0.603	4.71				
Services at the hotel, motel, guest house and restaurant are prompt	0.524	4.67				
Factor 3: Condition of Supporting Service		3.49	1.848	6.599	34.262	0.669
Medical and first-aid services are adequate	0.717	2.7				
Parking area is sufficient	0.671	3.51				
Transportation system is good	0.639	3.47				
Ticket counter, money exchange and internet services are tourists friendly	0.549	3.8				
Untreated drainage water entering into the sea causing pollution	0.543	3.95				
Factor 4: Requisite Facilities		4.4	1.604	5.728	39.99	0.579
Dustbins are placed at the right places	0.62	2.46				

Variables	Factor Loadings	Mean	Eigen Values	Variance (%)	Cumulative Variance (%)	Cronbach's Alpha
Tourist police or guards are helpful to the visitors	0.592	5.35				
Publicity to sensitize visitors about the negative effects of tourism is minimum	0.473	5.13				
Local people are friendly	0.437	5.34				
Tourists are conscious about natural, cultural heritages and sits	0.411	3.7				
Factor 5: Interest for sustainable tourism development		5.67	1.531	5.469	45.459	.439**
Tourist prefer to stay in hotels that are doing good for the environment	0.664	5.97				
Revenue generated from tourism can be spent for garbage cleaning and village development	0.659	6.39				
Tourists are conscious of the use of resources such as the electricity and water	0.602	4.64				

^{**}Mean Inter-item Correlation 0.248

The five factors identified by the factor analysis are explored in detail below. In parentheses, the percentage of variance explained by each factor is indicated.

Factor 1: Quality of Destination (17.795): The first factor consists of six variables that describe the quality of destination at Kuakata sea beach and obtained a coefficient of alpha of 0.732. **Table 2** displays six elements and their related mean values and Std. Deviation. This aspect has a mean value of 5.49 of tourist respondents in terms of good accommodation facilities, which is one of the major components of tourists need. The statements Kuakata sea beach is overcrowded with the visitors and Kuakata is safe respectively obtained mean value of 5.42 and 5.39 respectively. It clearly indicates that the quality of the destination plays a vital role in the tourism sector, and that travelers are more attracted to the destination when it is of higher quality.

Factor 2: Desirable Features (9.868): The second factor comprises 4 variables and includes: price of the product and service, quality of food and service. This factor attained a coefficient of alpha 0.708. The highest value of mean in the case of the statement- 'Quality of food is good' with a mean score of 4.71. It was deduced that Kuakata sea beach served quality food as an important desirable feature of a destination. The remaining statements obtained a mean value of more than 4.00 except the statement - 'Visitors mostly use the dustbins' with a least mean value of 3.22. It explains most visitors do not use dustbins. Desirable features of the destination greatly impact to establish sustainable tourism development.

Factor 3: Condition of Supporting Service (6.599): This factor includes medical and firstaid services, parking areas, transportation systems and ticket counters, money exchange and internet services issues that affect the overall satisfaction level of the tourist. The mean study of the condition of supporting service factor revealed that the statement "Untreated drainage water entering into the sea causing pollution" had a maximum mean value of 3.95. Thus, it is inferred that the sewerage system is not well developed in the destination and it is leading to the dissatisfaction of the tourists. The statement "Medical and first-aid services are adequate" is the least mean value of 2.70.

Factor 4: Requisite Facilities (5.728): The five (supporting factors) variables included in the fourth factor are the behavior of tourist, tourist police and local people. The mean value of 5.35 on the statement of "Tourist police or guards are helpful to the visitors". It indicates that the security system is quite good and most of the visitors feel safe visiting Kuakata sea beach. The tourist respondents felt that local people were very much friendly in Kuakata with mean value of 5.34 in this study, tourists claim that dustbins were not places at the right placed with least mean value of 2.46. The activities here are each undertaken by major stakeholder of the destination.

Factor 5: Interest for sustainable tourism development (STD) (5.469): The Cronbach's Alpha value of Factor 5 is 0.439 (< .6). According to Pallant (2007) Cronbach's Alpha value is highly dependent on the number of items on the scale. Only three variables are loading on factor 5. On this occasion, the mean inter-item correlation for the items could be more suitable to report. Briggs and Cheek (1986) recommend a range of .2 to.4 for the inter-item correlation. Here the mean inter-item correlation for Factor 5 is 0.248. So, this factor is considerable for factor analysis.

As a value of the mean score, factor 5 had the highest mean score (5.67) among the others. It was the most important factor because this factor represents tourists' interest for sustainable tourism development in Kuakata sea beach. This factor represents three items. The statement that "Revenue generated from tourism can be spent for garbage cleaning and village development" had the highest mean value, which came in at 6.39. It indicates that the tourists are more concerned with waste management and also participate in village development. Another reassuring fact about tourists is that the vast majority of them want to be in hotels

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that are eco-friendly and are conscientious about the amount of precious resources such as water and energy that they use.

Hypothesis:

H0: There is no significant mean difference in the perceptions of tourists towards sustainable tourism in Kuakata Sea Beach with respect to key demographic profiles.

The findings of Independent Sample 't' test and One-Way ANOVA for the perceptions of the tourists of sustainable tourism development at Kuakata sea beach in relation to the tourist demographic characteristics presented that there is a significant difference between the perceptions of the tourist with regard to tourist's house location from Kuakata sea beach and monthly family income where p < 0.05. However, there is no significant difference between the variables in relation to gender, age and educational qualification where p > 0.05. Therefore, out of five demographic variables three variables are fail to reject null hypothesis. **Table 3** shows the test results of Independent Sample 't' test and One-Way ANOVA between demographic variables and perceptions towards sustainable tourism development.

Table 3: Results of independent sample 't' test and one-way ANOVA

Sl. No	Tourist Demographic Variables	P-Value	Result	Inference of Hypothesis
1	Gender	.276 (t= -1.091)	Insignificant	Accepted
2	Age	.153 (F= 1.547)	Insignificant	Accepted
3	Tourist's House Location from Kuakata Sea Beach	.020 (F= 2.738)	Significant	Rejected
4	Educational Qualification	.407 (F= 1.036)	Insignificant	Accepted
5	Monthly Family income	.017 (F= 3.103)	Significant	Rejected

Conclusion

Despite the fact that sustainable tourism has experienced remarkable growth in recent years, there are very few research papers that investigate Kuakata sea beach, Bangladesh. Particularly research aimed at analyzing the perception and attitude of tourists toward sustainable tourism development is still under-researched. The purpose of this study was to examine this strand of tourism research with the goal of determining tourists' perceptions toward sustainable tourism development in Kuakata sea beach, the second largest sea beach in Bangladesh. However, given the significance of travelers' contributions to the development of the tourism industry, these findings can be a significant addition to the academic discussion

on sustainable tourism and can also aid policymakers in their pursuit of a more sustainable model for beach tourism locations.

The findings reveal that tourists have, overall, a mixed perception towards sustainable tourism development. Nevertheless, they moderately feel concerned about the quality of destination such as sea water quality accommodation facilities seating arrangements at the beach cleanliness of the sea beach and security environment of Kuakata. It may exert on their condition of supporting service requisite facilities the last factor of this study represents tourist interest towards sustainable tourism development in Kuakata sea beach. Here, they prefer to stay in hotels that are doing well for the environment, and tourists are conscious of the use of scarce resources like water and electricity. Besides, there is no significant mean difference in the perceptions of tourists towards sustainable tourism development Kuakata sea beach with respect to gender, age and educational qualification.

The empirical outcomes can be used as a guide in planning the future of sustainable tourism development for this destination. The Bangladesh government already launched the Padma Bridge. As a consequence, Kuakata will receive more tourists than at present. National and international marketing and communication efforts should be coordinated by policymakers to provide targeted messages (Brida et al., 2011). Still, those in charge of a destination should not ignore the fact that visitors to the destination might have their own perspectives on the way tourism has affected the area or the development of sustainability (Joo et al., 2019). Furthermore, the findings also serve as a reminder to destination managers and policymakers of the significance of taking into account visitor preferences before making decisions about tourism development, as well as the necessity of thoroughly comprehending and tracking over time how visitors react to and accept the effects of sustainable tourism development. Although not examined in this article, it is reasonable to predict that travelers' views and attitudes toward sustainable tourism would shift over time as the industry evolves. Therefore, policymakers should keep an eye on them and take them into account in a dynamic manner in order to be able to respond to changes when planning the destination's sustainable tourism development in the future.

Though the research presented in this paper contributes to this field of tourism study, it is equally important to take into account potential future contributions. Due to the COVID-19 pandemic, this study has been completed with a focus on domestic visitors. However, the international tourism market has already developed in Bangladesh. Further research is required to investigate the attitudes, expectations, experiences, as well as levels of sustainable tourism practice, satisfaction or dissatisfaction of international (foreign) tourists and whether they match or differ from domestic tourists. The study's results will assist Bangladesh in developing and implementing sustainable development and management strategies, particularly for Kuakata tourism, which caters to both categories of tourists. Future studies may also look at how other factors (tourist responses towards tourism service providers who are practicing sustainability) affect how visitors perceive and behave in relation to the development of sustainable tourism.

References

- Ali, A. M., Mohamad, 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), 167–177.
- Aydın, B., & Alvarez, M. D. (2020). Understanding the tourists' perspective of sustainability in cultural tourist destinations. *Sustainability (Switzerland)*, 12(21), 1–18. https://doi.org/10.3390/su12218846
- BANGLAPEDIA (2010), BANGLAPEDIA: National Encyclopedia of Bangladesh, Asiatic Society of Bangladesh, Dhaka.
- Bangladesh Bureau of Statistics. 2021. Statistical Yearbook Bangladesh 2020. 40th ed.
- BFRI. (2000). Forest Statistics of Bangladesh 2000, Bangladesh Forest Research Institute, Chittagong.
- Butler, R. W. (1993). Tourism An evolutionary approach. In: J.G. Nelson, R.W. Butler, and G Wall (eds). Tourism and Sustainable Development: Monitoring, Planning, Management (pp.27-44). Waterloo: University of Waterloo.
- Briggs, S.R. & Cheek, J.M. (1986). *The role of factor analysis in the development and evaluation of personality scales*, Journal of Personality, 54, 106-48.
- Brida, J.G., Riano, E. & Zapata, A.S. (2011). Resident's attitudes and perceptions towards cruise tourism development: a case study of Cartage de Indias (Colombia). *Tourism and Hospitality Research*, 11(3), 187-202.
- Chi, C. G. Q., & Qu, H. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tourism Management*, 29(4), 624–636. https://doi.org/10.1016/j.tourman.2007.06.007
- Çoban, S. (2012). The effects of the image of destination on tourist satisfaction and loyalty: The case of Cappadocia. *European Journal of Social Sciences*, 29(2), 222–232.
- Cottrell, S., Van Der Duim, R., Ankersmid, P., & Kelder, L. (2004). Measuring the sustainability of tourism in manuel antonio and texel: A tourist perspective. *Journal of Sustainable Tourism*, 12(5), 409–431. https://doi.org/10.1080/09669580408667247
- Eber, S. (Ed.). (1992). Beyond Green Horizons: Principles for Sustainable Tourism Surrey: World Wildlife Fund.
- Fallon, P., & Schofield, P. (2004). Journal of Quality Assurance in Hospitality & Tourism " Just Trying to Keep the Customer Satisfied." *Journal of Quality Assurance in Hospitality & Tourism*, 77–96. https://doi.org/10.1300/J162v04n03_06
- Font, X.& McCabe, S (2017). Sustainability and marketing in tourism: its contexts, paradoxes, approaches, challenges and potential. Journal of Sustainable Tourism, 25:7, 869-883,-DOI: 10.1080/09669582.2017.1301721

- Jackson, G., & Morpeth, N. (2000). Local Agenda 21. Reclaiming community ownership in tourism or stalled process? In G. Richards & D. Hall (Eds.), Tourism and sustainable community development (pp. 120). London: Routledge.
- Jafari, J. (2000). Encyclopedia of tourism. London: Routledge.
- Jafari, J (2001). The scientification of tourism. In Valene L. Smith & Maryann Brent (Eds.), Hosts and Guests Revisited: Tourism Issues of the 21st Century; Tourism Dynamics; Cognizant Communication Corp: New York, NY, USA, 2001; (pp. 28-41). ISBN 978-1-882345-28-1.
- Jahan, N., & Amin, M. R. (2014). Sustainable Tourism Development in Bangladesh: An Empirical Study on Sylhet. In *Journal of Business Studies: Vol. XXXV* (Issue 2).
- Jamaludin, M., Johari, S., Aziz, A., Kayat, K., & Yusof, A. R. M. (2012). Examining Structural Relationship between Destination Image, Tourist Satisfaction and Destination Loyalty. International Journal of Independent Research and Studies, 1(3), 89–96.
- Joo, D., Cho, H., & Woosnam, K. M. (2019). Exploring tourists' perceptions of tourism impacts. Tourism Management Perspectives, 31(May), 231-235. https://doi.org/10.1016/j. tmp.2019.05.008
- Kozak, M., & Rimmington, M. (2000). Tourist satisfaction with Mallorca, Spain, as an offseason holiday destination. Journal of Travel Research, 38(3), 260-269. https://doi. org/10.1177/004728750003800308
- Kozak, M., Bigné, E., & Andreu, L. (2004). Satisfaction and Destination Loyalty: A Comparison Between Non-Repeat and Repeat Tourists. Journal of Quality Assurance in Hospitality & *Tourism*, 5(1), 43–59. https://doi.org/10.1300/J162v05n01
- Lane, B. (1991). Sustainable tourism: A new concept for the interpreter. *Interpretation*, 28(29), 1-4.
- Lee, S., Jeon, S., & Kim, D. (2011). The Impact of Tour Quality and Tourist Satisfaction on Tourist Loyalty: The Case of Chinese Tourists in Korea. Tourism Management, Vol. 32, pp. 1115-1124.
- Liu, Z. (2003). Sustainable Tourism Development: A Critique. Journal of Sustainable Tourism, 11(6), 459–475.
- Lorant, D., Zoltan, B. (2008). Environmentally Sustainable Tourism: International and Hungarian Relations. Gazdalkodas, Special Edition 53: (23), 80-91.
- Hair, J., Black, B. Babin, B., Anderson, R. and Tatham, R. (2006). Multivariate Data Analysis (6th ed.). Upper Saddle River, NJ: Prentice-Hall.
- Hassan, Kamrul. 2012. "Measuring Tourist Satisfaction: A Categorical Study on Domestic Tourists in Bangladesh." XXXIII(1): 1–13.

- Goeldner, C. R., & Ritchie, J. R. B. (2012). *TOURISM: Principles, Practices, Philosophies* (12th ed.). John Wiley & Sons, Inc.
- Malhotra N. K., Dash S. (2016). *Marketing Research: An Applied Orientation*, 7th Edition, NewJersey:Pearson.
- Master, H., & Prideaux, B. (2000). Culture and Vacation Satisfaction: A Study of Taiwanese Tourists in South East Queensland. Tourism Management, Vol. 21, pp. 445-449.
- McKercher, B. (2003). Sustainable Tourism Development Guiding Principles for Planning and Management. *National Seminar on Sustainable Tourism Development*, Bishkek Kyrgyzstan, 5–9 November, 2003.
- Milne, S., & Ateljevic, I. (2001). Tourism, economic development and the global-local nexus: Theory embracing complexity. *Tourism Geographies*, *3*(4), 369–393. https://doi.org/10.1080/146166800110070478
- Nicholas, L. & Thapa, B. (2010). Visitor perspectives on sustainable tourism development in the Pitons Management Area World Heritage Site, St. Lucia. *Environ Dev Sustain* 12, 839–857 https://doi.org/10.1007/s10668-009-9227-y
- Oppermann, M. (2000). Tourism Destination Loyalty. *Journal of Travel Research*, 39(1), 78–84. https://doi.org/10.1177/004728750003900110
- Pallant, Julie. 2007. A Step by Step Guide to Data Analysis Using SPSS for Windows. Third. McGraw-Hill Education p.185.
- Peterson, R. A. (2000). *Constructing Effective Questionnaires*. Thousand Oaks, CA: Sage publications.
- Pizam, A., & Milman, A. (1993). Predicting satisfaction among first time visitors to a destination by using the expectancy disconfirmation theory. *International Journal of Hospitality Management*, 12(2), 197–209. https://doi.org/10.1016/0278-4319(93)90010-7
- Ponnapureddy, S., Priskin, J., Ohnmacht, T., Vinzenz, F., & Wirth, W. (2017). The influence of trust perceptions on German tourists' intention to book a sustainable hotel: a new approach to analysing marketing information. *Journal of Sustainable Tourism*, 25(7), 970–988. https://doi.org/10.1080/09669582.2016.1270953
- Rahman, A. M, Ali, M.M., & Rahman, A. M. (2014). STUDY ON THE EFFECTIVENESS OF BIO-SHIELD ALONG KUAKATA BEACH OF BANGLADESH IN REDUCING THE STORM SURGE ENERGY USING BOB MODEL. 2nd International Conference on Advances in Civil Engineering 2014 (ICACE-2014).
- Rashid, Md. Mamunur, and Raihana Taskin. 2018. "Tourism in Kuakata, Bangladesh:Understanding Current Status and Future Prospects." *Ottoman Journal of Tourism and Management Research* 3(1): 235–44.

- Sharpley, R. (2009). Tourism, Development and the Environment: Beyond Sustainability? Earthscan. https://doi.org/10.21832/9781845414740-011
- Smith, S. L. J. (2010). Practical Tourism Research. Oxfordshire, UK: CABI. ISBN: 978 1 845936327.
- ŠTETIĆ, S. S., PAVLOVIĆ, S. B., & ŠIMIČEVIĆ, D. (2015). Sustainable Tourism and Strategic Documents on the Danube River Basin in Serbia. In C. Avcikurt, M. Dinu, N. Hacioglu, R. Efe, & A. Soykan (Eds.), Tourism, Environment and Sustainability (pp. 331-358). St. Kliment Ohridski University Press.
- UNEP and WTO. (2005). "Making Tourism More Sustainable: A Guide for Policy Makers."
- UNWTO (2019). International tourism highlights. 2019 Edition, Madrid, Spain. Retrieved from https://www.e-unwto.org/doi/pdf/10.18111/ 9789284421152.
- Wang, S., & Qu, H. (2006). A study of tourists' satisfaction determinants in the context of the Pearl River Delta sub-regional destinations. *Journal of Hospitality and Leisure Marketing*, 14(3), 49–63. https://doi.org/10.1300/J150v14n03_05
- Weaver, D. B., & Lawton, L. J. (2004). Visitor attitudes toward tourism development and product integration in an Australian urban-rural fringe. Journal of Travel Research, 42(1), 286-296.
- Weaver, D.B. (2006). Sustainable Tourism: Theory and Practice. London: Butterworth-Heinemann.
- WTTC. (2021). "World Economic Impact 2021.": 1-2. https://wttc.org/Portals/0/ Documents/EIR/EIR2021 Global Infographic.pdf?ver=2021-04-06-170951-897.
- Yoon, Y., & Uysal, M. (2005). An examination of the effects of motivation and satisfaction on destination loyalty: A structural model. Tourism Management, 26(1), 45-56. https://doi. org/10.1016/j.tourman.2003.08.016
- Zamfir, A., & Corbos, R. A. (2015). Towards sustainable tourism development in urban areas: Case study on Bucharest as tourist destination. Sustainability, 7(9), 12709–12722.https:// doi.org/10.3390/su70912709
- Zikmund, W. G. (2003). Exploring Marketing Research, 7th ed.). Dryden Press, Forth Worth.