

**FACTORS INFLUENCING TOURISTS' SATISFACTION  
IN EASTERN PROVINCE, SRI LANKA**

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March 2018

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Thesis submitted in partial fulfilment of the requirements for the degree  
Master of Science in Operational Research

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## **Declaration**

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## Abstract

### Factors Influencing Tourists' Satisfaction in Eastern Province, Sri Lanka

Tourism is defined as the marketing of the enjoyable and other features of a travel destination and provision of facilities with services for the pleasure of travellers (tourists). In Sri Lankan context it has been experienced and appreciated as the way of generating the income and socio-economic status of the country in the past and present. In this research, overall satisfaction of tourists of Eastern Province of Sri Lanka was measured by seventy-six motives belongs to eight factors namely, accommodation services, transport services, nature and culture, food and beverages, public infrastructure facilities, price levels, safety and security and hygiene and sanitation. Primary data collection was done using structured questionnaire survey from 370 respondents. Data analysis was done using benchmark statistical tools. Reliability Test, Multiple Correspondence Analysis (MCA), Chi-Square Test and Ordinal Regression Analysis are the statistical analysis entailed in this study. While the obtained responses of each motive encompassed for each factor subjected to the reliability test few of them were eliminated until it reaches the optimum value for Cronbach's alpha. Further Multiple Correspondence Analysis was used to reduce the number of variables belongs to eight major factors. Moreover, based on the results obtained from Ordinal Regression Analysis revealed that all other factors showed a significant relationship with overall satisfaction of tourists except the food and beverages. The results obtained from the data collected is providing a valuable implication on each factor and each motive applicable to the tourism operators. Further, the study helps to incorporate the findings in improving the service quality of tourism industry towards uplifting the socio-economic status of the region and the nation.

**Keywords:** *Tourism, Tourists' satisfaction, Multiple Correspondence Analysis, Ordinal Regression Analysis, Chi-Square test*

## **Acknowledgement**

I must appreciate and acknowledge the support I received from many people on my way of presenting this research report.

I would like to offer my sincere gratitude to my supervisors Mr T. M. J. A. Cooray, Senior Lecturer, Department of Mathematics, Faculty of Engineering, University of Moratuwa, Sri Lanka and Dr.U.W.M.R.Sampath Kappagoda, Senior Lecturer, Department of Business Management, Faculty of Management Studies, Rajarata University of Sri Lanka. Your belief of my capabilities in accomplishing this research, the valuable guidance, important suggestions, constructive criticisms and the time devoted to me as my supervisors made me complete this effort successfully

I am very grateful to my Course coordinator Mr T. M. J. A. Cooray, Department of Mathematics, Faculty of Engineering, University of Moratuwa, for his advice and help.

I would like to thank all our lecturers, who gave me background knowledge on doing this project during the coursework of M.Sc. Dear teachers thank you very much for your kind assistance.

At last but not least, I wish to thank all those who helped me to carry out this project, even though the names have not been mentioned.

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## **List of abbreviations**

ACSI	- American Customer Satisfaction Index
CA	- Correspondence analysis
MCA	- Multiple correspondence analysis
MICE	- Meeting, Incentives, Conferences and Events
SEM	- Statistical Equation Model

# **1 INTRODUCTION**

## **1.1 Introduction**

The aim of this chapter is to describe the current trends of the tourism sector in Sri Lanka especially in Eastern Province, Statement of the research problem for the improvement of eastern tourism, formulation of research questions, objectives and significance of this study for Eastern Provincial tourism sector.

Tourism is defined as the marketing of the enjoyable and other features of a travel destination and provision of facilities and services for the pleasure travellers. It has been experienced and appreciated the way of generating the income and socioeconomic status of developed and developing nations. In association with the sequent changes in transportation and telecommunication technologies, socio-economic and cultural transformations, resulted in an enormous increase in the number of tourists to travel around the world. According to United Nations World Tourism Organization (2010), it has experienced continued expansion and diversification to become one of the largest and fastest growing economic sectors of the world. In addition, it has been accounted for one of the source of income/revenue for most of the nations (Neto, 2003). Further, it continues to expand annually and the arrival of tourists also uplifts the standard of the society. Worldwide, global tourism rebounded strongly, with the growth of international tourist arrivals by 3.9 percent in 2016 to a total of 1,235 million, from 1,189 million in 2015. The highest growth of all regions with 8.4 percent was recorded from Asia and Pacific in 2016.

## **1.2 Background of the study**

In the context of the tourism sector of Sri Lanka; scenic beauty of nature, comfortable climate, cultural, heritage, religious diversity, and historical, and archaeological monuments are the focal potentials of the tourism industry and considered as areas of growth potentials. As per the performance of tourism sector, it was ranked as the third largest source of foreign exchange earnings in 2016 contributing 14.2 percent to total

foreign earnings of the country. Therefore, a high potential exists in tourism such as Adventure tourism, Leisure tourism, Ecotourism, Agrotourism, Marine tourism, Recreational tourism and MICE (Meeting, Incentives, Conferences and Events) in Sri Lanka (Central Bank of Sri Lanka, 2015). Sri Lanka has been recognized as a popular tourist hot-spot in South Asia and has witnessed the gradual increase of tourist arrivals especially after the post-war era. In such way tourism sector has a direct economic impact as well as significant indirect and induced impacts. Direct impacts address the promotion of industrial sectors such as accommodation services, food and beverage services, retail trade, transportation services, cultural events, sports and recreational services whereas, indirect and induced impacts include employment opportunities subsequently improvement in socio-economic status of inhabitants closer to the tourism operated regions (Travel and Tourism Economic Impact 2017, Sri Lanka). Therefore tourism has been identified as the foreseeable industrial sector of Sri Lanka. As the result of this, Sri Lankan government has initiated various means of efforts committed to establishing and positioning Sri Lanka as ‘Asian Tourism Icon’ incorporated with its strong nature, culture and adventure in order to reach the stipulated target. In order to achieve progressive changes or stipulated target on the tourism industry, it is essential to study the status of existing tourism activities at regional and national scale. Moreover, as a developing nation, Sri Lanka needs a cost-effective development paradigm for the development of tourism sector.

### **1.3 Statement of the research problem**

Eastern Province of Sri Lanka characterized with its unique and tremendous wealth of natural, cultural and historical tourism resources. Hence it has a huge potential of earning a lot of benefits out of its tourism sector. Since that region has subjected to the civil unrest in near past consequently facing numerous key challenges in terms of developing tourism sector which necessitates the strategic and sustainable development of tourism sector. Various development efforts need to be initiated with respect to the tourism sector of Eastern Province such as Developing tourism-related infrastructure, Development and dissemination of tourism information, Enhanced business opportunities, Tourism related skill development, Institutional capacity

development and governance (Source: [www.ep.gov.lk/Tourismindex.asp](http://www.ep.gov.lk/Tourismindex.asp)). For the successful implementation of such efforts towards the development of tourism sector in Eastern Province, it is essential to measure the level of tourist satisfaction which relates to customer loyalty, repeat visitation, and positive social communication. However, there has been no qualitative data gathered from tourists to assess their expectation levels in Eastern Province but the attempt is made to study and measure the level of tourist satisfaction in Sri Lanka. As far as concerns towards the availability of data with reference to the indicators of tourism sector's performance in Eastern Province were lacking in the researchers perspective. This research study encompasses to analyse the factors affecting the level tourist satisfaction with reference to the tourism sector of Eastern Province.

#### **1.4 Research Questions**

1. What are the key factors that influence on tourist satisfaction in Eastern Province?
2. Is there any correlation between the level of service quality of each factor and the tourist satisfaction?
3. How the individual motives influence on tourist's satisfaction?
4. Which would be the preferable rectifications for the short term and long term improvements of the tourism industry in Eastern Province.
5. How likely are the tourists to re-visit to the Eastern Province and recommend the destinations to others?

## **1.5 Objectives of the Study**

### **1.5.1 General Objective**

The aim of this study is to identify and examine the factors, and their relative influence on tourists' satisfaction allied to the tourism sector of Eastern Province, Sri Lanka.

### **1.5.2 Specific Objectives**

- To identify the key factors on tourist Satisfaction in Eastern Province.
- To quantify the level of satisfaction with respect to existing facilities.
- To assess the level of tourist satisfaction/dissatisfactions based on the tourist's overall evaluation of Eastern Province of Sri Lanka as a tourist destination.
- To find the current lapses to improve the tourism sector in Eastern Province.
- To assess the likelihood of the tourists in the direction of the re-visit and/or recommendations on future perspective of tourism in Eastern Province.



## **1.6 The significance of the study**

Efforts to assess the level of impact of determinant factors by determine tourists' satisfaction towards the tourism in Eastern Province and to make use of these parameters to propose measures to upsurge the number of tourists visiting the region in future at the short-term and long-term basis.

- Level of satisfaction assessed by monitoring tourists' satisfaction at province level would provide a valuable framework for establishing accreditation mechanisms to ensure that individual firms conform to appropriate standards.
- Repeated visit and recommendations let make the organizations in the tourism industry recognize the need to encourage both new and repeat business. This can be achieved by ensuring that the current offerings of the tourism sector in Eastern Provinces are satisfying the needs, expectations, and desires of tourists and their propensity to recommend the destination to others.
- Recommendations of tourists could become a barometer of the 'health' of the industry for strategic planning purposes.
- Tourist recommendations associated with the level of satisfaction addresses the government agencies to recognize the value of assessing the success of their programs in terms of outcomes.

## **1.7 Structure of the Thesis**

The thesis is prepared in the form of chapters to find the lapses in Eastern Provincial tourism sector and to recommend improvements based on findings. The chapters are summarized below:

This chapter introduces the trends and current situations of the Sri Lanka tourism especially concentrate on eastern provincial tourism sector. The Introduction further describes about the formation of research questions and the objective of the study and also the role of the study for the betterment of eastern tourism sector. The Literature review chapter describes the nature of data collection through structured questionnaires. The selected motives and factors based on the related worked done in the past. Further the chapter discus on the theories and models belongs to tourism and tourist satisfactions. The chapter finally specify the selected motives and factors which determines the tourist satisfaction for further analysis. In chapter 3 methodology, the hypothesis is formulated based the factor derived through literatures as discussed in literature review. Methodology chapter tells about how the selected motives and factors are made into an operational form for the statistical analysis. The details of collected data, preprocessing of the data to remove the impurities and the statistical methods used for the analysis are discussed. The results obtained through the statically analysis is described in chapter 4 results and discussion. The detailed explanation is given for each step of the analytical pipeline of the study. the nature of the dataset collected, present the results into simple fathomable manner also described in this chapter. The final chapter conclude the study and also its recommends the possible improvements found through the results obtained. The chapter also consist the limitations of this study with the future scope. Finally, a set books, articles, journals, conference papers are given in the reference section.

## **2 LITERATURE REVIEW**

### **2.1 Introduction**

Before the relationship will be explored, this chapter will lay out a theoretical framework about the topics relevant to this research study. Firstly it covers the definitions of intended concepts afterwards an overview on different theories about those subjects under the researcher's interest; which have been already used in research and ways on factors could be measured, finally, the empirical evidence in which those theories were used which are from literary resources.

### **2.2 Customer satisfaction**

Customer satisfaction is a term relates to marketing. It measures how products or services supplied by a commodity or service provider meet or surpass a customer's expectation. It is the greatest indicator of how likely a customer will make purchases in the future or repeatedly. Customer satisfaction as a standard of measurement is essential to marketers and business owners which they can use to manage and improve their businesses.

### **2.3 Theories of customer satisfaction**

Oliver (1980) has stated that a number of theoretical approaches have been utilized to explain the relationship between disconfirmation and satisfaction. Further Adeel in (2004) stated that many theories have been used to understand the process through which customers form satisfaction judgments. The theories can be broadly classified into three groups: Expectancy disconfirmation, Equity, and Attribution. Where Anderson in (1973) suggested that the expectancy disconfirmation theory that forms consumer's satisfaction judgments by evaluating actual product/service incorporated with four psychological theories which could be used to explain the impact of expectancy or satisfaction: Assimilation, Contrast, Generalised Negativity, and Assimilation-Contrast.

## **2.4 Measurement of customer satisfaction**

Based on Oliver (1980) the heart of the satisfaction process is the comparison of what was expected with the product or service's performance which has been traditionally described as the 'confirmation/disconfirmation' process. Firstly, customers would form expectations prior to purchase a product or hire a service, Secondly consumption of product or service experiences or produces the level of perceived quality which influenced by expectations.

According to Vavra (1997), if perceived performance is only slightly less than expected performance, assimilation will occur, perceived performance will be adjusted upward to equal expectations Whereas, perceived performance lags expectations substantially, the contrast will occur, and the shortfall in the perceived performance will be exaggerated. Atkinson (1988) found out that cleanliness, security, value for money and courtesy of staff determine customer satisfaction with special reference to the tourism industry. Furthermore, Knutson (1988) revealed that room cleanliness and comfort, the convenience of location, prompt service, safety and security, and friendliness of employees are important in terms of customer satisfaction.

A study conducted by Akan (1995) claimed that the vital factors are the behaviour of employees, cleanliness and timeliness. On the other hand the study by Choi and Chu (2001) concluded that staff quality, room qualities, and value are the top three hotel factors that determine travellers' satisfaction where Peyton (2003) stated that four theoretical approaches have been advanced under the umbrella of consistency theory includes assimilation theory contrast theory, assimilation, contrast theory and negativity theory.

### **2.4.1 Assimilation Theory**

Based on Festinger's (1957) dissonance theory which posits that consumers make some kind of cognitive comparison between expectations about the product and the perceived product performance where collectively explained by Peyton (2003) and Anderson (1973) as this view of consumer post-usage evaluation was introduced into the satisfaction literature in the form of assimilation theory.

According to Anderson (1973) and Olson (1979), consumers seek to avoid dissonance by adjusting perceptions about a given product to bring it more in line with expectations. In addition, consumers can also reduce the tension resulting from a discrepancy between expectations and product performance either by distorting expectations so that they coincide with perceived product performance or by raising the level of satisfaction by minimizing the relative importance of the disconfirmation experienced.

#### **2.4.2 Contrast Theory**

Contrast theory was introduced by Hovland, Harvey and Sherif (1987). Dawes et al (1972) define that the tendency to magnify the discrepancy between one's own attitudes and the attitudes represented by opinion statements. Furthermore, according to Cardozo (1965), contrast theory presents an alternative view of the consumer post-usage evaluation process that was presented in assimilation theory in that post-usage evaluations lead to results in opposite predictions for the effects of expectations on satisfaction.

According to Reginald (2003) while assimilation theory posits that consumers will seek to minimize the discrepancy between expectation and performance, as contrast theory holds that a surprise effect occurs leading to the discrepancy being magnified or exaggerated. Therefore based on contrast theory, any discrepancy of experience from expectations will be exaggerated in the direction of discrepancy where firm raises expectations in his advertising, and then a customer's experience is only slightly less than that promised, the product/service would be rejected as totally unsatisfactory. According to Vavra (1997) conversely, under-promising in advertising and over-delivering will cause positive disconfirmation also to be exaggerated.

#### **2.4.3 Assimilation-Contrast Theory**

Assimilation-contrast theory by Anderson (1973) in the context of post-exposure product performance based on Sherif and Hovland's (1961) discussion of assimilation

and contrast effect. Furthermore, according to Oliver (1994) assimilation-contrast theory suggests that if performance is within a customer's latitude (range) of acceptance, even though it may fall short of expectation, the discrepancy will be disregarded – assimilation will operate and the performance will be deemed as acceptable. If performance falls within the latitude of rejection, the contrast will prevail and the difference will be exaggerated, the produce/service deemed unacceptable. Thereafter based on Vavra (1997) assimilation-contrast theory has been proposed as yet another way to explain the relationships among the variables in the disconfirmation model. Furthermore, according to Hovland (1957), this theory is a combination of both the assimilation and the contrast theories as “This paradigm posits that satisfaction is a function of the magnitude of the discrepancy between expected and perceived performance”. As per Reginald (2003) assimilation theory; the consumers will tend to assimilate or adjust differences in perceptions about product performance to bring it in line with prior expectations but only if the discrepancy is relatively small.

#### **2.4.4 Negativity Theory**

This theory developed by Carlsmith and Aronson (1963) suggests that any discrepancy of performance from expectations will disrupt the individual, producing “negative energy.” Affective feelings toward a product or service will be inversely related to the magnitude of the discrepancy. Further based on Vavra (1997) negative theory has its foundations in the disconfirmation process. The negative theory states that when expectations are strongly held, consumers will respond negatively to any disconfirmation. “Accordingly dissatisfaction will occur if perceived performance is less than expectations or if perceived performance exceeds expectations”.

#### **2.4.5 Disconfirmation Theory**

According to Ekinici (2004) disconfirmation theory argues that ‘satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations’. Szymanski and Henard (2001)

found in the meta-analysis that the disconfirmation paradigm is the best predictor of customer satisfaction. Whereas Petrick (2004) Ekinci et al (2004) cited Oliver's updated definition on the disconfirmation theory, which states "Satisfaction is the guest's fulfilment response; judgement that a product or service feature, or the product or service itself, provided (or is providing) a pleasurable level of consumption-related fulfilment, including levels of under- or over-fulfilment".

Mattila and O'Neill (2003) discussed that "Amongst the most popular satisfaction theories is the disconfirmation theory, which argues that satisfaction is related to the size and direction of the disconfirmation experience that occurs as a result of comparing service performance against expectations. Basically, satisfaction is the result of direct experiences with products or services, and it occurs by comparing perceptions against a standard (e.g. expectations). Further, that research indicated that how the service was delivered is more important than the outcome of the service process, and dissatisfaction towards the service often simply occurs when guest's perceptions do not meet their expectations.

#### **2.4.6 Cognitive Dissonance Theory**

According to Festinger (1957), cognitive dissonance defined as an uncomfortable feeling caused by holding two contradictory ideas simultaneously. The theory of cognitive dissonance proposes that people have a motivational drive to reduce dissonance by changing their attitudes, beliefs, and behaviours, or by justifying or rationalizing them. In addition the phenomenon of cognitive dissonance stated by, originally has been quickly adopted by consumer behaviour research described as "a psychologically uncomfortable state that arises from the existence of contradictory (dissonant, non-fitting) relations among cognitive elements" and cognitive dissonance revealed high exploratory power in explaining the state of discomfort buyers are often in after they made a purchase.

#### **2.4.7 Adaptation-level Theory**

Oliver in (1994) stated that adaptation-level theory is another theory, which is consistent with expectation and disconfirmation effects on satisfaction. This theory was originated by Helson in 1964 and applied to customer satisfaction. Further Helson (1964) has simply put his theory as follows: “It posits that one perceives stimuli only in relation to an adopted standard. The standard is a function of perceptions of the stimulus itself, the context, and psychological and physiological characteristics of the organism. Once created, the ‘adaptation level’ serves to sustain subsequent evaluations in that positive and negative deviations will remain in the general vicinity of one’s original position. Only large impacts on the adaptation level will change the final tone of the subject’s evaluation”.

#### **2.4.8 Opponent-process Theory**

This was originally a theory of motivation reformulated by Solomon and Corbit (1974), which has been adapted from the basic physiological phenomena known as homeostasis. Homeostasis assumes that many hedonic, affective or emotional states, being away from neutrality and exceeding a threshold level of hedonic feelings, are automatically opposed by central nervous system mechanisms, which reduce the intensity of the feelings, both pleasant and aversive, to some constant level. The onset of the opponent process totally dependent on the effect of the primary process, in which an emotional state is initiated by a known stimulus. However according to (Oliver 1981), if the initial stimulus is eliminated to reduce completely or partially the primary process effect, the opponent process will continue to operate at a decaying rate determined by inertia factors.



### 2.4.9 Equity Theory

This theory is built upon the argument by Oliver (1989a) that a “man’s rewards in an exchange with others should be proportional to his investments”. However, according to Oliver (1994), an early recognition of this theory first came out of research by Stouffer and his colleagues in military administration. They referred to ‘relative deprivation’ (equity) as the reaction to an imbalance or disparity between what an individual perceives to be the actuality and what he believes should be the case, especially where his own situation is concerned. Furthermore, Adee (2004) stated that the equity concept suggests that the ratio of outcomes to inputs should be constant across participants in an exchange. As applied to customer satisfaction research, satisfaction is thought to exist when the customer believes that his outcomes to input ratio are equal to that of the exchange person.

*Table 2.1: Comparison of Various Theories of Customer Satisfaction.*

<b>Theory</b>	<b>Product/Service Experience</b>	<b>Effect on Perceived Product Service Performance</b>	<b>Moderating Conditions</b>	<b>Effect</b>
Contrast		Positive confirmation  Negative disconfirmation	Perceived Performance enhanced  Perceived performance lowered	
Assimilation / Contrast	Small confirmation or Disconfirmation	Perceived performance assimilated	Purchase is ego-involved	Performance difference exaggerated

	Large confirmation or  Disconfirmation	toward expectations.  Perceived performance contrasted against expectations		
Dissonance	Negative disconfirmation	Perceived performance modified to fit with expectations	Purchase made under conditions of ambiguity	Less modification
Generalized Negativity	Either confirmation or disconfirmation	Perceived product performance lowered	The purchase is ego involved, high commitment and interest	More modification
Hypothesis Testing	Either confirmation or disconfirmation	Perceived performance modified to fit expectations	Purchase made under conditions of ambiguity	More modification

Source: Vavra (1997)

## 2.5 Models of customer satisfaction measurement

Organizations analyse customer satisfaction with various customer satisfaction models. Different models clarify different theories of customer satisfaction.

### **2.5.1 SERVQUAL**

According to Yoo (2007), the SERVQUAL instrument has been widely applied in a variety of service industries, including tourism and hospitality. The instrument was used to measure hotel employee quality as well. Parasuraman, Zeithamal and Berry (1988) built a 22-item instrument called SERVQUAL for measuring consumer perceptions of service quality. SERVQUAL addresses many elements of service quality divided into the dimensions of tangibles, reliability, responsiveness, assurance, and empathy.

A number of researchers have applied the SERVQUAL model to measure service quality in the hospitality industry, with modified constructs to suit specific hospitality situations Saleh (1992). The most widely accepted conceptualisation of the customer satisfaction concept is the expectancy disconfirmation theory. Barsky (1992) stated that “The theory was developed by Oliver (1980), who proposed that satisfaction level is a result of the difference between expected and perceived performance.

However, Avelini (2010) stated Satisfaction (positive disconfirmation) occurs when product or service is better than expected. On the other hand, a performance worse than expected results with dissatisfaction (negative disconfirmation)”. Though study revealed that numerous hotel chains use guest satisfaction evaluating methods based on inadequate practices to make important and complex managerial decisions. In order to improve the validity of hotel guest satisfaction measurement practice. Barsky and Huxley (1992) proposed a new sampling procedure that is “Quality Sample”. Providing services those customers prefer is a starting point for providing customer satisfaction considered as a relatively easy way to determine what services customer prefers is simply to ask them. It reduces non-responsive bias by offering incentives for completing the questionnaires. Furthermore, Avelini (2010) stated the components of their questionnaire are based on disconfirmation paradigm and expectancy-value theory. In this manner, guests can indicate whether service was above or below their expectations and whether they considered a particular service important or not.

Schall (2003) discussed the issues of question clarity, scaling, validity, survey timing, question order, and sample size as “According to the SERVQUAL model, service quality can be measured by identifying the gaps between customers’ expectations of the service to be rendered and their perceptions of the actual performance of service. SERVQUAL is based on five dimensions of service:

1. Tangibility: Tangibility refers to the physical characteristics associated with the service encounter. Rooma (2007).
2. Reliability: The service provider’s ability to provide accurate and dependable services; consistently performing the service right. The physical surroundings represented by objects (for example, interior design) and subjects (for example, the appearance of employees).
3. Responsiveness: A firm’s willingness to assist its customers by providing fast and efficient service performances; the willingness that employees exhibit to promptly and efficiently solve customer requests and problems.
4. Assurance: Diverse features that provide confidence to customers (such as the firm’s specific service knowledge polite and trustworthy behaviour from employees).
5. Empathy: The service firm’s readiness to provide each customer with personal service”. Halil Nadiri (2005).

### **2.5.2 Kano Model**

The Kano model of customer satisfaction classified attributes based on how they are perceived by customers and their effect on customer satisfaction. The model is based on three types of attributes viz. (1) basic or expected attributes, (2) performance or spoken attributes, and (3) surprise and delight attributes. Kano et al (1996).

The performance or spoken attributes are the expressed expectations of the customer. The basic or expected attributes are as the meaning implies the basic attributes without any major signs of worth mentioning. The third one, the surprise and delight attributes

are those, which are beyond the customers' expectations. Furthermore, Edvardsson (2000) stated Kano model measures satisfaction against customer perceptions of attribute performance. Grades the customer requirements and determines the levels of satisfaction.

The underlying assumption behind Kano's method was that the customer satisfaction is not always proportional to how fully functional the product or service is or in other words, higher quality does not necessarily lead to higher satisfaction for all product attributes or services requirements. In his model, Kano (Kano, 1984) distinguished between three types of basic requirements, which influence customer satisfaction. If these requirements are not fulfilled, the customer will be extremely dissatisfied. On the other hand, as the customer takes these requirements for granted, their fulfilment will not increase his satisfaction; One-dimensional Requirement – the One-dimensional requirement is usually explicitly demanded by the customer – the higher the level of fulfilment, the higher the customer's satisfaction and vice versa. (3) Attractive Requirement – These requirements are the product/service criteria which have the greatest influence on how satisfied a customer will be with a given product". Bilsen Bilgili & Sevtap Ünal (2008) stated additional attributes, which Kano mentions, are: Indifferent attributes, Questionable attributes, and Reverse attributes.

### **2.5.3 ACSI Methodology**

The American Customer Satisfaction Index (ACSI) was launched in 1994. The American Customer Satisfaction Index used customer interviews as input to a multi-equation econometric model developed at the University of Michigan's Ross School of Business. The ACSI model is a cause-and-effect model with indices for drivers of satisfaction on the left side (customer expectations, perceived quality, and perceived value), satisfaction (ACSI) in the centre, and outcomes of satisfaction on the right side (customer complaints and customer loyalty, including customer retention and price tolerance) Vavra (2007).

Vavra (2007) views that the ACSI initiative has at least three primary objectives:

1. Measurement: to quantify the quality of economic output based on subjective consumer input;
2. Contribution: to provide a conceptual framework for understanding how service and product quality related to economic indicators
3. Forecasting: to provide an indicator of future economic variability by measuring the intangible value of the buyer-seller relationship.

The ACSI survey process involves collecting data at the individual customer level. The casual sequence begins with customer expectations and perceived quality measures which are presumed to affect, in order, perceived value and customer satisfaction. “Customer satisfaction, as measured by the ACSI index, has two antecedents: customer complaints, and ultimately, customer loyalty” Vavra (2007). ACSI data is used by academic researchers, corporations and government agencies, market analysts and investors, industry trade association, and consumers Luo (2006).

#### **2.5.4 HOTELZOT (A modified version of SERVQUAL)**

The conceptual model HOTELZOT measured the zone of tolerance in hotel service by incorporating two levels of expectations – desired and adequate. Desired expectations represent the level of hotel service that a customer hopes to receive – a blend of what a customer believes ‘can be’ and ‘should be’ offered. This differs from Parasuraman et al (1988) conceptualization, which referred only to what the service ‘should be’. Adequate expectations represent a lower level of expectations. They relate to what a hotel customer deems as ‘acceptable’ level of performance. Desired expectations are deemed to remain relatively stable over time, whereas adequate performance expectations might vary with time. Halir Nadiri (2005). The zone of tolerance can be defined as “the extent to which customers recognize and are willing to accept heterogeneity”. Zeithaml (1993)

### **2.5.5 SERVPERF**

The performance-based service quality (SERVPERF) was identified by Cronin and Taylor (1992). Cronin and Taylor proposed the SERVPERF instrument, which is a more concise performance-based scale; an alternative to the SERVQUAL model. The perceived quality model postulates that an individual's perception of the quality is only a function of its performance. Cronin et al. (1994) continue to debate the effectiveness of SERVQUAL and SERVPERF for assessing service quality. The authors remained unconvinced of both, that including customer expectations in measures of service quality is a position to be supported, and that SERVPERF scale provides a useful tool for measuring overall service quality.

Moreover, Lee et al (2000) empirically compared SERVQUAL (performance minus expectations) with the performance-only model (SERVPERF). The authors also conclude that the results from the latter appeared to be superior to the former. It has been acknowledged that such approach limits the explanatory power of service-quality measurement.

## **2.6 Tourist Satisfaction**

According to Oliver (1981), satisfaction is a subjective comparison between expected and received the experience of a product or service. Its outcome may take the form of all impressions of enjoyment, entertainment, excitement, or enlightenment. In the same way, (Baker & Crompton, 2000) The tourist satisfaction can be defined as the quality of visitors experience and a psychological outcome derived from interaction with different service facets in a destination. According to Anton (1996) discussed that customer satisfaction as a state of mind in which the customer's needs, wants, and expectations throughout the products or service life are met.

After using the product, customers compare actual performance with those expectations. If the actual performance is better than their expectations, they are likely to have a positive disconfirmation, suggesting that consumers are highly satisfied and will be more willing to purchase the same product again. However, if the actual

performance is worse than expectations, they are likely to have a negative disconfirmation, suggesting that consumers are dissatisfied (Heung and Cheng, et al., 2000).

Understanding the level of customer satisfaction is very crucial to the tourism industry since it affects directly or indirectly the level of expenditure tourists make. According to Kozak and Rimmington, (2000) tourist satisfaction influenced the consumption of products and services, the choice of destination, and the decision to return. It enhances competitiveness, encourages product differentiation, increases customer retention as well as positive word of mouth communication (Yuksel & Rimmington, 1998). Kotler (2010) defined that, there are two types of qualities such as product features which enhance the customer satisfaction and the freedom from deficiencies which increase customer satisfaction.

## **2.7 Factors Affecting Tourist Satisfaction**

When visiting a destination, tourists interact with many different components of the destination product, which is a package of diverse attributes that includes not only the historical sites and spectacular scenery but also services and facilities catering to the everyday needs of tourists. The quality of these interactions and experiences, with numerous encounters in the total holiday experience, forms the basis for overall holiday dis/satisfaction and future travel decisions (Laws, 1995).

(Fornell, 1992) stated tourists express satisfaction or dissatisfaction after they buy tourism products and services. If tourists are satisfied with the quality of the products and services, then they will be motivated to buy them again or they will recommend them to their friends. While service quality is concerned with the attributes of service and the development of positive perceptions of service, satisfaction refers to the psychological outcome deriving from service experience, or customer's feelings and emotions developed in response to an evaluation of service and service experience. Usually, a high quality of service, which develops positive service perceptions, results in high satisfaction, whereas the poor quality of service develops negative perceptions of service and dissatisfaction.



Thus, service or product quality determines customer satisfaction, and both are vastly dependent upon the perceptions of the quality of service encounter. Here comes the importance of evaluating of tourist Satisfaction. A number of researchers have tried to measure the level of tourist Satisfaction based on destination attributes. Several researchers have also used destination attributes as a basis for measuring tourist Satisfaction.

Reisinger (2016), has listed the following attributes use to evaluate tourism Destinations.

*Table 2.2: Attributes Used to Evaluate Tourism Destinations*

Accommodation (luxury, budget)	Historical attractions (buildings, museums)
Accessibility	Image of the destination
Activities (indoor, outdoor)	Industrial attractions
Amenities (variety and quality)	Local prices
Architecture/buildings	Natural attractions (national parks, wildlife)
Assistance with foreign language	Nightlife (nightclubs)
Atmosphere (relaxing, peaceful)	Opportunity for adventure
Availability of tourist information	Opportunity for socializing with locals
Beaches	Opportunity for sightseeing
Catering (food and drink)	Recreation opportunities and facilities
Cleanliness (clean facilities)	Safety and security of the destination
Cost of airfare or transportation to get to the destination	Opportunities for shopping
Rest and relaxation	Scenery and landscape
Cultural attractions (theatres, galleries)	Service quality
Different culture/ customs	Special events (exhibitions, festivals)
Different food and drink	Sport activities
Ease of getting to the destination	Theme parks
Ease of local transportation	Exotic environment
Entertainment (live concerts, cinemas)	Transportation (local)
Tour guides speaking foreign languages	Unpolluted environment
Friendliness of the locals	

Source: (Reisinger, 2016)

The dichotomy of push and pull factors as a simple and intuitive approach to discuss the travel motivations of the tourists. Push and pull factors motivate the people to take two different decisions at two different times i.e. “whether to go” and “where to go”. Dann (1977)

Anderson, (1997) used historical buildings, galleries, museums, Theatres, Festivals and Events, Shopping places and so on. Similarly Yuksel, (2001), destination attributes such as efficiency of service and cleanliness of accommodation, courtesy of residents, courtesy of employees, efficiency of service at tourist facilities, Natural environment of the area, Price and value of Services, ease of communication, safety, weather condition of the area etc. were used to assess the level of tourist satisfaction of the particular destination.

Master & Prideaux (2000) examined the role of culture and its influence on visitor satisfaction using 150 Taiwanese who travelled in South East Queensland. The findings concluded that the culture did not play a major role in determining the satisfaction. The majority of the tourists are satisfied with the holidays.

Nield et al. (2000) identified that the value for money, quality of foods, number of dishes, the standard of food services, a variety of dishes, presentation of food and speed of service, the attractiveness of the surroundings influence the overall food service experience and satisfaction of the tourists in Romania.

Thompson & Schofield (2007) identified factors related to the public transport system of the destination i.e. ease of use, efficiency and safety, and good parking effect for the tourist's satisfaction.

Neal and Gursoy, (2008) demonstrated that most satisfaction studies in tourism and other aspects of leisure are conducted after the service experience and focus on the overall opinions expressed by guests regarding the general tourism experience.

Choia & Chub (2001) investigated the determinants of hotel guests' satisfaction and their repeat patronage in Hong Kong hotel industry with using a multiple regression

analysis. They identified seven hotel factors as the determinants of the tourists' satisfaction.

Kozak (2002) investigated the factors that affect the satisfaction of German and British backpacker tourists. He concludes that accommodation services, local transport services, hygiene and sanitation, hospitality and customer care, facilities and activities, price levels, language and communication and airport services affect the overall satisfaction of the tourists.

Akama & Kieti (2003) argued the existing exogenous factors are responsible for the decline and poor performance of Kenya's tourism industry. The exogenous factors are the increasingly negative perception of the tourists about Kenya as an insecure tourist destination and the poor infrastructure conditions and facilities, especially, the poor transport network.

Poon and Low (2005) investigated tourists' perception and satisfaction about the Malaysian Hotel facilities using two groups such as the Western and Asian travellers.

Chang et al. (2006) identified the interaction between the salespeople and shoppers is a vital component of product delivery and thus influence the shoppers' consumption motives and satisfaction.

Eraqi (2006) investigated the tourism services quality in Egypt and identified the factors that affect customer satisfaction. He identifies that the tourists' satisfaction of quality depends upon a number of criteria, such as the general evaluation of tourism services, the extent to which tourists are satisfied with the hotel's services, customer value related to tourism services' prices, level of services at accommodations, internal transport quality, the extent to which tourism services prices at suitable levels, and tourists' desire to repeat his/her visit. He determines that the quality of the consumer products and services greatly affect tourists' satisfaction and vice versa.

Nash et al. (2006) identified the factors that affect the satisfaction of the backpacker tourists as price, location, cleanliness of rooms, value for money and the presence of self-catering facilities etc.

Wang and Qu (2006) investigated tourist satisfaction using twelve variables such as accommodations, shopping facilities, and restaurant facilities, quality of accommodation, personal safety, tourist information, beach cleanness, and state of the roads, beach promenades, drinkable water, and traffic flow and parking facilities. However, Clerides and Pashourtidou, (2007) used accommodation, restaurants, cleanliness of the natural environment, taxi and bus services and so on. In addition, Huang & Sarigöllü (2008) argued that the core and secondary factors of the destination affect the tourists' satisfaction. The core factors are the fun & sun, ecotourism, outdoor adventure, sea sport and entertainment. The secondary factors represent the infrastructure & services, safety, convenience and cost.

Ladhari et al (2008) discovered the determinants and consequences of dining satisfaction of tourists regarding the restaurant services in Korea as positive emotions, perceived service quality, and negative emotions. Positive emotions are more important and it mediated the impact of perceived service quality on dining satisfaction. The satisfied customers gave positive recommendations, developed loyalty, and even liked to pay more.

Wu & Liang (2009) examined customer satisfaction with service encounters in luxury hotels in Taiwan and identified the restaurant environment and interactions with the service employees and other customers influence positively and directly the customer satisfaction.

Truong and King (2009) categorized the factors that affect the satisfaction of the Chinese tourists who visit in Vietnam. The factors include variety and beautiful scenery, variety of activities, quality and variety of restaurants, quality and standard of accommodation, safety, friendliness and hospitality of local people, availability of shopping facilities, availability of nightlife and entertainment facilities, prices of souvenirs and gifts, service level of immigration and customs clearance, political stability of the destination, social and educational value of the tour, variety of cultural events and festivals, etc.

According to Alegre and Garau (2010) examined dissatisfaction at a sun and sand tourist destination, namely the island of Majorca in the Balearic Islands. The following attributes were rated in terms of satisfaction; climate, cleanliness and hygiene, scenery, peace and quiet, accommodation, safety, historic sites or places, presence of friends and family, interaction with other tourist, nightlife, sports activities, tourist attractions, prior visits to the destination, ease of access, facilities for children, easy access to information, local cuisine, local lifestyle, and affordable prices.

Hasegawa (2010) identified the satisfaction of the tourists who visited Hokkaido, Japan and concluded the factors of scenic beauty and meals to have the largest influence on the overall satisfaction of the tourists. Likewise, souvenir items, accommodation, services, transportation facilities, and tourist facilities also influenced their satisfaction.

Kim & Lee (2010) examined the relative importance of perceived service quality, customer satisfaction and behavioural intentions of the tourists in South Korea. It indicates that the destination related tangibles and responsiveness were highly influential factors for customer satisfaction. Furthermore, the study revealed the consequences of customer satisfaction as Word of Mouth (WOM) communication, purchase intentions, and complaining behaviour.

Zabkar et al. (2010) concluded that the destination attributes affect the perceived quality of tourist offerings and those factors are positively related to the tourist's satisfaction and their behavioural intentions also confirmed that there is a positive relationship between the tourists' satisfaction and the behavioural intentions.

Gnanapala (2015) studied the international tourists 'perceptions and satisfaction on their holiday stay and its implication for destination management with reference to Sri Lanka. He inspected the factors Quality of Attractions, Quality of Accommodation & Entertainment, Quality of Food & Beverages, Quality of Staff, Safety & Security situation of Sri Lanka, Quality of Guide Services and Information Supply, Tourist Prices, Nature of the Selling Products and Behaviour of the Vendors and Infrastructure

and Super-structure facilities. He concludes that those factors are influencing the positive perception and satisfaction of the tourists.

Jayasinghe et al., (2015) explored the tourists' perception and satisfaction about the holiday in Nuwara Eliya, Sri Lanka. The tourists' perception about the holiday stay was measured through nine orthogonal factors, such as accommodation, food and beverages, guide services, climate, tourist attractions, price levels, people and staff, safety and security and infrastructure facilities. He determines that there is a positive relationship between those nine factors with the tourists' satisfaction

## **2.8 Measuring Tourist Satisfaction**

According to (Neal & Gursoy, 2008) Measuring consumer satisfaction is difficult and it is even more challenging in tourism because of the type of product and services and the different perceptions of individuals. However, it is one of the most frequently examined topics in the hospitality and tourism field because of the important role it plays in survival and future of any tourism products and services.

The measurement of satisfaction done by measuring the satisfaction of each individual attribute of the product, which is of importance. As well as for the overall experience. (Oliver and Burke, 1999, in Rodriguez Del Bosque and San Martin, 2008).

Two conceptualization of measuring satisfaction were identified: Transaction specific satisfaction and cumulative satisfaction. Anderson *et al.*, (1995). Transaction specific satisfaction is concerned with "satisfaction as an individual, transaction-specific measure or evaluation of a particular product or service experience". Cumulative satisfaction, on the other hand, is "a cumulative, abstract construct that describes customer's total consumption experience with a product or service" (Anderson *et al.*, 1995)

Neal and Gursoy, (2008) demonstrated that most satisfaction studies in tourism and other aspects of leisure are conducted after the service experience and focus on the overall opinions expressed by guests regarding the general tourism experience. Regarding the customer's overall evaluation of the purchase or consumption

experience (Traveler's dis/satisfaction), cumulative satisfaction is the most relevant conceptualization when the focus is on the tourist's evaluation of their overall experience at a destination (Johnson, Anderson *et al.*, 1995).

While travelling to a destination, the tourist interacts with various aspects of the tourism experience. Understanding the satisfaction with each aspect of the trip must be the basic parameter used to evaluate overall satisfaction with the trip. According to Leis (1979), the tourist satisfaction depends partly on the facilities, services, and programs that are available during the whole trip besides his/ her recreational experience. The performance of the different components of the tourism industry positively or negatively affects tourist satisfaction.

Measuring tourist overall satisfaction with particular destinations has become the key interest of many researchers (Yu & Goulden, 2006; Kozak, 2001; Meng, Tepanon & Uysal, 2008; Hui, Wan & Who, 2007; Neal & Gursory, 2008). Overall tourist satisfaction measured in terms of perceived performance of the distinct services which tourists encounter in different phases throughout the travel period (Geva & Goldman, 1991) such as that in the transportation sectors, accommodation, restaurants, travel agencies, shopping places, and spot environment as well. Thus, evaluating tourist satisfaction would likely be more complex for business success in tourism management (Alegre & Garau, 2009; Yoon & Uysal, 2005) than simply identifying each construct of customer satisfaction (Chang, 2008).

In service satisfaction measurement, scale based evaluation methods (e.g. Likert type) on various service attributes of destination were commonly used (e.g. Hui, Wan and Who, 2007; Neal & Gursory, 2008; Eusebio & Vieira, 2011), in which respondents were asked to rate their satisfaction and dissatisfaction level on a scale. Using the 7-point Likert-Scale to let respondents indicate to what level of satisfaction they based each item, as well as the overall experience, is an often used approach (Bigné and Andreu, 2004; Bigné et al, 2005; Van Dolen et al, 2004; in Rodriguez Del Bosque and San Martin, 2008).

Finally, various simple and complex statistical methods such as descriptive statistics (Huang & Hsu, 2009; Yu & Goulden, 2006), ANOVA test (Vogt & Andereck, 2003; Yu & Goulden, 2006), Factor Analysis (Eusebio & Vieira, 2011; Meng, Tepanon & Uysal, 2008; O'Neill et al., 2010; Yuksel 2000), Principal Component analysis (Huang & Hsu, 2009) and regression analysis (Meng, Tepanon & Uysal, 2008; O'Neill et al., 2010; Yuksel, 2000) are applied in order to establish a relationship between the construct and reliability of the outcome. The data for the study were collected by means of a questionnaire survey using self-administrated questionnaires (Song et al., 2011; Yu & Goulden, 2006) distributed to tourists at tourist locations.

## **2.9 Models of Measuring Tourist Satisfaction**

The measurement of visitor satisfaction lies within the general area of consumer satisfaction within the disciplines of marketing and psychology. In tourism study, a respectable number of theoretical and statistical models were adopted from marketing research. The marketing literature of consumer satisfaction is heavily influenced by the notion that satisfaction is measured by the difference between a consumer's expectation of a product or service, and the actual performance of a product or service. There has been considerable research to determine the factors that influence customers' satisfaction and how it is measured.

These include the following: the SERVQUAL multi criteria service quality model developed by Parasuraman, Zeithaml & Berry (1988), Kano's service quality measure model (Kano, 1984), holiday satisfaction model (HOLSAT) developed by Tribe and Snaith (1998), Multivariate Statistical Equation Model (SEM) by Anderson and Gerbing (1988), LISREL model by Diamantopoulos and Siguaw (2000) Cluster Based Analysis by Hovardas and Poirazidis (2006), Multiple linear regression by Meng et al. (2008), Congruity Model (Chon 1991), Expectancy-disconfirmation model (Pizam & Milman, 1993), Expectation- Perception gap model by Duke and Persia (1996).

Several researchers have studied customer satisfaction and provided theories about tourism. For example, Parasiraman, Zeithaml, and Berry's (1985) expectation-perception gap model, Oliver's expectancy– disconfirmation theory (Pizam and



Milman, 1993), Sirgy's congruity model (Sirgy, 1984; Chon and Olsen, 1991), and the performance – only model.(Pizam, Neumann, and Reichel, 1978) have been used to measure tourist satisfaction with specific tourism destinations. Due to its broad applicability, expectancy-disconfirmation model has received the widest acceptance among these theories.

According to Yoon & Uysal (2005), four major approaches have been employed in the tourism literature to determine tourist satisfaction level. These are expectation/disconfirmation theory, equity theory, norm theory and perceived-only performance theory. Among these theories, the expectation/disconfirmation theory and perceived performance theory are most frequently used. The expectation/disconfirmation theory is based on the post-purchase concept. In this approach, tourist satisfaction is measured by a gap analysis between tourist expectation and travel perception of various services offered by the destination.

Pizam and Milman (1993) utilized Oliver's (1980) expectancy-disconfirmation model to improve the predictive power of travellers' satisfaction. They introduced the basic dynamic nature of the disconfirmation model into hospitality research while testing part of the original model in a modified form. In order to assess the causal relationship between two different disconfirmation methods, they employed a regression model with a single "expectation – met" measure as the dependent variable, and 21 difference–score measures as the independent variables. Some studies on customer satisfaction are also notable in tourism behaviour research. For example, Pizam, Neumann and Reichel (1978) investigated the factor structure of tourists' satisfaction with their destination areas. The authors showed eight distinguishable dimensions of tourist satisfaction.

Expectancy – disconfirmation paradigm into lodging research introduced by Barsky and Labagh, (1992) stated basically, the proposed model in these studies was that customer satisfaction was the function of disconfirmation, measured by nine "expectations met" factors that were weighted by attribute – specific importance. The model was tested with data collected from 100 random subjects via guest comment

cards. As a result, customer satisfaction was found to be correlated with a customer's willingness to return.

The perceived-only performance approach measures tourist satisfaction with the actual performance of the products, regardless of the existence of any previous expectations (Kozak, 2001; Um et al., 2006; Hui et al., 2007; Eusebio & Vieira, 2011). Using perceived-performance approach, various destination variables were identified and satisfaction measured with a positive and negative evaluation of tourist over these attributes at the destination.

Chon and Olsen (1991) discovered a goodness of fit correlation between tourists' expectations about their destination, and tourists' satisfaction. Tourists have bought the travel service and products, if the evaluation of their experience of the travel product is better than their expectations, they will be satisfied with their travel experience. Furthermore, Chon and Olsen (1991) provided an intensive literature review of tourist satisfaction. However, the posited social cognition theory offers an alternative way of explaining satisfaction processes, its methodological mechanism is analogous to that of expectancy–disconfirmation theory. In other words, the concepts of congruity and incongruity can be interpreted similarly to the concepts of confirmation and disconfirmation, both of which can result in either positive or negative directions.

#### **2.2.1 The Expectancy Disconfirmation Model (SERVQUAL)**

Among the theoretical frameworks that have been proposed to explain consumer Satisfaction, the most influential model has undoubtedly been the Expectancy-disconfirmation paradigm (Oliver, 1980).

Reisig and Chandek, (2001) described the expectancy disconfirmation model as a four-stage process which starts from the consumer formulating expectations about a product. After formulation, the individual makes certain attributions regarding the performance of that product. On the third Stage, the consumer compares his/her perception of the product's performance against his/her initial expectations.

According to Oliver, (1980) the individual may judge product performance to be better than, worse than, or equal to what he/she expected. For example, a consumer might experience positive disconfirmation, wherein his/her expectations are exceeded (increases likelihood of satisfaction). Negative disconfirmation is another possibility and occurs when the consumer's expectations are not met by product or service performance (decreases the likelihood of satisfaction). Finally, zero disconfirmation occurs when performance matches expectations (no effect on satisfaction).

Although disconfirmation is hypothesized to have the largest effect on consumer satisfaction, research shows that disconfirmation is not the only direct effect. Expectations have also been found to directly affect satisfaction. For example, individuals with lower expectations often report higher levels of satisfaction. Expectations and performance, therefore, are believed to have both direct and indirect effects on consumer satisfaction.

### **2.9.1 The Performance – only model (SERVPERF)**

Cronin and Taylor (1992) in their empirical work controverted the framework of Parasuraman, Zeithaml and Berry (1985, 1988) with respect to conceptualization and measurement of service quality, and propounded a performance-based measure of service quality called ‘SERVPERF’ illustrating that service quality is a form of consumer attitude. They argued that SERVPERF was an enhanced means of measuring the service quality construct.

### **2.9.2 The self-congruity model**

According to (Sirgy & Su 2000) the self-congruity model postulates relationships between destination environment, destination visitor image, tourists’ self-concept, self-congruity, functional congruity, and travel behaviour. Travel behaviour is hypothesized to be influenced significantly by both self-congruity and functional congruity. Self-congruity is the match between the destination visitor image and tourists’ self-concept (actual, ideal, social, and ideal social self-image). Functional congruity is the match between the utilitarian attributes of the destination and the

tourist's ideal expectations related to those attributes. Self-congruity is hypothesized to influence functional congruity. It is argued that the destination environment influences the formation and change of the destination visitor image and the tourist-perceived utilitarian destination attributes.

## **2.10 The Empirical Evidences**

In (2017) Agrawal researched on factors affecting tourist's satisfaction level at a religious visit in Brij-Kshetra, India, using 26 destination attributes identified under 5 factors incorporated with the data collected from 300 tourists during February to April 2016. This study revealed the positive strong significant relationship between five factors with the overall tourist's satisfaction namely aesthetic appeal, accessibility, supporting infrastructure, food & service and health and guide service.

Research conducted on factors influencing perceived crowding of tourists by Jin, et al, (2016) which utilized both quantitative and qualitative data obtained from structured questionnaire survey from tourists 400 in Xi'an, China between August 2011 and February 2012. The respondents have evaluated five factors with the importance of 23 motives during their trips. That research found that many tourists in Xi'an were motivated by the "self-development/novelty (host-site-involvement motivation)" factor.

A research study on the primary factors that affect the perception of domestic tourists towards the service quality of budget hotels in Egypt by Hossam Samy in (2016) using three divided main constructs of factors: physical quality, service quality and value for money associated with 208 valid questionnaires were statistically analysed and tested. The primary findings of that study were budget hotel location, cleanliness, maintenance, comfort level, hotel staff service, value for money room rates and food and beverage values are the significant factors that influence domestic tourist satisfaction within predefined constructs.

Analysis on which tourist satisfaction influences tourism expenditure at the destination in Andalusia, Spain by García et al in (2016) using 20 factors such as

Tourist information, Tourism signposting, Leisure/Entertainment, Value for money, Roads and communications, Accommodation, Restaurants, Cultural activities and shows, Attention and care, Public safety, Cleanliness, Quietness, Landscapes, Natural parks, Urban environment (public infrastructures, conservation, etc.), Traffic/Car parking, Access to the Internet, Public transport, Healthcare, Overall assessment of their experience on this trip incorporated with 2967 questionnaire surveys. Results of the study showed that there is indeed a correlation between tourist satisfaction and tourism expenditure at the destination.

In 2015 Gnanapala researched the relationship between the tourists' perception and satisfaction based on questionnaire survey from 204 respondents by convenience sampling. There were 9 factors analysed namely Attractions, Accommodation & Entertainment, Food & Beverages, Behaviour of Staff, Safety & Security, Guide Services and Information, Price Levels, Nature of the selling Products and Behaviour of the Vendors, Infrastructure and superstructure facilities. The research revealed that a positive correlation and linear relationship between the tourists' perception (destination related factors that affect the perception of the tourists) and the satisfaction.

Modelling visitor perceptions on homestay tourism in Sri Lanka conducted by Ranasinghe (2015) based on a survey carried out in all homestay zones of Sri Lanka. Total of 24 variables was comprised in the questionnaire. Findings of that study indicated that there exists a strong statistically significant relationship with motivation and satisfaction of homestay tourists.

Assessment on the international tourists' perception on various attributes in Tanzania conducted by Philemon (2015) which includes a total of 286 self-administered questionnaire analysis measured 8 items revealed restaurants, infrastructure, tour guidance, security, and safety needs more improvement to meet their expectations.

Pavĺína (2015) studied to quantify factors and identify the most important factors influencing customer satisfaction with public city transport within conditions of the Czech Republic. The method of factor analysis applied to ten items such as Station

proximity, Information, Timetable clarity, Safety, Vehicles cleanliness, Transport speed, Transport comfort, Fare, Service Continuity, Frequency, Punctuality. The sample consisted of 592 respondents. The optimal model was found. There are 12 observed variables and 15 latent variables including 12 residual variables in the optimal model. The logistic parameters, including service continuity and frequency, and service, including information rate, station proximity and vehicle cleanliness, are the factors influencing passengers' satisfaction on a large scale.

A research study conducted on tourists' satisfaction level; with specific attention given to their experience and expectation of twenty holiday attributes during their visits to Penang, Malaysia by Shida Irwana (2015) adopted the model of Holiday Satisfaction (HOLSAT) in order to measure the difference between experience and expectation of holiday attributes. The attributes employed were categorised into four groups, namely accessibility, accommodation, tourist amenities and food/meals. Results are drawn from a questionnaire survey of 4170 domestic and international tourists who visited Penang in 2014. The study observed similar satisfaction and dissatisfaction patterns for all attribute groups, for both international and domestic groups. However, the results for food/meals and tourist amenities should be of interest to tourism service providers as these are the attributes that need to be significantly improved upon and enhanced in order to increase tourists' positive experience.

A study in identifying key factors affecting tourists' satisfaction as well as their return intention towards Vung Tau tourist destination conducted by Ngoc and Trinh (2015). Using 301 questionnaires from leisure tourists considered with ten independent variables consisting of 70 items and one for two dependent variables including 16 items were measured. That study revealed the significant correlations between variables indicated that better destination image, natural and cultural environment, price, infrastructure, accessibility, local cuisine, leisure and entertainment, and destination satisfaction could lead to higher tourists' return intention. In addition, the empirical results showed that destination image, infrastructure, price, natural and cultural environment, and tourists' destination satisfaction significantly and positively

affected tourists' return intention. Contrarily, safety and security provided a significant negative effect on tourists' return intention.

Study on key factors affecting tourist's perceived value as well as their satisfaction towards Cat Tien National Park conducted by Ngoc and Luan (2015) considered 10 independent factors (including 47 items/attributes), revealed four main factors include price, ecology and landscapes, natural atmosphere and social environment which positively influence tourists' satisfaction directly and indirectly. Furthermore, there was a significant relationship between tourists' perceived value and tourists' satisfaction.

Corte (2015) investigated the fact that tourists' positive experiences of service, products, and other resources provided by tourism destinations can produce customer retention as well as positive word-of-mouth. The study used 14 tourist satisfaction indicators in order to measure the global satisfaction. The researcher collected cross-sectional data via questionnaire, from May 2012 to May 2013 in the city of Naples, Italy. The study revealed that tourist satisfaction depends on a complex process where the role of each actor is fundamental and it must be in tune with all the other ones. Besides, tourists visiting Naples were not fully satisfied, in addition, that Naples has not a clear destination image.

Jayasinghe.(2015) researched the factors that have contributed to creating a positive perception of the destination and the relationship between the tourists' perception and satisfaction related to the holiday stay in Nuwara Eliya. Data collection was done using questionnaire survey data from 362 respondents. There were seven observed variables used for this study such as Accommodation, Food and beverages, Guide services, Climate, Tourist attractions, Price levels, People & staff, Safety & security and Infrastructure facilities. The findings revealed that there is a positive relationship between the tourists' perceptions on the observed variables and the tourists' satisfaction. However, the accommodation and infrastructural facilities contributed minimally to tourists' satisfaction.of the Nuwara Eliya district.

Research study on the existing level of satisfaction on destination attributes in Sri Lanka conducted by Lakmali in 2014 which analysed a model with five destination attributes; Destination attractions, Food & Beverage services, Tourism price level, hospitality, Political and Social factors to determine tourists' destination satisfaction in Sri Lanka. The Judgmental sampling technique was utilized to collect 251 questionnaires in Colombo, Galle and Kandy locations in Sri Lanka. The results revealed that the tourists are moderately and highly satisfied with destination attributes; destination attractions, tourism price level and food & beverage services, hospitality and social and political factors.

Examination of existing tourism services of the highly trafficked destination of Cox's Bazar Sea beach in Bangladesh conducted Hassan in 2014, which examined the level satisfaction using five-point Likert-scales against seventeen selected variables under ten factors such as Health Service Facilities, Transportation & Communication Service, Accommodation Service, Safety & Security, Food Services, Beauty, Cleanness, Hygiene & Sanitation, People's Attitude, Tour Guides and Entertainment Facilities and data obtained using self-determined questionnaire survey. That study found that majority of tourists were satisfied with amenities related to destination management, with a natural attraction to the beach and relaxation facilities provided by the destination. In contrast, tourists were disappointed with facilities such as health and emergency services, transportation services, tour guides, information services and nightlife.

Traveller expectation study on motivation and attitude in Hong Kong conducted by Wong, Cheung & Wan (2013) revealed that a significant correlation between traveller expectations and motivation, as well as motivation and attitude.

## **2.11 Summary**

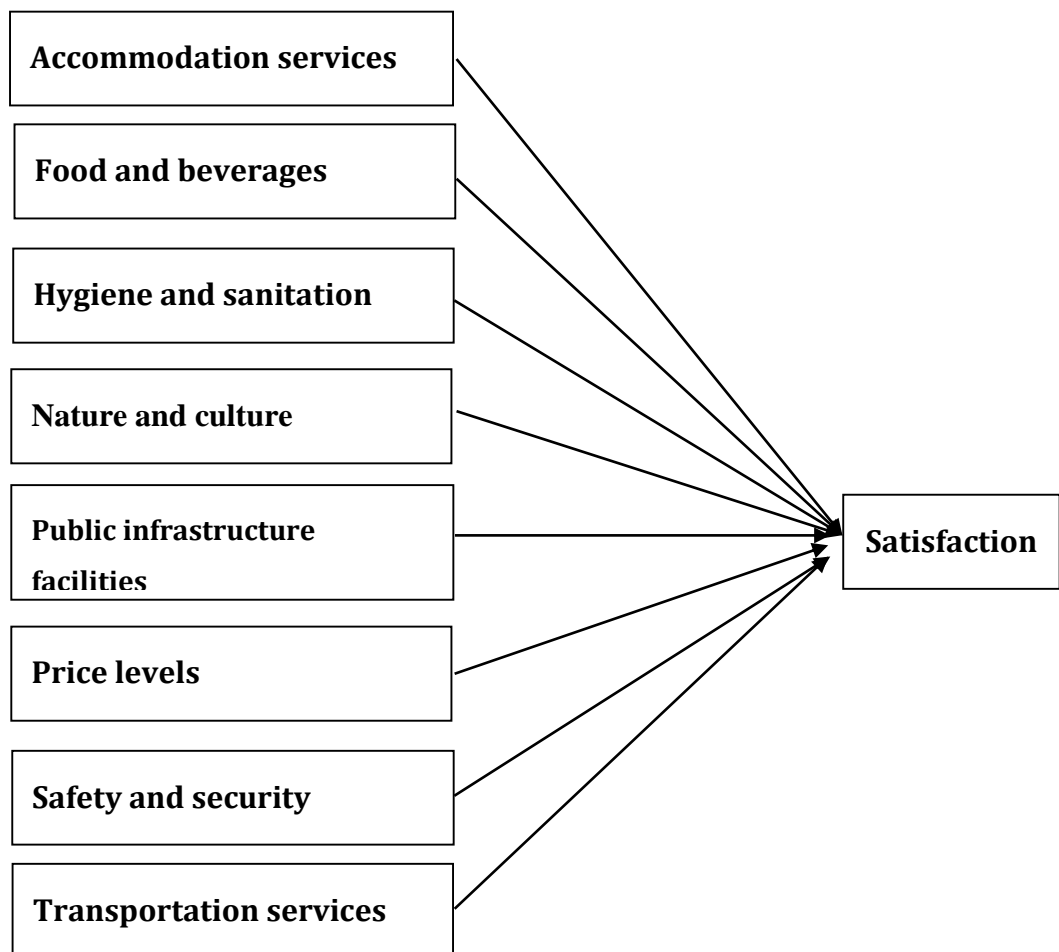
Based on the aforementioned literature, this study has measured the level of satisfaction of tourists experienced the tourism sector of Eastern Province of Sri Lanka using all relevant attributes of tourism destinations.



### 3 METHODOLOGY

#### 3.1 Conceptual Flow

To study the factors influence the tourist's satisfaction following conceptual flow has been developed from Pearce (2005) Concept map with few modifications.



## **3.2 Hypotheses Development**

Based on the theoretical framework hypotheses were used to test the relationship between independent and dependent variables to find the validity of assumptions.

### **3.2.1 Hypothesis 1: For Accommodation services and Tourist's Satisfaction**

Accommodation is a type of residential place which generally tourist make use of such places for sleep, rest, food, safety, shelter from cold or hot temperatures and rain, storage of luggage lodging during their holidays or travel.

Comfortable hotels and other forms accommodation facilities play a vital role in attracting tourists to the tourism destinations. Realizing this fact, the accommodation has a sound influence on the certain tourism destination, accommodation facilities which are available in different tourist spots have been focusing to provide maximum comfort to tourists within reasonable rates. There is also a general consensus that Accommodation services exercise a positive influence on tourist satisfaction. (Ivan Paunovic, 2014; Echtner & Ritchie, 2003; Clerides & Pashourtidou, 2007; Kruger & Saayman, 2010).

H<sub>10</sub>: There is no relationship between Accommodation services and tourist satisfaction.

H<sub>1a</sub>: There is a relationship between Accommodation services and tourist satisfaction.

### **3.2.2 Hypothesis 2: For Food and beverages and Tourist's Satisfaction**

Food and beverages refer the meals and all forms of refreshment delivered/ available to the tourists at the place of accommodation and tourism destinations itself. The positive relationship between Food and beverages and tourist satisfaction has also been identified in the tourism field. (Jin, et al, 2016; Ivan Paunovic, 2014; Chen, 2007; Wang, Zhang, Gu, & Zhen, 2009).

H<sub>20</sub>: There is no relationship between Food and beverages and tourist satisfaction.

H<sub>2a</sub>: There is a relationship between Food and beverages and tourist satisfaction.

### **3.2.3 Hypothesis 3: For Hygiene and sanitation and Tourist's Satisfaction**

Sanitation defined by World Health Organization (WHO) as for keeping our environment healthy through the effective use of tools and actions. These include proper toilets, food preparation, washing stations, effective drainage and other such mechanisms. Hygiene is a set of personal practices that contribute to good health. It helps to break the chain of infection transmission in the family and community. It includes things like hand-washing, bathing and cutting hair/nails. Other studies have identified Hygiene and sanitation as one of the major predictors of tourist satisfaction. (Jang & Wu, 2006; Chen, 2007; Truong & King, 2009; Andriotis, Agiomirgianakis & Mihiotis, 2008).

H3<sub>0</sub>: There is no relationship between hygiene and sanitation and tourist satisfaction.  
H3<sub>a</sub>: There is a relationship between hygiene and sanitation and tourist satisfaction.

### **3.2.4 Hypothesis 4: For Nature and culture and Tourist's Satisfaction**

Nature includes all things that exist in surroundings which are not made or produced by a human. In the field of tourism, natural environment encompasses weather, beach, lake, mountain, desert, etc. Culture can be defined as arts, customs, and habits that characterize a particular society or nation, celebration or concert, religion, memorable historical attractions, traditions and lifestyles, political and economic components.

The positive relationship between Nature & culture and tourist satisfaction has also been identified in the tourism field. (Murphy, 2000; Pearce & Lee, 2005; O'Leary, 2003; Echtner & Ritchie, 2003; Jang & Wu, 2006; Chen, 2007; Schofield, 2000; Truong & King, 2009).

H4<sub>0</sub>: There is no relationship between Nature & culture and tourist satisfaction.  
H4<sub>a</sub>: There is a relationship between Nature & culture and tourist satisfaction.

### **3.2.5 Hypothesis 5: For Public infrastructure facilities and Tourist's Satisfaction**

Infrastructure is the basic features and systems serving a living area. It has different types of functionalities and structural designs to fulfil the people/tourists needs. These are tools which are quite transparent for most people such roads, bridges, tunnels, water supply, sewers, electrical grids, telecommunications (IDD & Internet connectivity). The positive relationship between Public infrastructure facilities and tourist satisfaction has also been identified in the tourism field. (Murphy, 2000; Jin, et al, 2016; Echtner & Ritchie, 2003; Clerides & Pashourtidou, 2007)

H5<sub>0</sub>: There is no relationship between Public infrastructure facilities and activities and tourist satisfaction.

H5<sub>a</sub>: There is a relationship between Public infrastructure facilities and activities and tourist satisfaction.

### **3.2.6 Hypothesis 6: For Price levels and Tourist's Satisfaction**

The price is that customers actually pay in exchange for the benefits received in the form of a product or service. The consumer can decide that the product is goods or service that gives value. Other studies have identified Price levels as one of the major predictors of tourist satisfaction. (Murphy (2000; Yukesel 2000; O'Leary, 2003; Echtner & Ritchie, 2003; Naidoo, Munhurrin, & Ladsawut 2010).

H6<sub>0</sub>: There is no relationship between Price levels and tourist satisfaction.

H6<sub>a</sub>: There is a relationship between Price levels and tourist satisfaction.

### **3.2.7 Hypothesis 7: For Safety and security and Tourist's Satisfaction**

Safety and security intend to deal with individuals by taking out any risks, dangers and guaranteeing a safe and secure environment. The positive relationship between Safety and security and tourist satisfaction has also been identified in the tourism field. (Jin, et al 2016; Khatib & Al-Ali, 2011).

H7<sub>0</sub>: There is no relationship between Safety and security and tourist satisfaction.  
H7<sub>a</sub>: There is a relationship between Safety and security and tourist satisfaction.

### **3.2.8 Hypothesis 8: For Transport services and Tourist's Satisfaction**

Transportation service is the tool for movement of tourists and goods from one place to another. It can be categorized as air, land (rail and road), water, cable, pipeline and space based on its mode of usage. It has been identified as a most influencing factor for tourism on a global scale. There is also a general consensus that Transport services exercise a positive influence on tourist satisfaction (Ivan Paunovic, 2014; Echtner & Ritchie, 2003; Wang, Zhang, Gu, & Zhen, 2009; Kruger & Saayman, 2010).

H8<sub>0</sub>: There is no relationship between Transportation services and tourist satisfaction.  
H8<sub>a</sub>: There is a relationship between Transportation services and tourist satisfaction

## **3.3 Conceptualization of Variables**

### **3.3.1 Conceptualization of Dependent Variable**

In this part conceptualized and defined the tourist satisfaction as the dependent variable.

### **3.3.2 Operationalization of tourist satisfaction**

Consumer satisfaction is the consumers' evaluation of consumption experience. It is incorporated with both affective and cognitive dimensions Wang et al (2008).

According to literature, two approaches were developed to measure tourism satisfaction. The first approach measured the affective dimension: "What is your overall satisfaction level as a tourist experiencing Eastern Province?" (1= very unsatisfied to 5=very satisfied) whereas the second approach measured the cognitive dimension: "How do you rate Eastern Province as a destination compared with similar places?" (1= much worse to 5 = much better).

### **3.3.3 Conceptualization of Independent Variables**

In this part Nature and culture, Accommodation services, Food and beverages, Hygiene and sanitation, Public infrastructure facilities, Price levels, Safety and security, and Transportation services were conceptualized and define for the purpose of the study.

#### **3.3.3.1 Accommodation services**

The role of accommodation in tourism development is dependent on the quality and quantity of accommodation facilities available. It is one of an essential factor of tourism development. To imagine a successful tourism development, the development of accommodation should be considered as a core factor of the tourism planning. In other words, accommodation is a matrix of tourism, and therefore, appropriate choice of accommodation is required in order to expand and develop the tourism industry (Saxena 2008).

Considered as a core of tourism industry, most of the countries have been able to recognize its importance in accordance to the tourism development and therefore the government of the destination countries has been coordinating their tourism activities with the accommodation industries by emphasizing attractive intensive and concession to the providers of tourist accommodation.

For example, spacious, ventilated and proper maintained rooms and proper room facilities and services, well-equipped and safety features of the bathrooms, proper and better lighting, proper door locks with safety, clean bed linen and mattresses entertainment, sports & recreational facilities, efficient front desk, friendly & communicative, pleasant staff, prompt & courteous service, congeniality of information counter, and language proficiency of staff affect the tourist satisfaction. (Knutson, 1988; Saleh & Ryan, 1992; Poon & Low, 2005).

This study used their findings which is relevant in the case of Eastern Province. Respondents were asked to evaluate the Accommodation services for these 16 motives such as Resort would be pretty, Resort would be fashionable, Room would have good

view, Staff would be courteous, Staff would be friendly, Dry weather facilities, Wet weather facilities, Opportunity for rest & relaxation, Comfort of the room, Adequacy of space, Adequacy of water and electricity supply, Laundry service, Quality of furnishings, Nearby noise sources, Facilities for physical activities and Convenient opening hours along a five-point scale

### **3.3.3.2 Food & beverages**

High-quality food and beverages play a vital role in any travel experiences. There is an increased recognition for food and beverages as prime travel motivators of tourists. The tourists have to make their own choices about where to stay, what to eat, what to drink and what to do during their holidays.

In literature study, many researchers identify a positive relationship between the tourists' perception and satisfaction regarding the quality & taste of foods, quality & taste of beverages, reasonability of food prices, food serving methods, ability to eat your favourite foods, number of dishes, standard of food services, variety of dishes, presentation of food and speed of service, attractiveness of the surroundings influence the overall food service experience and satisfaction of the tourists. ( Jin, et al, 2016; Ivan Paunovic, 2014; Chen, 2007; Wang, Zhang, Gu, & Zhen, 2009)

Thus, 9 Motives were selected to measure tourist satisfaction on Food & beverages such as Variety of cuisines, Variety of restaurants, Traditional food, Availability of Children foods, Availability of foods for elderly people, Tastiness of food served, Temperature of food served, Portions of food and Presentation of dishes. Respondents were asked to evaluate these items on a five-point scale.

### **3.3.3.3 Hygiene and sanitation**

The hygiene factors(catering, toilets, personnel), which include peripheral elements, such as toilet facilities, eating and souvenir stores, do not directly influence satisfaction, but their poor quality may have a negative effect on satisfaction. Hygiene

factors have a very limited impact on revisit intentions, but a relatively strong influence on motivational factors, while revisit intentions are strongly influenced by motivational factors (Jensen 2004)

According to Eraqi(2006), Food safety standards must be met and be common to all types of food outlets, from street vendors to luxury gourmet restaurants to airline catering. For example, cleanliness and hygiene of the hotel & rooms (Ryan, 1992), an accommodation facility just has to be safe and clean, one cannot pretend that such requirements are more important to high-class establishments Therefore, the current study measured Hygiene & sanitation based on these seven motives such as Hygienic Food preparation, Cleanliness of destinations, Cleanliness of living rooms/accommodation, Safe drinking water, Availability of Health Services, Environmental Quality and Protection from Insects/Mosquitoes/Pests. Respondents were asked to evaluate these items on a five-point scale. (Jang & Wu, 2006; Chen, 2007; Truong & King, 2009; Andriotis, Agiomirgianakis & Mihiotis, 2008).

#### **3.3.3.4 Nature and culture**

Heritage resources can be broadly divided into tangible and intangible resources. Tangible resources include cultural and environmental (natural) heritage. Cultural heritage encompasses man-made objects, such as monuments of architecture, sculpture and painting, building complexes, sites of human work, tradition and manifestations of art, lifestyles, literature and folklore as well as cultural landscapes and historical sites. Natural heritage includes geological elements, landforms, plant and animal habitats, as well as areas of unique scientific, environmental or aesthetic value (UNESCO, 1972; Murphy, 2000; Pearce & Lee, 2005; O'Leary, 2003; Echtner & Ritchie, 2003; Jang & Wu, 2006; Chen, 2007; Schofield, 2000; Truong & King, 2009). Therefore, the current study measured tourist satisfaction on nature & culture based on these 12 motives. Pleasant Climate, Heritage Ambience, Being harmonious with nature, Relaxing & Restful, Historical sights, Archaeological sites and monuments, Natural features, Availability of leisure activities, Beach would be



uncrowded, Convenient Location, Natural monuments and Comfort for sunbathing in the beach. Respondents were asked to evaluate these items on a five-point scale.

#### **3.3.3.5 Public infrastructure facilities**

The tourism and infrastructure and facilities should be developed simultaneously because tourism is highly interrelated with other sectors of the country. The improved facilities are demanded by the tourists. The improved facilities symbolize the economic development of the country.

Most researchers measure and identify the tourists' perception and satisfaction regarding the quality of roads, safety of roads & traffics, banking services, internet & IDD facilities, and customs & airport services, limited range of products for purchase, no fast-food bar, restaurant, places of respite and toilets. No information in foreign languages, personnel not providing visitors with information and not wearing costumes, no or limited interpretation, poorly marked routes and directions, no information on time distances. (Murphy, 2000; Jin, et al, 2016; Echtner & Ritchie, 2003; Clerides & Pashourtidou, 2007)

This study used their findings and evaluate Public infrastructure facilities with 7 motives such as Signs & indicators, Parking facilities and space, Telecommunication facilities, Money Exchange, Road conditions, Tourist information Centre and Shopping Facilities. Respondents were asked to evaluate these items on a five-point scale.

#### **3.3.3.6 Price levels**

Price is one of the key factors in deciding about whether and where to have holidays. The majority of travellers are price sensitive economy persons Gnanapala (2015). They pay much attention to the price levels and the value for money of the destination. The tourists highlighted that there are price variations of the good and services from place to place. It is acceptable to have a little variation of prices in different places. However,

when the variation is vast, the tourists may get dissatisfaction. If the tourists buy enough goods in their holiday visit, it will help to create more opportunities for the supportive industries jobs, income and other benefits. Factors that strongly affect satisfaction include, apart from service and product quality, the price the customer must pay (Parasuraman et al., 1994)

Therefore, the current study measured Price levels based on these 6 motives. Those are Reasonable price for accommodation, Level of public transport prices, Level of cost for luxury transport prices, Restaurants would be cheap, Shops would be cheap and Price of gifts & Souvenirs. Respondents were asked to evaluate these items on a five-point scale. (Murphy (2000; Yukesel 2000; O'Leary, 2003; Echtner & Ritchie, 2003; Naidoo, Munhurrin, & Ladsawut 2010)

#### **3.3.3.7 Safety and security**

Tourists prefer to travel in secure locations. Therefore, when selecting a destination, the tourists give more priority for the safety and security situation of the destination. A tourism product or service cannot represent a danger to life, damage to health and other vital interests and integrity of the consumer. Safety and security standards are normally established by law (e.g. by fire prevention regulations) and should be considered as quality standards. Eraqi(2006) . The results highlight that safety and security arrangement and situations have positive influences on the level of perception, which leads the tourists towards higher satisfaction levels.

Thus, there are 6 motives selected to measure safety & security such as Safety of visitors, Safety of valuables, Safe destinations, Safety during transportation, friendly locals, Emergency Preparedness. Respondents were asked to evaluate these items on a five-point scale. (Jin, et al 2016; Khatib & Al-Ali, 2011)

#### **3.3.3.8 Transportation services**

The transportation forms and its facilities play a vital role in attracting tourists to the destinations places. Realizing this fact, Transportation services have a big influence on the certain tourism destination, transportation facilities which are available in

different tourist spots have been focusing to provide maximum comfort to tourists within reasonable rates. The transport time and cost may constitute important factors determining visitor satisfaction. (Oliver, 1997; Baker & Crompton, 2000).

In this research measured tourist satisfaction on Transportation services with 13 motives such as Waiting time for Public transport, Road networks, Rail networks, Taxi services, Speed of Check in & Check out, Availability of Public transport, Efficiency of Public transport, Ease of Access, Uncongested Roads, Time scheduled public transport, Comfortable seating, Wild safari facilities and Tour Guides. Respondents were asked to evaluate these items on a five-point scale. (Ivan Paunovic, 2014; Echtner & Ritchie, 2003; Wang,Zhang, Gu, & Zhen, 2009; Kruger & Saayman, 2010)

### 3.3.4 Operationalization of Variables

*Table 3.1: Operationalization of Variables*

Factors	Motive Items	Source
Independent Variables		
Nature & culture	Pleasant Climate	Murphy (2000)
	Heritage Ambience	Murphy (2000)
	Being harmonious with nature	Pearce & Lee (2005)
	Relaxing & Restful	Pearce & Lee (2005); O’Leary (2003); Echtner & Ritchie (2003); Jang & Wu (2006)
	Historical sights	Jin, etl( 2016); Crompton (1997); Yoon &. Uysal (2005); Jang & Wu (2006); Khatib & Al-Ali (2011)
	Archaeological sites and monuments	Tribe & Snaith (1998); Clerides & Pashourtidou (2007)
	Natural features	Pearce & Lee (2005); Ivan Paunovic. (2014); Chen (2007); Wang,Zhang, Gu, & Zhen (2009)
	Availability of leisure activities	Naidoo, Munhurrun, & Ladsawut (2010); Schofield (2000); Pileliene & Grigaliunaite(2014); Crompton (1997); O’Leary (2003)
	Beach would be uncrowded	Tribe & Snaith (1998); Echtner & Ritchie(2003)
	Convenient Location	Schofield (2000);

	Natural monuments	Pileliene & Grigaliunaite(2014); O’Leary (2003); Echtner & Ritchie (2003); Larry Dwyer (2004)
	Comfort for sunbathing in beach	Yukesel A. (2000); Prebensen (2004)
Accommodation services	Resort would be pretty	Tribe & Snaith (1998); Truong & King (2009)
	Resort would be fashionable	Tribe & Snaith (1998); Truong & King (2009)
	Room would have a good view	Tribe & Snaith (1998); Truong & King (2009)
	Staff would be courteous	Tribe & Snaith (1998); Echtner & Ritchie(2003)
	Staff would be friendly	Tribe & Snaith (1998); Yukesel A. (2000); Echtner & Ritchie(2003)
	Dry weather facilities	Schofield (2000);
	Wet weather facilities	Schofield (2000);
	Opportunity for rest & relaxation	Schofield (2000);
	The comfort of the room	Echtner & Ritchie(2003) Jang & Wu (2006) Chen (2007)
	Adequacy of space	Yoon &. Uysal (2005)
	Adequacy of water and electricity supply	Yukesel (2000); Echtner & Ritchie(2003)
	Laundry service	Tribe & Snaith (1998)
	Quality of furnishings	Tribe & Snaith (1998);Lee & Crompton (1992)
	Nearby noise sources	Yukesel (2000) Prebensen (2004) Chen (2007)
	Facilities for physical activities	Jang & Wu (2006)
	Convenient opening hours	Echtner & Ritchie(2003)
Food and beverages	Variety of cuisines	Echtner & Ritchie(2003) Yoon &. Uysal (2005) Larry Dwyer (2004)
	Variety of restaurants	Tribe & Snaith (1998) Truong & King (2009)
	Traditional food	Yukesel (2000); Mohammad & Som (2010)
	Availability of Children foods	Prebensen (2004); Chen (2007); Andriotis, Agiomirgianakis & Mihiotis (2008)

	Availability of foods for elderly people	Chen (2007)
	Tastiness of food served	Yukesel (2000)
	Temperature of food served	Yukesel (2000)
	Portions of food	Yukesel (2000)
	Presentation of dishes	Yukesel (2000)
Transportation services	Waiting time for Public transport	Yukesel (2000)
	Road networks	Jin, et al( 2016)
	Rail networks	Jin, et al( 2016)
	Taxi services	Clerides & Pashourtidou (2007); Andriotis, Agiomirgianakis & Mihiotis (2008)
	Speed of Check in & Check out	Andriotis, Agiomirgianakis & Mihiotis (2008)
	Availability of Public transport	Schofield (2000) Yukesel (2000); Jang & Wu (2006)
	Efficiency of Public transport	Yukesel (2000)
	Ease of Access	Chen (2007) Truong & King (2009)
	Uncongested Roads	Schofield (2000)
	Time scheduled public transport	Yukesel (2000)
	Comfortable seating	Jang & Wu (2006)
	Wild safari facilities	Crompton (1997) Echtner & Ritchie(2003) Kruger & Saayman (2010)
	Tour guides	Truong & King (2009)
Public infrastructure facilities	Signs & indicators	Chen (2007); Truong & King (2009)
	Parking facilities and space	Schofield (2000) Jin, et al( 2016) Thompson & Schofield (2007) Chen (2007)
	Telecommunication facilities	Larry Dwyer (2004)
	Money Exchange	Larry Dwyer (2004); Mohammad & Som (2010)
	Road conditions	Chen (2007)
	Tourist information Centre	Jin, etl( 2016); Echtner & Ritchie(2003); Larry Dwyer (2004)

	Shopping Facilities	Echtner & Ritchie(2003);Prebensen (2004); Larry Dwyer (2004)
Price levels	Reasonable price for accommodation	Chen (2007); Jin, et al( 2016)
	Level of public transport prices	Jin, etl( 2016)
	Level of cost for luxury transport prices	Chen (2007);
	Restaurants would be cheap	Chen (2007);
	Shops would be cheap	O’Leary (2003); Truong & King (2009)
	Price of gifts & Souvenirs	Jin, et al( 2016); Truong & King (2009)
Safety and security	Safety of visitors	Echtner & Ritchie(2003)
	Safety of valuables	Chen (2007); Truong & King (2009)
	Safe destinations	Jin, etl( 2016); Khatib & Al-Ali (2011)
	Safety during transportation	Chen (2007)
	Friendly locals	Chen (2007); Khatib & Al-Ali (2011)
	Emergency Preparedness	Schofield (2000)
Hygiene and sanitation	Hygienic Food preparation	Yukesel (2000); Jang & Wu (2006); Chen (2007)
	Cleanliness of destinations	Ivan Paunovic. (2014)
	Cleanliness of living rooms/accommodation	Yukesel (2000); Jang & Wu (2006)
	Safe drinking water	Schofield (2000); Lee & Crompton (1992)
	Availability of Health services	Schofield (2000); Jin, et al ( 2016)
	Environmental quality	Pileliene & Grigaliunaite(2014); Jang & Wu (2006)
	Protection from Insects/Mosquitoes/Pests	Macpherson, et al (2000)
Dependent Variables		
Satisfaction	Overall satisfaction	Valle, et al (2006)
	Compared with similar places	Wang et al (2008)

### **3.4 Type of the study**

The objective of this study is to describe the impact of push and pull factors on international tourism in Eastern Province of Sri Lanka. In this research, eight factors which are considered to be important in the satisfaction of tourist have been identified as possible contributing factors. The objective is to establish the relationship between this independent variable and dependent variable.

The type of investigation used in this research is a correlation. Because of it is conducted within a natural environment under minimal interface. A correlational study is conducted in the natural environment of the tourist spots in the Eastern Province with minimal interference by the researcher. This study is conducted within the natural environment in the beaches, historical places, religious places, lodging and public transport stations under minimal interface in a normal enjoyment and entertainment of international tourist.

### **3.5 Nature of the Study**

In this study, the researcher tries to establish the relationship between destination attributes such as (Nature and culture, Accommodation services, Food and beverages, Transportation services, Public infrastructure facilities, Price levels, Safety and security, and Hygiene and sanitation) and tourist satisfaction.

Therefore, this study is an explanatory study that seeks to explore the relationship between variables. The intention of this study is to determine whether there is any relationship between dependent and independent variables. Therefore this is an analytical survey. This analytical survey is designed by using questionnaire. In this questionnaire, there are 89 questions which were answered by an international tourist who has visited tourism spots in Eastern Province of Sri Lanka.

### **3.6 Unit of Analysis**

This study focuses on identifying the relationship the relationship between destinations attributes and tourist satisfaction among international tourist who have visited tourism

sports in Eastern Province of Sri Lanka. The data will have to be collected from each tourist who has visited Eastern Province of Sri Lanka Therefore unit of analysis of this study is individual.

### **3.7 Data collection**

According to Sekaran & Bougie (2016), there are some different ways for gathering data. Those data can be obtained from primary or secondary. Therefore this research is based on primary data and secondary data.

#### **3.7.1 Primary Data**

For this study, a questionnaire is used as the method of data collection primarily. According to Sekaran & Bougie (2016) questionnaire is reformulated written set of questions to get answers from the respondent, usually within rather closely defined alternatives. The questionnaire is an efficient data collection mechanism when the researcher knows exactly what is required and how to measure the variables of interest.

#### **3.7.2 Secondary Data**

In this research, the secondary data is based on articles and journals, tourism survey reports, reference books, magazines, newspapers, Tourism Board annual reports.

### **3.8 Population and Sampling**

#### **3.8.1 Population**

The population of this study is all international tourist who have visited Eastern Province of Sri Lanka in January 2018. According to Tourism Board of Sri Lanka, There are 219,360 international tourists visited Sri Lanka in January 2017.

#### **3.8.2 Sample**

The target population of this study is international tourists visiting Eastern Province of Sri Lanka in January 2018. From this population, a sample was selected using a quota sampling method with interviews performed by trained interviewers, instructed to



select respondents as randomly as possible (not based on personal preferences), at different locations and at different times. The number of tourists to be included in each quote was defined equally for every district (Ampara, Batticaloa and Trincomalee). This sampling method was applied because it is not possible to obtain a list of all tourists visiting Eastern Province during this period, which would enable the use of a stratified sampling method (the random version of the quota sampling method). There are 219,360 international tourists visited Sri Lanka in January 2017.

A reference Krejcie and Morgan (1970) that allowed to apply the instrument of qualitative order to tourists and its calculation was made through of the equation:

$$n = N\sigma^2 Z^2 / [(N - 1)e^2 + \sigma^2 Z^2]$$

Therefore

$$n = 219360 \times 0.5^2 \times 1.96^2 / [(219360 - 1)0.05^2 + 0.5^2 1.96^2] = 384$$

$\sigma$  = deviation of 0.5;  $Z$  = 95% confidence level equivalent to 1.96;  $e$  = acceptable limit of error of 0.05% obtaining 384 tourists as a population sample.

The number of tourists to be included in each quote is 128.

### **3.9 Questionnaire Development**

The questionnaire method was used to collect data. A questionnaire was derived from previous studies (Chon, 1990) and a set of scale models to test consumer satisfaction/dissatisfaction. Previously developed measurement scales were applied to measure the constructs examined in the questionnaire. To have a high level of accurate and reliable data, the study questions were worded carefully in a manner reflecting the actual requirements of researchers as well as enabling the sample population at understanding the questions and answering them correctly.

Each questionnaire was accompanied by a covering letter that explained the purpose of the study. General instructions on how to complete the questionnaire and the

importance of completing all questions were also mentioned. It is very important that the respondents know that the questionnaire is confidential because if it is not, this will influence their answer. Therefore, researcher personally explained to the respondents the confidentiality of their information.

This research study comprised of a sample of 384 international tourists visited Eastern Province of Sri Lanka. The questionnaire method is the most efficient and economical data collection method available when working with such a sample size. Therefore, it is not possible to use other methods for data collection.

There are four parts of the questionnaire namely information related to the demographic factors, information related to the tourist experience, destination attributes and tourist satisfaction. It is mentioned part A, B, C and D respectively.

Part A has six questions related to the tourist demographic characters. Part B has two questions for tourist experience on the previous visits. Part C is focused on destination attribute, which has seventy-nine attributes of the destination. Respondents were asked to evaluate these items on a five-point scale (1 = "*Not at all important*" and 5 = "*very important*"). Part D has two questions for tourist overall satisfaction.

### **3.10 Administration of the questionnaire**

The researcher visited the selected tourism spots in the Eastern Province of Sri Lanka and met the international tourist and explained the purpose of the research in order to get their willingness to participate in this survey. The questionnaires were distributed accompanied by a covering letter among the international tourist who has been accepted to participate in this survey.

### **3.11 Method of Scaling**

This study was used five-point Likert scales in the questionnaires to measure respondent's attitudes.

### 3.12 Decision Rules- Likert Scale

Likert scale is used to measure the respondent's attitudes towards the certain statements, which the respondent is asked to agree or disagree. The Likert scale works well when measuring attitudinal information on a specific subject.

The five-point Likert scale was used in the questionnaire. Assignment of scores for positive responses categories in the Likert scale was mentioned in Table 3.2.

The five-point Likert scale was used in questionnaires. The degree of agreement or disagreement of the respondents for each question of each variable ranged from strongly disagree to strongly agree. In this questionnaire, it has only positive questions. Therefore it has assigned the value of 1 to 5 respectively for the positive statements.

The mean value of this five-point scale was 3  $((5+4+3+2+1)/ 5)$ . Therefore, the following decision rules were formulated for each variable. " $\mu$ " denotes the mean score of the respondents for each variable.

- If  $\mu = 1$  or 2, or "between" 1-3 then the level of agreement of the respondent for each variable is low.
- If  $\mu = 3$ , then the level of agreement of the respondent for each variable is moderate.
- If  $\mu = 4$  or 5, or "between" 3-5 then the level of agreement of the respondents for each variable is high.

*Table 3.2: Responses Categories in Likert scale – Positive and Negative Questions*

Response Categories	Positive Scores	Negative Scores
Strongly Agree	5	1
Agree	4	2
Neither agree nor disagree	3	3
Disagree	2	4
Strongly Disagree	1	5

### **3.13 Methods of Data Analysis**

As this research aims to find the factors which are most influencing the foreign tourist who has visited Eastern Province of Sri Lanka. The dataset is collected through structured questionnaires from the tourist who have visited Eastern Province of Sri Lanka in January 2018. Set of methods and techniques are applied to the collected dataset to find the most influential factor to attract the tourist towards eastern Sri Lanka. First, the dataset screened to eliminate the unengaged and incomplete responses from the dataset. Then the dataset has been evaluated for the understanding of demographic characteristics. After ensuring the demographics characteristics the Cronbach's alpha coefficient has been selected to test the internal consistency of the variables chosen. The central tendency measure cannot be applied to these variables as these variables are the ordinal type. The factor correspondence analysis also was done to select the more interactive variable among for the other variable gathered for each factor selected. The dataset with more interactive variables of each factor is examined through the chi-squared test to find the dependency of the selected variables with overall satisfaction. Finally, the ordinal regression analysis is used to test the hypothesis formulated.

#### **3.13.1 Data Screening**

The Data screening is done after digitizing the collected questionnaires from the tourist and manually screened to remove incomplete responses from the dataset. The unengaged responses also have been removed to maintain the quality of data for the better results.

#### **3.13.2 Measuring the Demographic Characteristics**

Section one of the questionnaire includes demographic data was added for gathered background, personal and organizational information of the international tourists who have visited Eastern Province of Sri Lanka.

*Table 3.3: Demographic Characteristics of Tourists and Relevant Question Number*

Demographic Characteristics	Relevant Questions	Definition
Country	01	From where the tourist came
Gender	02	Whether the tourist is a male or female
Age	03	Age in years of tourist on the date of data collection
Marital Status	04	Whether the tourist is single or married
Educational Qualifications	05	Highest educational qualification obtained by the tourist
Occupation	06	Current occupation of the tourist

### **3.13.3 Frequency counts and percentage**

The conclusions that extend beyond the immediate data alone were obtained using inferential statistics. As inferential statistics are really useful in a research to make decisions of the probability or inferences from the data to more general conditions, in addition, it enables the researcher to observe the behaviour of the population from the sample. The correlation analysis and regression analysis were used to measure the magnitude and direction of the relationship between the pairs of variables, under the inferential statistics.

### **3.13.4 Reliability Test**

The reliability test is used to predict the concordance of variables which means to find how variables closer to each other. Which help us to eliminate the least close variable from the grouped variable set.

The Cronbach's alpha coefficient is a measure (Cronbach 1951) to test the internal consistency of the variables in the set that means how well a set of variables or items measures a single, one-dimensional latent aspect of individuals. The alpha coefficient ranges in value from 0 to 1 and may be used to describe the reliability of factors

extracted from dichotomous and/or multi-point formatted questionnaires or scales. George and Mallery (2003) provide the following rules of thumb:

*Table 3.4: Cronbach's alpha coefficient*

Cronbach's alpha	Internal consistency of the variables
value > .9	Excellent
.9 > value > .8	Good
.8 > value > .7	Acceptable
.7 > value > .6	Questionable
.6 > value > .5	Poor
value < .5	Unacceptable

The high value for Cronbach's alpha indicates the good internal consistency of the items in the scale (Gliem & Gliem, 2003). Based on George and Mallery (2003) suggestion the variables which give the Cronbach's alpha coefficient more than 0.7 were taken into factor correspondence analysis.

### **3.13.5 Chi-Square Test**

The statistical tool that can be utilized to find out the level of the relationship between two variables is the chi-squared test. In other words, it is used to identify whether there is any relationship between two categorical variables. A contingency table was developed to analyze the relationship between the selected two variables. This good assist in developing prediction multiple models.

In the case of this research, the relatedness measured was the relationship between destination attributes (Accommodation services, Food and beverages, Hygiene and sanitation, Nature and culture, Public infrastructure facilities, Price levels, Safety and security, and Transportation services) and tourist satisfaction

$H_0$ : The two categorical variables are independent.

$H_a$ : The two categorical variables are dependent.

The chi-square test statistic is calculated by using the formula:

$$\chi^2 = \sum_{i=1}^r \sum_{j=1}^c \frac{(O_{ij} - E_{ij})^2}{E_{ij}}$$

where

r represents number of rows, c is the number of columns, O the is the observed frequency. E is the expected frequency. The degree of freedom is = (r - 1) (c - 1), and reject the null hypothesis if

$$\chi^2 < \chi_{\alpha}^2.$$

### 3.13.6 Multiple Correspondence Analysis

Multiple correspondence analysis (MCA) is another type of extended version of the correspondence analysis and helps to find the chance for relationships of many categorical type dependent variables. Basically, it is a type of generalization of principal component analysis as it is applied for qualitative instead of quantitative. Optimal scaling, dual scaling, optimal or appropriate scoring, scalogram analysis, and quantification method, homogeneity analysis is the similar discovery of multiple correspondence analysis. Standard correspondence analysis is the core technique used for multiple correspondence analysis on an indicator matrix (with 0 or 1 as entries). The explained variance percentages are should be corrected. Further, the adoption of correspondence analysis explanation of inter-point distances also important. This analysis helps to find the most influenced variables for each factor and also which reduces the dimensions of selected variables.

Since this research study considered numerous variables belong to eight factors for the analysis, to reduce the complexity of further analysis MCA was used to extract and to identify the most influencing and underlying variables out of the numerous variables in each factor for further analysis.

### 3.13.7 Ordinal Regression Analysis

It is a statistical method used for prediction of ordinal dependent variables behaviour with some independent variables (Harrell, 2001). In this study many variables of interest are ordinal. That is, you can rank the values, but the real distance between categories is unknown. The satisfaction is graded on scales from very unsatisfied to very satisfied. Survey respondents choose answers on scales from 5 five to 1. Further, the analysis is applied for overall satisfaction factor with selected factors of foreign tourist and tourism industries through categorical variables. This method is used to find the relationship between them. Through this Ordinal Regression Analysis, the most influencing factors of Sri Lankan tourism industry especially in Eastern Province with the overall satisfaction of foreign tourists can be predicted.

The general form of ordinal regression is

$$\ln\left(\frac{F_{ij}}{1-F_{ij}}\right) = \beta_{0j} + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k$$

$F_{ij}$  represents cumulative probabilities.

$F_{i1}$  is the probability that  $Y = 1$ , the lowest ordered category.

$F_{i2}$  is the probability that  $Y \leq 2$ , the lowest two ordered categories.

$F_{i3}$  is the probability that  $Y \leq 3$ , the lowest three ordered categories, and so on

$\beta_1$  - coefficient

X- Independent variables



## **4 RESULTS AND DISCUSSION**

### **4.1 Introduction**

This chapter describes how the collected data subjected to the statistical analysis in accordance with the methodology of this study discussed in chapter 3. Further, this chapter presents the results of the data analysis. The descriptive and inferential methods are used to present the data.

There are 384 questionnaires were collected from the foreign tourist who has vested in the Eastern Province of Sri Lanka in January 2018. The responses were digitized with MS Excel and cleaned.

There are 370 responses were taken into the statistical analysis after the pre-processing. The demographic characteristic of the respondent was analysed. Among the responses, there are 248 males and 122 female tourists were responded. Among 370 respondents 46 tourists are from Germany and 41, 24 are from England and Sweden respectively.

The majority of the tourists are belonging to the age category of 28-37 years. As shown in the dataset around one-third of them are living common which was the major marital status of the respondent. Among the 370 respondent, 76.8% are the first time, visitors. Half of the respondents are not interested to note their occupation that means they have chosen the option “Others” even though there is a way to specify their job. Majority of the tourist got the information about Eastern Province of Sri Lanka from friends and relatives.

### **4.2 Data Cleaning**

The collected dataset has been digitized using Microsoft excel to have an overall observation. The responses of the tourist are recorded with the serial number. Some unengaged and incomplete responses are observed in the dataset. Around five incompletes and nine unengaged responses were removed. In the end, around 370 responses are taken into further analysis

### **4.3 The demographic profile of the respondent**

Gender, Marital status, Age, Occupation, and educational qualifications were the demographic factors collected among respondents which were taken into the consideration further analysis. The demographic factors are clearly described in the subsections given below.

#### **4.3.1 Gender**

As far as the gender of respondents was concerned out of the total of 370 respondents 248 (67%) were male whereas 122 (33%) respondents were female.

*Table 4.1 Statistics of demographic profile – Gender*

		Frequency	Percent
Valid	Male	248	67.0
	Female	122	33.0
	Total	370	100.0

#### **4.3.2 Country**

A number of tourists/respondents are from Germany, around 46 out of 370 (12.4%). There are 41 respondents from England, and 24,22,17,16 and 16 are from Sweden, Netherlands, Russia, Slovenia and Austria respectively. Respondents from other nations are recorded with least frequencies as mentioned in Table 4.2.

Table 4.2: Statistics of demographic profile – Country					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Germany	46	12.4	12.4	46.8
	England	41	11.1	11.1	25.4
	Sweden	24	6.5	6.5	98.4
	Netherlands	22	5.9	5.9	72.2
	Jamaica	19	5.1	5.1	64.6
	Russia	17	4.6	4.6	84.1
	Austria	16	4.3	4.3	5.1
	Slovenia	16	4.3	4.3	88.9
	France	15	4.1	4.1	34.3
	Italy	15	4.1	4.1	59.5
	Norway	15	4.1	4.1	76.5
	Denmark	14	3.8	3.8	14.3
	Finland	11	3	3	30.3
	Spain	11	3	3	91.9
	Other	88	23.7	23.7	100
	Total	370	100	100	

### 4.3.3 Age Category

As per the frequency of age group of respondents mentioned in Table 4.3, respondents who ranged from 28-37 years were recorded with a high frequency of 222 out of 370 (60 %) since the age group was the most responsive to the survey. This would be due to the fact that the respondents in this group are young and matured compared to the respondents with another age group.

Table 4.3: Statistics of demographic profile - Age group					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-27 years	57	15.4	15.4	15.4
	28-37 years	222	60.0	60.0	75.4
	38-47 years	69	18.6	18.6	94.1
	48-57 years	15	4.1	4.1	98.1
	58-67 years	7	1.9	1.9	100.0
	Total	370	100.0	100.0	

#### 4.3.4 Marital Status

Regarding the marital status of respondents, the “living common” responses were recorded with the high frequency of 136 out of 370 (37%) then around 109 (30%) responses were recorded by respondents who are single. The respondent who are married is 109 out 370 (29%) whereas other categories of marital statuses are recorded with fewer frequencies of 5, 3, 3 out of 370 such as widowed, separated and divorced respectively as mentioned in Table 4.4.

Table 4.4: Statistics of demographic profile - Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Married	109	29.5	29.5	29.5
	Living common	136	36.8	36.8	66.2
	Widowed	5	1.4	1.4	67.6
	Separated	3	.8	.8	68.4
	Divorced	3	.8	.8	69.2
	Single	114	30.8	30.8	100.0
	Total	370	100.0	100.0	

#### 4.3.5 Occupation

Regarding the occupation of the respondents, majority of respondents (170 out of 370, 45%) belongs to other categories which were not specifically mentioned in the questionnaire followed by 84 (22%) respondents were entrepreneur category, 56 of them were students (15%) whereas 14 respondents out of 370 were travel agents/guides as shown in Table 4.5.

Table 4.5: Statistics of demographic profile –Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public Sector Employee	46	12.4	12.4	12.4
	Entrepreneur	84	22.7	22.7	35.1
	Student	56	15.1	15.1	50.3
	Tourism Travel Agent / Guide	14	3.8	3.8	54.1
	Other	170	45.9	45.9	100.0
	Total	370	100.0	100.0	

### 4.3.6 Education

As far as concerning the educational status of the respondents mentioned in Table 4.6 The majority of the respondents (271 out of 370, 73%) have attended college/universities and 45(12%) respondents with postgraduate qualifications. Other respondents with qualifications above post-graduation, secondary school primary school or below and “other” categories are recorded with the frequencies of 6,39,2 and 7 respectively.

Table 4.6: Statistics of demographic profile – Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Above PG	6	1.6	1.6	1.6
	Post Graduate	45	12.2	12.2	13.8
	College/university	271	73.2	73.2	87.0
	Secondary school	39	10.5	10.5	97.6
	Primary school or below	2	.5	.5	98.1
	Other	7	1.9	1.9	100.0
	Total	370	100.0	100.0	

### 4.3.7 Visits to Eastern Province (Experience)

Most of the respondents are visiting first time to the Eastern Province where 11.4 percent of them are visiting the second time and around 9 respondents visited Eastern Province more than 5 times (Included with the current visit).

Table 4.7: Statistics of demographic profile –Visits to Eastern Province (Experience)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	284	76.8	76.8	76.8
	1 <sup>st</sup> time	42	11.4	11.4	88.1
	2 times	25	6.8	6.8	94.9
	3 times	8	2.2	2.2	97.0
	4 times	2	.5	.5	97.6
	5 times	9	2.4	2.4	100.0
	Total	370	100.0	100.0	

#### 4.3.8 Information about Eastern Province

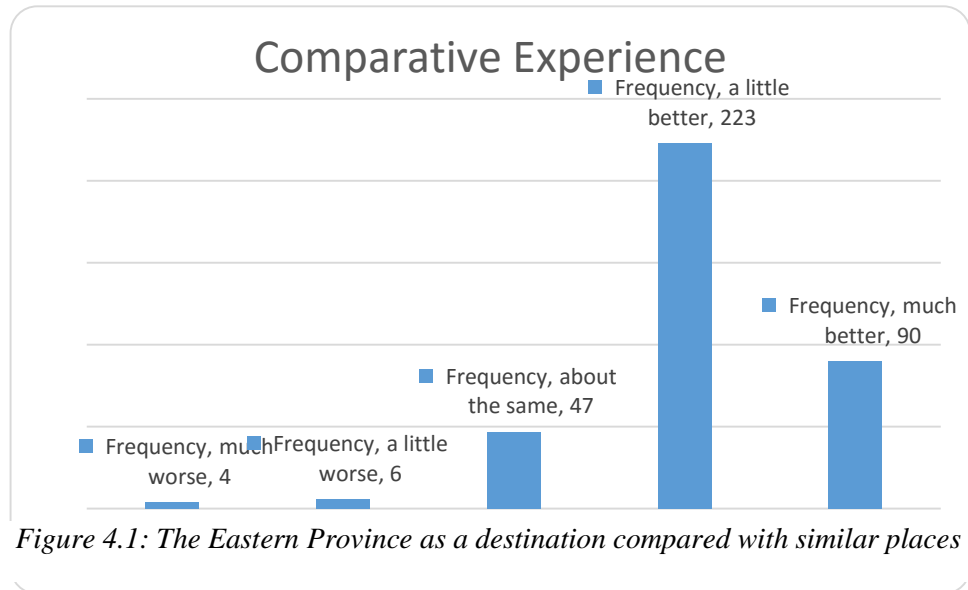
Most of the visitors found the information about the Eastern Provinces through their friends and relatives where most of the others found the information through internet and travel agents.

Table 4.8: Statistics of demographic profile –Information about Eastern Province

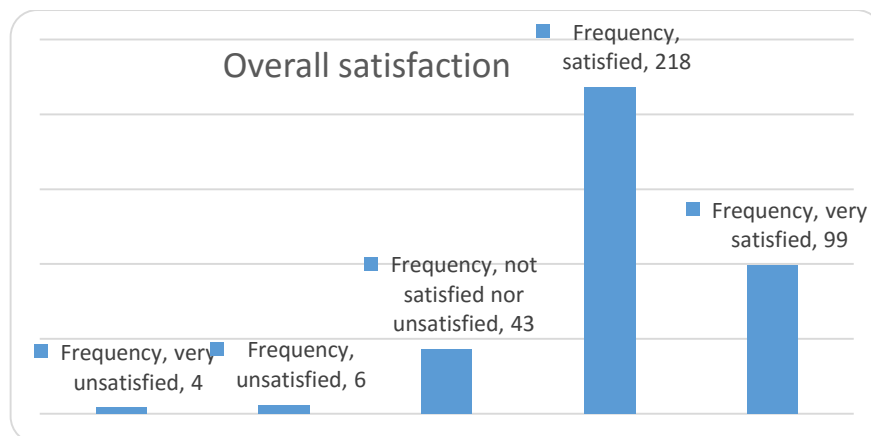
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid				
Been here before	42	11.4	11.4	11.4
Friends or Relatives	156	42.2	42.2	53.5
Tourist Office/Visitor Information Centre	2	.5	.5	54.1
Travel Books, Guide or Brochure	6	1.6	1.6	55.7
A Travel Agent	67	18.1	18.1	73.8
The Internet	92	24.9	24.9	98.6
Advertising/travel articles or documentaries (TV, radio or print)	5	1.4	1.4	100.0
Total	370	100.0	100.0	

#### 4.4 Frequency Count

Tourist experiences at the similar destinations other than Eastern Province is shows the majority proportion of responses were recorded a little better with the frequency of 223 out of 370 and response of much better recorded with the frequency the of 90 out of 370. Though the majority of responses on overall experience in Eastern Province recorded a little better, the trend of comparative experience of Eastern Province with other similar places is towards much better.



The frequency of overall satisfaction of tourist on their tourism experience at Eastern Province was concerned the majority of responses recorded as satisfied with the frequency of 218 out of 370 followed by very satisfied with the frequency of 99 out of 370(27%) whereas other forms of responses were recorded with fewer frequencies. Though the majority of responses on overall satisfaction recorded as satisfied, the trend of overall satisfaction is seemed towards very satisfactory.



## 4.5 Reliability Test

### 4.5.1 Accommodation services

The Cronbach's Alpha value of the reliability analysis for the initially selected sixteen variables for "Accommodation services" was 0.839. As shown in *Table 4.9* "Wet weather" shows the Cronbach's Alpha greater than 0.839 which is 0.847. Therefore, it is recommended to remove the variables to obtain the optimal inconsistency and 0.847 is achieved. After removing "Wet weather" still another variable "Opportunities for rest and relaxation" shows the value greater than 0.847 (0.848) as shown in *Table 4.10*. Finally, the "Opportunities for rest and relaxation" is removed and the Cronbach's Alpha value of 0.848 achieved. Therefore, it is the maximum achievable inconsistency for the Accommodation Service factor of the dataset as all the other variables show less Cronbach's Alpha in the *Table 4.11*. It is obtained by removing those variables discussed above.

Table 4.9 Accommodation services – Initial Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Resort would be pretty	64.08	47.198	.484	.829
Resort would be fashionable	64.13	46.310	.556	.825
Room would have good view	63.94	48.259	.433	.832
Staff would be courteous	63.88	47.905	.456	.831
Staff would be friendly	63.86	48.370	.416	.832
Dry weather facilities	64.08	46.173	.491	.828
Wet weather facilities	64.68	47.286	.265	.847
Opportunity for rest & relaxation	63.74	48.945	.289	.839
Comfort of the room	63.91	46.634	.530	.826
Adequacy of space	63.87	47.094	.552	.826
Adequacy of water and electricity supply	63.84	47.330	.489	.829
Laundry service	64.08	44.855	.598	.822
Quality of furnishings	64.09	45.267	.602	.822
Nearby noise sources	64.37	45.187	.501	.828
Facilities for physical activities	64.16	47.574	.364	.836
Convenient opening hours	63.88	47.809	.381	.834



Table 4.10: Accommodation services After removing “Wet weather”

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Resort would be pretty	60.45	41.885	.481	.838
Resort would be fashionable	60.51	41.058	.553	.834
Room would have good view	60.31	42.817	.438	.840
Staff would be courteous	60.26	42.327	.478	.838
Staff would be friendly	60.24	42.880	.426	.840
Dry weather facilities	60.45	40.985	.482	.838
Opportunity for rest & relaxation	60.12	43.487	.290	.848
Comfort of the room	60.29	41.289	.535	.835
Adequacy of space	60.25	41.633	.568	.834
Adequacy of water and electricity supply	60.21	41.798	.510	.836
Laundry service	60.46	39.642	.599	.830
Quality of furnishings	60.47	40.125	.594	.831
Nearby noise sources	60.74	40.148	.484	.838
Facilities for physical activities	60.53	42.353	.350	.846
Convenient opening hours	60.25	42.190	.404	.842

Table 4.11: Accommodation Services – Final Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Resort would be pretty	55.89	38.093	.504	.838
Resort would be fashionable	55.95	37.309	.575	.833
Room would have good view	55.75	39.201	.437	.841
Staff would be courteous	55.69	38.836	.465	.840
Staff would be friendly	55.67	39.505	.396	.844
Dry weather facilities	55.89	37.481	.477	.839
Comfort of the room	55.72	38.016	.503	.838
Adequacy of space	55.68	38.065	.567	.835
Adequacy of water and electricity supply	55.65	38.348	.495	.838
Laundry service	55.89	36.176	.596	.831
Quality of furnishings	55.91	36.452	.611	.831
Nearby noise sources	56.18	36.333	.510	.838
Facilities for physical activities	55.97	38.457	.376	.846
Convenient opening hours	55.69	38.810	.381	.845

#### 4.5.2 Food and beverages

The Cronbach's Alpha value of the reliability analysis for the initially selected sixteen variables for "food and beverages" was 0.758. As shown in Table 4.12 "Availability of foods for elderly people" shows the Cronbach's Alpha greater than 0.758. Therefore, it is recommended to remove the variables to obtain the inconsistency 0.760. After removing "Availability of foods for elderly people" still another variable "Availability of Children food" shows the value greater than 0.760 (0.796) as shown in Table 4.13. Finally, the "Availability of "Availability of Children foods" is removed and the Cronbach's Alpha value of 0.796 achieved. Therefore, it is the maximum achievable inconsistency for the accommodation service factor of the dataset as all the other variables show less Cronbach's Alpha in the Table 4.14. It is obtained by removing those variables discussed above.

Table 4.12: Food and beverages– Initial Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Variety of cuisines	34.32	20.061	.440	.736
Variety of restaurants	34.33	19.494	.536	.723
Traditional food	34.24	18.824	.523	.722
Availability of Children foods	34.87	17.503	.445	.741
Availability of foods for elderly people	34.91	18.257	.360	.760
Tastiness of food served	34.05	20.472	.415	.740
Temperature of food served	34.09	19.788	.505	.728
Portions of food	34.07	20.201	.453	.735
Presentation of dishes	34.05	20.783	.420	.740

Table 4.13: Food and beverages– After removing Availability of foods for elderly people

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Variety of cuisines	30.61	14.710	.461	.734
Variety of restaurants	30.62	14.312	.543	.720
Traditional food	30.54	13.333	.593	.707
Availability of Children foods	31.16	14.086	.261	.796
Tastiness of food served	30.34	15.113	.429	.739
Temperature of food served	30.39	14.287	.564	.717
Portions of food	30.36	14.600	.519	.725
Presentation of dishes	30.35	15.224	.469	.735

Table 4.14: Food and beverages– Final Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Variety of cuisines	26.86	11.062	.435	.787
Variety of restaurants	26.87	10.823	.495	.776
Traditional food	26.79	9.821	.579	.761
Tastiness of food served	26.59	11.148	.459	.782
Temperature of food served	26.64	10.297	.628	.751
Portions of food	26.61	10.590	.577	.761
Presentation of dishes	26.60	11.157	.525	.771

### 4.5.3 Hygiene and sanitation

According to the reliability analysis of hygiene and sanitation recorded with Cronbach's Alpha value of 0.831 with thirteen variables as shown in Table 4.15 and it has been found as the maximum achievable inconsistency for the obtained data set.

Table 4.15: Hygiene and sanitation– Final Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Hygienic Food preparation	28.15	6.694	.543	.816
Cleanliness of destinations	28.12	6.698	.655	.796
Cleanliness of living rooms/accommodation	28.09	7.060	.591	.807
Safe drinking water	28.11	6.774	.667	.795
Availability of Health services	28.17	6.767	.545	.815
Environmental quality	28.09	7.228	.556	.812
Protection from Insects/Mosquitoes/Pests	28.08	7.287	.519	.817

### 4.5.4 Nature & culture

According to the reliability analysis of nature and culture recorded with Cronbach's Alpha value of 0.818 with thirteen items as shown in Table 4.16 and it has been found as the maximum achievable inconsistency for the obtained data set.

Table 4.16: Nature &amp; Culture– Initial Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Pleasant Climate	49.38	24.313	.536	.793
Heritage Ambience	49.16	25.674	.442	.801
Being harmonious with nature	48.95	26.878	.362	.807
Relaxing & Restful	49.35	23.834	.530	.793
Historical sights	49.47	23.301	.583	.787
Archaeological sites and monuments	49.10	25.411	.456	.800
Natural features	49.15	25.104	.464	.799
Availability of leisure activities	49.41	23.966	.467	.800
Beach would be uncrowded	49.26	25.661	.351	.809
Convenient Location	49.38	23.819	.533	.792
Natural monuments	49.13	25.376	.419	.803
Comfort for sun bathe in beach	49.20	25.758	.394	.805

#### 4.5.5 Public infrastructure facilities

The Cronbach's Alpha value of the reliability analysis for the initially selected seven variables for "Public infrastructure facilities" was 0.719. As shown in *Table 4.17* "Signs & indicators" show the Cronbach's Alpha greater than 0.719. Therefore, it is recommended to remove the variables to obtain the optimal inconsistency and 0.762 is achieved. After removing "Signs & indicators" still another variable "Parking facilities and space" shows the value greater than 0.762 (0.775) shown in *Table 4.18*. And also "Telecommunication facilities" is greater than 0.775 (0.786) as shown in *Table 4.19*. Finally, the "Telecommunication facilities" and "Parking facilities and space" were removed and the Cronbach's Alpha value of 0.786 achieved. Therefore, it is the maximum achievable inconsistency for the Public infrastructure facilities factor of the dataset as all the other variables show less Cronbach's Alpha in the *Table 4.20*. It is obtained by removing those variables discussed above.

Table 4.17: Public infrastructure facilities– Initial Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Signs & indicators	25.60	13.221	.273	.762
Parking facilities and space	24.81	14.006	.439	.684
Telecommunication facilities	24.91	13.228	.622	.640
Money Exchange	24.70	13.989	.533	.663
Road conditions	24.47	14.299	.544	.664
Tourist information Centre	24.60	14.311	.525	.668
Shopping Facilities	24.30	16.557	.251	.722

Table 4.18: Public infrastructure facilities– after Removing “Sign and Indicator”

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Parking facilities and space	21.52	9.844	.352	.775
Telecommunication facilities	21.62	9.402	.491	.732
Money Exchange	21.40	9.151	.580	.707
Road conditions	21.17	9.179	.648	.691
Tourist information Centre	21.31	9.221	.617	.698
Shopping Facilities	21.00	10.908	.388	.755

Table 4.19: Public infrastructure facilities– after Removing “Parking facilities and Space ”

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Telecommunication facilities	17.53	6.857	.410	.786
Money Exchange	17.31	6.232	.603	.714
Road conditions	17.09	6.291	.668	.693
Tourist information Centre	17.22	6.150	.684	.686
Shopping Facilities	16.92	7.741	.407	.776

Table 4.20: Public infrastructure facilities– Final Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Money Exchange	13.33	4.080	.520	.776
Road conditions	13.10	3.890	.673	.691
Tourist information Centre	13.23	3.707	.718	.665
Shopping Facilities	12.93	4.851	.483	.785

#### 4.5.6 Price levels

According to the reliability analysis of price levels with six variables the Cronbach's Alpha was found 0.850 as shown in Table 4.21. And it has been found as the maximum achievable inconsistency for the obtained data set.

Table 4.21: Price levels– Final Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Reasonable price for accommodation	22.62	8.579	.603	.834
Level of public transport prices	22.78	8.795	.555	.844
Level of cost for luxury transport prices	22.55	8.703	.720	.810
Restaurants would be cheap	22.47	8.944	.745	.808
Shops would be cheap	22.55	8.823	.675	.818
Price of gifts & Souvenirs	22.42	9.708	.556	.840

#### 4.5.7 Safety and security

According to reliability analysis of Safety and security was concerned, initially, with six variables the Cronbach's Alpha was found as 0.759 and when "Emergency preparedness" seems higher than 0.759 (0.811) as shown in Table 4.22, and which is need to be removed to find the optimal inconsistency. Therefore, the variable "Emergency preparedness" has been removed. Finally, Cronbach's Alpha was at satisfaction level with the value of 0.811 as there are no exceeding values in Table 4.23. Therefore, it is the maximum achievable inconsistency.

Table 4.22: Safety and security– Initial Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Safety of visitors	22.96	6.838	.451	.737
Safety of valuables	22.97	6.246	.613	.697
Safe destinations	23.03	5.875	.681	.675
Safety during transportation	23.06	6.414	.551	.712
Friendly locals	23.04	6.039	.581	.702
Emergency Preparedness	23.26	6.755	.241	.811

Table 4.23: Safety and security– Final Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Total	Item Correlation	Cronbach's Alpha if Item Deleted
Safety of visitors	18.55	4.963	.490		.805
Safety of valuables	18.56	4.425	.670		.753
Safe destinations	18.62	4.155	.719		.735
Safety during transportation	18.65	4.677	.560		.786
Friendly locals	18.64	4.417	.565		.787

#### 4.5.8 Transportation services

The Cronbach's Alpha value of the reliability analysis for the initially selected seven variables for "Transportation services" was 0.846. As shown in Table 4.24, the motive "Guide" shows the Cronbach's Alpha greater than 0.846 (0.857). Therefore, it is recommended to remove the variables to obtain the optimal inconsistency and 0.857 is achieved. After removing "Guide" still another variable "Efficiency of public transport" shows the value greater than 0.857 (0.867) shown in Table 4.25. The motive "Ease of access" is greater than 0.867 (0.869) as shown in Table 4.26. And "Time scheduled public transport" is equal to 0.869 (0.869) as shown in Table 4.27. Finally, the "Ease of access", "Efficiency of public transport" and "Time scheduled public transport" were removed and the Cronbach's Alpha value of 0.869 achieved. Therefore, it is the maximum achievable inconsistency for the transportation services factor of the dataset as all the other variables show less Cronbach's Alpha value in the Table 4.28. It is obtained by removing those variables discussed above.

Table 4.24: Transportation services– Initial Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Waiting time for Public transport	53.12	31.814	.609	.828
Road networks	53.14	31.841	.632	.826
Rail networks	53.08	32.687	.615	.828
Taxi services	52.99	34.078	.477	.837
Speed of Check in & Check out	53.13	32.823	.540	.833
Availability of Public transport	53.18	32.329	.574	.830
Efficiency of Public transport	53.14	36.303	.219	.852
Ease of Access	53.24	34.045	.459	.838
Uncongested Roads	53.15	32.261	.605	.828
Time scheduled public transport	53.17	33.744	.518	.835
Comfortable seating	52.98	33.590	.539	.833
Wild safari facilities	53.11	33.055	.530	.834
Guides	53.74	35.857	.198	.857

Table 4.25: Transportation services– After Removing Guide

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Waiting time for Public transport	49.26	29.144	.616	.840
Road networks	49.29	29.094	.648	.837
Rail networks	49.22	29.914	.632	.839
Taxi services	49.13	31.371	.478	.849
Speed of Check in & Check out	49.27	29.950	.566	.843
Availability of Public transport	49.32	29.437	.604	.841
Efficiency of Public transport	49.28	33.764	.188	.866
Ease of Access	49.38	31.656	.421	.853
Uncongested Roads	49.30	29.483	.623	.839
Time scheduled public transport	49.31	31.228	.496	.848
Comfortable seating	49.12	30.933	.536	.846
Wild safari facilities	49.26	30.283	.543	.845



Table 4.26: Transportation services– After Removing Efficiency of Public Transport

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Waiting time for Public transport	44.81	27.073	.637	.849
Road networks	44.83	27.032	.669	.847
Rail networks	44.76	27.888	.647	.849
Taxi services	44.67	29.398	.479	.861
Speed of Check in & Check out	44.81	27.914	.580	.854
Availability of Public transport	44.86	27.368	.624	.850
Ease of Access	44.92	30.248	.349	.869
Uncongested Roads	44.84	27.459	.638	.849
Time scheduled public transport	44.85	29.482	.467	.861
Comfortable seating	44.66	28.868	.551	.856
Wild safari facilities	44.80	28.314	.547	.856

Table 4.27: Transportation services– After Removing Ease of Access

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Waiting time for Public transport	40.44	23.873	.642	.852
Road networks	40.46	23.838	.674	.849
Rail networks	40.40	24.599	.659	.851
Taxi services	40.31	26.111	.478	.865
Speed of Check in & Check out	40.45	24.595	.594	.856
Availability of Public transport	40.50	24.018	.646	.852
Uncongested Roads	40.48	24.304	.634	.853
Time scheduled public transport	40.49	26.505	.421	.869
Comfortable seating	40.30	25.621	.549	.860
Wild safari facilities	40.44	25.108	.543	.860

Table 4.28: Transportation services– Final Reliability Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item Deleted
Waiting time for Public transport	36.01	20.479	.650	.850
Road networks	36.04	20.381	.692	.846
Rail networks	35.97	21.154	.669	.849
Taxi services	35.88	22.573	.485	.864
Speed of Check in & Check out	36.02	21.051	.616	.853
Availability of Public transport	36.07	20.573	.661	.849
Uncongested Roads	36.05	21.074	.614	.853
Comfortable seating	35.87	22.474	.501	.863
Wild safari facilities	36.01	21.821	.523	.862

### 3.1 Multiple Correspondence Analysis

In order to reduce the dimension of the ordinal variables and to get more interacted variables with specific factors, the correspondence analysis was done for each factor separately. Since the factors taken into the consideration in this research were obtained from strong literature by fixing the 0.4 as the cut off for factor loading Comrey and Lee (1992).

#### 4.5.9 Accommodation services factor

As shown in Table 4.29 the results obtained from correspondence analysis for variables which belongs to accommodation services factor was concerned. The variables which were recorded with the cut off value less than 0.4 were considered to be less interactive to accommodation factor. In such a way the variables of “Resort would be pretty”, “Room would have good view”, “Staff would be courteous”, “Staff would be friendly”, “Adequacy of water and electricity supply”, “Nearby noise sources”, “Facilities for physical activities” and “Convenient opening hours” were eliminated from the further analysis.

Table 4.29: Accommodation services- Discrimination Measures

	Dimension	Mean
	1	
Resort would be pretty	.358	.358
Resort would be fashionable	.451	.451
Room would have a good view	.246	.246
Staff would be courteous	.374	.374
Staff would be friendly	.326	.326
Dry weather facilities	.431	.431
Comfort of the room	.426	.426
Adequacy of space	.455	.455
Adequacy of water and electricity supply	.319	.319
Laundry service	.521	.521
Quality of furnishings	.551	.551
Nearby noise sources	.383	.383
Facilities for physical activities	.318	.318
Convenient opening hours	.158	.158
Active Total	5.315	5.315
% of Variance	37.964	37.964

#### 4.5.10 Food and beverages factor

As shown in the results obtained from correspondence analysis for variables which belongs to Food and beverages factor were recorded with the cut-off value less than 0.4 were considered to be less interactive to food and beverages. In such a way the variables of “Variety of cuisines” and “Variety of restaurants” were eliminated from the further analysis.

Table 4.30: Food and Beverages-Discrimination Measures

	Dimension	Mean
	1	
Variety of cuisines	.251	.251
Variety of restaurants	.318	.318
Traditional food	.529	.529
Tastiness of food served	.563	.563
Temperature of food served	.661	.661
Portions of food	.649	.649
Presentation of dishes	.591	.591
Active Total	3.562	3.562
% of Variance	50.881	50.881

#### 4.5.11 Hygiene and sanitation factor

As shown in Table 4.31 the results obtained from correspondence analysis for variables which belongs to factor hygiene and sanitation were recorded with the cut-off values more than 0.4. It obvious that all those variables were much interactive within the hygiene and sanitation factor.

Table 4.31: Hygiene and Sanitation-Discrimination Measures

	Dimension	Mean
	1	
Hygienic Food preparation	.460	.460
Cleanliness of destinations	.655	.655
Cleanliness of living rooms/accommodation	.556	.556
Safe drinking water	.554	.554
Availability of Health services	.446	.446
Environmental quality	.506	.506
Protection from Insects/Mosquitoes/Pests	.699	.699
Active Total	3.876	3.876
% of Variance	55.365	55.365

#### 4.5.12 Nature & culture factor

As shown in Table 4.32 the results obtained from correspondence analysis for variables which belongs to nature and culture factor were recorded with the cut off value less than 0.4 were considered to be less interactive within the factor of nature and culture. In such a way the variables of “Heritage ambience”, “Being harmonious with nature”, “Archaeological sites and monuments”, “Natural features”, “Availability of leisure activities”, “Beach would be uncrowded”, “Natural monuments” and “Comfort for sunbathe in beach” were eliminated from the further analysis

Table 4.32: Nature &amp; culture- Measures

	Dimension	Mean
	1	
Pleasant Climate	.452	.452
Heritage Ambience	.374	.374
Being harmonious with nature	.250	.250
Relaxing & Restful	.408	.408
Historical sights	.471	.471
Archaeological sites and monuments	.371	.371
Natural features	.354	.354
Availability of leisure activities	.373	.373
Beach would be uncrowded	.226	.226
Convenient Location	.409	.409
Natural monuments	.271	.271
Comfort for sunbathe in beach	.376	.376
Active Total	4.335	4.335
% of Variance	36.128	36.128

#### 4.5.13 Public infrastructure facilities factor

As shown in Table 4.33 the results obtained from correspondence analysis for whole the variables belong to the factor Public infrastructure facilities were recorded with the cut off value more than 0.4. It obvious that all those variables were much interactive within the Public infrastructure facilities factor.

Table 4.33: Public infrastructure facilities -Discrimination Measures

	Dimension	Mean
	1	
Money Exchange	.542	.542
Road conditions	.707	.707
Tourist information Centre	.755	.755
Shopping Facilities	.511	.511
Active Total	2.516	2.516
% of Variance	62.898	62.898

#### 4.5.14 Price levels factor

As shown in Table 4.34 the results obtained from correspondences analysis for all the variables belong to the factor price levels were recorded with the cut off value more than 0.4. It obvious that all those variables were much interactive within the price levels factor.

Table 4.34: Price levels - Discrimination Measures

	Dimension	Mean
	1	
Reasonable price for accommodation	.523	.523
Level of public transport prices	.456	.456
Level of cost for luxury transport prices	.709	.709
Restaurants would be cheap	.738	.738
Shops would be cheap	.680	.680
Price of gifts & Souvenirs	.477	.477
Active Total	3.582	3.582
% of Variance	59.707	59.707

#### 4.5.15 Safety and security factor

As indicated in in Table 4.35 the results obtained from correspondences analysis for all the variables belong to factor Safety and security were recorded with the cut off value more than 0.4. It obvious that all those variables were much interactive within the Safety and security factor.

Table 4.35: Safety and security - Discrimination Measures

	Dimension	Mean
	1	
Safety of visitors	.421	.421
Safety of valuables	.726	.726
Safe destinations	.767	.767
Safety during transportation	.561	.561
Friendly locals	.571	.571
Active Total	3.046	3.046
% of Variance	60.925	60.925

#### 4.5.16 Transportation services factor

As shown in Table 4.36 the results obtained from correspondence analysis for variables which belongs to transportation services factor was concerned variables which were recorded with the cut off value less than 0.4 were considered to be as less interactive to Transportation services. In such a way the variables of “Taxi services”, “Comfortable seating” and “Wild safari facilities” were eliminated from the further analysis.

Table 4.36: Transportation services - Discrimination Measures

	Dimension	Mean
	1	
Waiting time for Public transport	.586	.586
Road networks	.617	.617
Rail networks	.595	.595
Taxi services	.364	.364
Speed of Check in & Check out	.538	.538
Availability of Public transport	.567	.567
Uncongested Roads	.524	.524
Comfortable seating	.370	.370
Wild safari facilities	.388	.388
Active Total	4.549	4.549
% of Variance	50.539	50.539

#### 4.6 Chi-square test

The Chi-square test was applied for selected variables from the Multiple Correspondence analysis with overall tourist satisfaction variable. The result would indicate the association between variables. The table shows the results of the "Pearson Chi-Square" value, degrees of freedom and level of significance.

Table 4.37: Cross Tabulation for Overall Satisfaction with Selected Variables

	Pearson Chi-Square		
	Value	df	Sig. (2-sided)
<b>Accommodation services factors</b>			
Resort would be fashionable	46.720	16	.000
Dry weather facilities	79.893	16	.000
Comfort of the room	40.478	16	.001
Adequacy of space	25.423	16	.063
Laundry service	38.394	16	.001
Quality of furnishings	54.755	16	.000
<b>Food and beverages factors</b>			
Traditional food	37.000	16	.002
Tastiness of food served	22.047	16	.142
Temperature of food served	46.458	16	.000

Portions of food	26.024	16	.054
Presentation of dishes	5.812	12	.925
<b>Hygiene and sanitation factors</b>			
Hygienic Food preparation	85.257	16	.000
Cleanliness of destinations	117.984	16	.000
Cleanliness of living rooms/accommodation	92.458	12	.000
Safe drinking water	61.368	12	.000
Availability of Health services	61.589	16	.000
Environmental quality	89.429	12	.000
Protection from Insects/Mosquitoes/Pests	197.204	16	.000
<b>Nature and culture factors</b>			
Pleasant Climate	58.324	16	.000
Relaxing & Restful	32.236	16	.009
Historical sights	27.676	16	.035
Convenient Location	14.903	16	.532
<b>Public infrastructure facilities factors</b>			
Money Exchange	59.474	16	.000
Road conditions	43.255	16	.000
Tourist information Centre	70.687	16	.000
Shopping Facilities	77.406	16	.000
<b>Price levels factors</b>			
Reasonable price for accommodation	48.237	16	.000
Level of public transport prices	66.486	16	.000
Level of cost for luxury transport prices	49.751	12	.000
Restaurants would be cheap	54.043	12	.000
Shops would be cheap	35.515	16	.003
Price of gifts & Souvenirs	39.634	12	.000
<b>Safety and security factors</b>			
Safety of visitors	65.249	12	.000
Safety of valuables	32.806	16	.008
Safe destinations	66.931	16	.000
Safety during transportation	42.199	12	.000
Friendly locals	84.723	16	.000



<b>Transportation services factors</b>			
Waiting time for Public transport	24.651	16	.076
Road networks	21.970	16	.144
Rail networks	35.026	16	.004
Speed of Check in & Check out	30.924	16	.014
Availability of Public transport	62.364	16	.000
Uncongested Roads	30.584	16	.015

Cross-tabulation for overall satisfaction and selected variables for accommodation services factors showed in Table 4.37 shows that the adequacy of space has recorded the p-value (Significant ) of 0.063 ( $>0.05$ ) revealed that there is no statistically significant association between adequacy of space and overall tourist satisfaction. Therefore, regardless of the type of responses on the adequacy of space, all forms of responses will have equal importance in the categories of overall tourist satisfaction.

As far as the p values of cross-tabulation of variables belong to food and beverages factor, tastiness of food served, portions of food and presentation of dishes recorded the p values of 0.142, 0.54 and 0.925 respectively. These findings revealed that there is no statistically significant association between those variables and overall tourist satisfaction. Therefore, regardless of types of responses of those variables, all forms of responses will have equal importance in the categories of overall tourist satisfaction.

As represented in Table 4.37 the cross-tabulation of variables under nature and cultural factors shows that variable of convenient location depicted with the p-value of 0.532 revealed that there is no statistically significant association between variable convenient location and overall tourist satisfaction. Therefore, regardless of the type of responses on a convenient location, all forms of responses will have equal importance in the categories of overall tourist satisfaction.

The cross-tabulation of variables belongs to transportation services factor mentioned in Table 4.37 shows that the variables of waiting time for public transport and road networks obtained with the p values of 0.076 and 0.144 revealed that there is no any statistically significant association between those variables and overall tourist

satisfaction. Therefore, regardless of the type of responses those variables, all forms of responses will have equal importance in the level of overall tourist satisfaction

Therefore, the rest of the variables shown in Table 4.37 is considered to be more influential to the overall tourist satisfaction.

## 4.7 Ordinal Regression Analysis

### 4.7.1 Accommodation services

The Ordinal Regression Analysis is performed for all the factors gathered in Table 4.38. The result of the regression model of overall tourist satisfaction with Accommodation services shows that the final model p-value (sig.) is 000. Therefore, the null hypothesis rejected ( $H_{10}$ ). Hence, there is an evidence that the accommodations services associated with overall tourist satisfaction.

Table 4.38: Accommodation services model fitting information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	541.049			
Final	459.689	81.360	24	.000

Such relationship in between accommodation services and overall tourist satisfaction obtained in the studies conducted by Hossam Samy (2016); Gnanapala (2015); Ivan Paunovic (2014); Echtner & Ritchie(2003); Clerides & Pashourtidou(2007); Kruger & Saayman(2010).

#### 4.7.2 Food and beverages

The result of the regression model of overall tourist satisfaction with Food and beverages shows that the final model p-value (sig.) is 0.301. Therefore, the null hypothesis is accepted ( $H_{20}$ ) and there is no evidence for the relationship between Food and beverages with overall tourist satisfaction.

Table 4.39: Food and beverages model fitting information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	364.964			
Final	343.298	21.666	19	.301

Such relationship in between “Food and beverages” and overall tourist satisfaction obtained in the studies conducted by Gnanapala (2015); Agrawal(2017); Jin, et al(2016); Ivan Paunovic(2014); Hossam Samy (2016); Wang, , Zhang, Gu, & Zhen(2009).

#### 4.7.3 Hygiene and sanitation

The result of the regression model of overall tourist satisfaction with Hygiene and sanitation shows that the final model p-value (sig.) is .000. Therefore, the null hypothesis is rejected ( $H_{30}$ ). Hence, there is an evidence that the Hygiene and sanitation are associated with overall tourist satisfaction.

Table 4.40: Hygiene and sanitation model fitting information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	442.204			
Final	280.408	161.796	25	.000

Such relationship in between “Hygiene and sanitation” and overall tourist satisfaction obtained in the studies conducted by Agrawal(2017) ; García et al(2016); Gnanapala

(2015) ; Jang & Wu( 2006); Chen( 2007); Truong & King(2009); Andriotis, Agiomirgianakis & Mihiotis(2008).

#### 4.7.4 Nature and culture

The result of the regression model of overall tourist satisfaction with nature & culture shows that the final model p-value (sig.) is 000. Therefore, the null hypothesis rejected ( $H_{40}$ ). Hence, there is an evidence that the Nature and culture associated with overall tourist satisfaction

Table 4.41: Nature and culture model fitting information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	334.940			
Final	286.095	48.845	16	.000

Such relationship in between “Nature and culture” and overall tourist satisfaction obtained in the studies conducted by García etl(2016); Gnanapala (2015) ; Murphy(2000); Pearce & Lee(2005); O’Leary(2003); Echtner & Ritchie(2003); Jang & Wu(2006); Chen(2007); Schofield(2000); Truong & King(2009).

#### 4.7.5 Public infrastructure facilities

The result of the regression model of overall tourist satisfaction with public infrastructure facilities shows that the final model p-value (sig.) is 000. Therefore, the null hypothesis rejected ( $H_{50}$ ). Hence, there is an evidence that the Public infrastructure facilities associated with overall tourist satisfaction.

Table 4.42: Public infrastructure facilities model fitting information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	349.790			
Final	308.429	41.361	16	.000

Such relationship in between “Public infrastructure facilities” and overall tourist satisfaction obtained in the studies conducted by Agrawal(2017); García et al(2016); Jin, et al( 2016;) Gnanapala (2015); Echtner & Ritchie( 2003); Clerides & Pashourtidou( 2007)

#### 4.7.6 Price levels

The result of the regression model of overall tourist satisfaction with price levels shows that the final model p-value (sig.) is 000. Therefore, the null hypothesis rejected ( $H_0$ ). Hence, there is an evidence that the Price levels associated with overall tourist satisfaction.

Table 4.43: Price levels model fitting information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	463.947			
Final	391.639	72.309	21	.000

Such relationship in between “Price levels” and overall tourist satisfaction obtained in the studies conducted by García et al(2016); Yukesel(2000); Gnanapala (2015); O’Leary(2003); Echtner & Ritchie(2003); Naidoo, Munhurrin, & Ladsawut(2010).

#### 4.7.7 Safety and security

The result of the regression model of overall tourist satisfaction with safety and security shows that the final model p-value (sig.) is 000. Therefore, the null hypothesis is rejected ( $H_{70}$ ). Hence, there is an evidence that the Safety and security associated with overall tourist satisfaction.

Table 4.44: Safety and security model fitting information

	-2 Log			
Model	Likelihood	Chi-Square	df	Sig.
Intercept Only	341.363			
Final	255.735	85.628	18	.000

Such relationship in between “Safety and security” and overall tourist satisfaction obtained in the studies conducted by Jin, et al (2016); Gnanapala (2015); Khatib & Al-Ali (2011).

#### 4.7.8 Transportation services

The result of the regression model of overall tourist satisfaction with transportation services shows that the final model p-value (sig.) is 000. Therefore, the null hypothesis is rejected ( $H_{80}$ ). Hence, there is an evidence that the Transportation services associated with overall tourist satisfaction.

Table 4.45: Transportation services model fitting information

	-2 Log			
Model	Likelihood	Chi-Square	df	Sig.
Intercept Only	445.661			
Final	381.610	64.051	24	.000

Such relationship in between “Transportation services” and overall tourist satisfaction obtained in the studies conducted by García et al(2016); Gnanapala (2015); Ivan

Paunovic (2014); Echtner & Ritchie(2003); Wang, Zhang, Gu, & Zhen(2009); Kruger & Saayman(2010)

### **3.2 Chapter Summary**

Ordinal regression analysis revealed that except food and beverages factor all other seven factors namely, accommodation services, hygiene and sanitation, nature and culture, public infrastructure facilities, price levels, safety and security, and transportation services have a significant influence on overall tourist satisfaction. Reliability analysis exposed that variables/motives belong to a certain factor have their characteristic influence on the level of satisfaction as mentioned in the second specific objective of this study. For the accommodation services factor wet weather facilities and opportunities for rest and relaxation, while under food and beverages availability of food for elderly people and children whereas under public infrastructure factor the variables of signs and indicators, parking facilities and telecommunication facilities were the variables showed greater importance. In general, the response of tourists on their overall satisfaction based on their tourism experience at Eastern Province was concerned, the majority of responses recorded as satisfied with the frequency of 218 out of 370 followed by very satisfied with the frequency of 99 out of 370(27%) whereas other forms of responses such as little worse, much worse recorded with lower frequencies. Though the majority of responses on overall satisfaction recorded as satisfied, the trend of overall satisfaction is seemed towards very satisfactory. The chi square test performed to find out the association of each variable with the overall satisfaction revealed that adequacy of space, tastiness of food served, portion of food, presentation of dishes, convenient location, waiting time for public transport and road networks were not showed association with overall satisfaction.

In this chapter, the results of each step for all the eight factors were discussed. Finally, the factor Food and Beverages is rejected through ordinal regression analysis and the study revealed that rest of the seven factors are proved that they are having the relationship with the overall tourist satisfaction. This chapter clearly explains all the values and cut off obtained from each step of the analysis pipeline used for this

research. Finally, it reveals that all the seven factors are significantly associated with the overall tourist satisfaction.



## **5 CONCLUSIONS AND RECOMMENDATIONS**

### **5.1 Conclusions**

In this research, tourists overall satisfaction was measured by 76 motives belongs to eight factors namely accommodation services, transport services, nature and culture, food and beverages, public infrastructure facilities, price levels, safety and security, and hygiene and sanitation. The results obtained from the data provide a valuable implication on each factor and of each motive applicable to the tourism operators to incorporate the findings in improving the service quality of tourism industry of Eastern Province in future. In addition, this research provides several noteworthy contributions to a new conceptual tourist's overall satisfaction survey which apply to the tourism sector in the Eastern Province of Sri Lanka. Further, this research explored the importance of service quality options of motives relevant to tourism operators in Eastern Province of Sri Lanka and their potential to influence the tourist's overall satisfaction. The intention of tourists on the repeated visit to the tourism destinations of Eastern Province also concerned in this research.

The Ordinal Regression Analysis is performed for all the factors, accommodation services showed the final model p value (sig.) as 000, Food and beverages recorded with p value (sig.) as 0.301, hygiene and sanitation showed the final model p value (sig.) as 000, nature and culture showed the final model p value (sig.) as 000, public infrastructure facilities shows the final model p value (sig.) as 000, price levels showed the final model p value (sig.) as 000, safety and security shows that the final model p value (sig.) as 000, transportation services shows that the final model p value (sig.) is 000 all together these values revealed that various factors showed different levels of influence on the overall satisfaction of tourists. The factor Food and Beverages was rejected through ordinal regression analysis and the rest of the seven factors are proved that they are having a significant influence on the overall tourist satisfaction.

The reliability test of all the factors and motives showed that under accommodation facilities wet weather facilities and place for relaxation were the motives need to be considered in terms of enhancing the service quality of accommodation services.

Whereas under food and beverages factor availability of foods for elderly people and children foods are the motives that need to be introduced in the tourism destinations to improve the tourist overall satisfaction. Based on reliability analysis tourists showed their sense of satisfaction in the factors hygiene and sanitation, and nature and culture. Reliability analysis of public infrastructure encountered the motives of signs & indicators, parking facilities and space, telecommunication facilities need to be upgraded in order to uplift the level of tourist satisfaction at Eastern Province of Sri Lanka.

Finally, the Eastern Province is good at a price, safety, security, hygiene and sanitation, and transportation services as those are the most influential attributes to the overall satisfaction. The tourism sector of Eastern Province will be enhanced and contribute more to the country's economy by maintaining the quality of above attributes.

## **5.2 Recommendations**

The factor Nature and culture is the first factor in the questionnaire with 13 motives as categorical variables. Through the correspondence analysis, there are 8 motives eliminated. From the eliminated motives of nature and culture, the natural features and heritage ambience are very poor. According to the responses, it seems that the natural features and heritage ambience are may be out of the control of operators, but not being harmony with nature can be improved by beautification of surroundings at the tourist spots and hotels in Eastern Province. Most of the other motives are looks better in this analysis with frequency count.

According to the frequency count analysis, in transportation services the “guide services”, is the major motive should be concern critically in Eastern Province tourism industry. As the respondents say that it is important to concern on accessibility to the tourist spots specially beaches in Eastern Sri Lanka. The rest of the motives in this factor can be the second option to be improved for the betterment of the tourism sector.

In food and beverages factor, it is accepted that the availability of elders and children's food are the very special concern in the domain of food and beverages. It seems that the tourism sector needs very serious concern on food. It is necessary to concern on a

variety of cuisines and restaurants which are not in an acceptable level in Eastern Province.

The signs and indicators are very poor in hotels and other places in Eastern Province in terms of public infrastructure facilities. Further, the Telecommunication facilities that means the limited Wi-Fi facility must be improved and also the parking facilities must be arranged in an elegant manner.

Further, in terms of safety and security, the emergency preparedness in the hotel and other tourist spots are needed to be improved a little to safeguard tourist from unexpected issues which may give them a mental satisfaction. The rest of the motives of safety and security are covered well by the Eastern tourism sector.

The accommodation services is usually a major concern in tourism. The accommodation facilities of a hotel/resort are one of the factors which decide the amount of tourist who is visiting the particular place. There are 16 motives taken as a factor to determine the relative influence of the accommodation services with the overall satisfaction of a tourist.

There are two variables eliminated such as Wet weather facility and opportunities for rest and relaxation. Usually, all the hotels in Eastern Province are facilitated with air conditioners but it seems the facility is poor for the tourist or not in an acceptable level. So it is essential to provide very strong wet weather facilities as the respondent are not satisfied with it.

The opportunities for rest and relaxation is having an impact on the overall satisfaction as Eastern tourism significantly depends on playing in beaches and swimming which makes the tourist tired. It is better to improve the rest and relaxation opportunities in the hotels of Eastern Province to make the tourists convenient

The factor correspondence analysis, the motive “resort would be pretty” also determined the attraction of each tourist. Therefore, the tourism industry also can guide the resort or hotels in beautification using some novel attractive ideas.

The price levels are very convenient to the tourist of Eastern Province and also it seems that they are very satisfied with Hygiene and sanitation of the hotels and resorts. It is recommended that to have sustain and stable price levels and hygiene and sanitation facilities in the hotels and resorts of Eastern Provincial tourism sectors.

As most of the tourist claimed that they got the information through the internet, the tourism sector of the Eastern province must concentrate more on advertisements of their tourist spots and attractions with the services provided by them in an interesting way through the electronic media. These electronic advertisements help them to attract more tourist from Europe. Because many of them are visited from Germany, Sweden and England.

The tourism operator must elaborate their services and their facilities such as beach games, seasonal beach festivals cultural shows and etc. to build an impact on the tourist to make an intention to revisit. Which means they should build physiological impact on the tourist's mind that "I couldn't cover most of the things of this region in this visit, I should visit at least once again". Because, the result shows that only 25 percent of the tourists are visited more than one time and the rest of them are first time visitors.

It seems that the rest of the motives belongs to each of the factors which are accepted as providing a significant contribution to the overall satisfaction of a tourist.

### **5.3 Limitations of the study**

Implications drawn in this study were subject to some limitations.

- Respondents' may not aware of the study and give insufficient and biased responses.
- The area of differentiation between expectation and satisfaction in the minds of respondents.

#### **5.4 Further research**

In future, the study can be further enhanced by discussing the current findings with the tourism operators in Eastern Province and incorporating their views and comments for the future data collection and analysis. The similar questionnaire can be used to gather the data from the international tourist of Eastern Province in the different seasons of a year which may give some detailed idea to enrich the eastern tourism.

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## **Appendix A: Questionnaire**

### **Tourist Satisfaction Survey**

#### **Eastern Province of Sri Lanka**

I am a postgraduate student in the Department of Mathematics at University of Moratuwa. I am researching Perception and Satisfaction of Tourist in Eastern Province.

I am inviting your participation, which will involve filling out a questionnaire and watching a short marketing commercial. This should take about 10-15 minutes to complete. You have the right not to answer any question, and to stop participation at any time.

Your participation in this study is voluntary. You must be 18 years or older to participate in the study. Responses to the questionnaire will be used to determine how international destinations can improve their image and determine what characteristics are the most influential to potential tourists. There are no foreseeable risks or discomforts to your participation. Your name will not be used or collected during the survey.

Your responses will be anonymous. The results of this study may be used in reports, presentations, or publications.

If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the researcher. Please let me know if you wish to be part of the study by completing the online questionnaire.

Contact Info:

07738441062

[jeamugan@gmail.com](mailto:jeamugan@gmail.com)

**Thank You**

# SURVEY INSTRUMENT

## Tourist

### PART A

1. In which country do you live?

.....

2. What is your Gender?

Male		Female	
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3. What is your age group?

18-27 years		48-57 years	
28-37 years		58-67 years	
38-47 years		68+	

4. What is your Marital Status?

Married		Separated	
Living common		Divorced	
Widowed		Single	

5. What is your Highest Level of Educational?

Above PG		Secondary school	
Post Graduate		Primary school or below	
College/university		Other	
		.....	

**6. What is your Current Occupation?**

Public Sector Employee		Tourism Travel Agent / Guide	
Entrepreneur		Other.....	
Student			

**PART B**

**1. How did you get the information about Eastern Province?**

Been here before		A Travel Agent	
Friends or Relatives		The Internet	
Tourist Office/Visitor Information Centre		Advertising/travel articles or documentaries (TV, radio or print)	
Travel Books, Guide or Brochure		None	

Other:

.....

**2. How many times have you visited Eastern Province before now?**

None	1 time	2 times	3 times	4 times	5 times	More than 5 times

## PART C

Few statements measure each of these aspects that you rate on a scale of one to five reflecting how well they describe the region. **A score of five indicates that you mean the motive is “very important”, and a score of one indicates that you mean the motive is “Not at all important”.**

5	4	3	2	1
Very Important	Important	Neutral	Slightly Important	Not at all important

Motive	5	4	3	2	1
1. Pleasant Climate					
2. Heritage Ambience					
3. Being harmonious with nature					
4. Relaxing & Restful					
5. Historical sights					
6. Archaeological sites and monuments					
7. Natural features					
8. Availability of leisure activities					
9. Beach would be uncrowded					
10. Convenient Location					
11. Natural monuments					
12. Comfort for sunbathe in beach					
13. Resort would be pretty					
14. Resort would be fashionable					
15. Room would have a good view					
16. Staff would be courteous					
17. Staff would be friendly					
18. Dry weather facilities					
19. Wet weather facilities					
20. Opportunity for rest & relaxation					
21. Comfort of the room					
22. Adequacy of space					
23. Adequacy of water and electricity supply					
24. Laundry service					
25. Quality of furnishings					
26. Nearby noise sources					
27. Facilities for physical activities					
28. Convenient opening hours					
29. Variety of cuisines					

30. Variety of restaurants					
31. Traditional food					
32. Availability of Children foods					
33. Availability of foods for elderly people					
34. Tastiness of food served					
35. Temperature of food served					
36. Portions of food					
37. Presentation of dishes					
38. Waiting time for Public transport					
39. Road networks					
40. Rail networks					
41. Taxi services					
42. Speed of Check in & Check out					
43. Availability of Public transport					
44. Efficiency of Public transport					
45. Ease of Access					
46. Uncongested Roads					
47. Time scheduled public transport					
48. Comfortable seating					
49. Wild safari facilities					
50. Guides					
51. Signs & indicators					
52. Parking facilities and space					
53. Telecommunication facilities					
54. Money Exchange					
55. Road conditions					
56. Tourist Information Centre					
57. Shopping Facilities					
58. Reasonable price for accommodation					
59. Level of public transport prices					
60. Level of cost for luxury transport prices					
61. Restaurants would be cheap					
62. Shops would be cheap					
63. Price of gifts & Souvenirs					
64. Safety of visitors					
65. Safety of valuables					
66. Safe destinations					
67. Safety during transportation					
68. Friendly locals					
69. Emergency Preparedness					
70. Hygienic Food preparation					
71. Cleanliness of destinations					
72. Cleanliness of living rooms/accommodation					
73. Safe drinking water					
74. Availability of Health services					

75. Environmental quality					
76. Protection from Insects/Mosquitoes/Pests					

#### PART D

**1. How do you rate Eastern Province as a destination compared with similar places?**

5	4	3	2	1
much better	a little better	about the same	a little worse	much worse

**2. What is your overall satisfaction level as a tourist experiencing Eastern Province?**

5	4	3	2	1
very satisfied	satisfied	not satisfied nor unsatisfied	unsatisfied	very unsatisfied

What changes would you like to see on your next visit to Eastern Province?

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**Thank You**

