+Tourist Satisfaction in Shimla City (H.P) -An Empirical Evaluation

Vikrant Kumar

Junior Research Fellow (Ph. D), Department of Commerce, Himachal Pradesh University, Summer Hill, Shimla E-Mail: vikrantkupwan@gmail.com Mob. No. 8894091080

Abstract: Tourism industry is playing a very significant role in the growth and development of Indian economy. India is the world's 7th largest tourism economy in terms of GDP. Indian economy is growing at a rapid pace with largest share of service sector in India's GDP, even though there are various development opportunities for tourism sector that are untapped. Few of them are, to develop new sites and provide better services at existing ones etc., that will lead to further improvement in share of tourism sector in GDP. The present study is focused on evaluation of the satisfaction level of tourists in Shimla the capital city of Himachal Pradesh. For this purpose, the following objectives was spelt out: - 1) To evaluate the level of tourists' satisfaction with regards to existing tourism facilities in Shimla, 2) To identify the problems experienced by the tourists and to advance the suggestions for tackling those problems. To achieve these objectives a well-structured questionnaire was prepared and data were collected through direct personal interview. Several tests like Chi-square and descriptive statistics were used to get more accurate results. It was found that majority of tourists are not satisfied with public transportation, parking and banking and medical facilities in Shimla.

Keywords: Indian economy, tourism sector, tourists' satisfaction, public transportation.

1. INTRODUCTION

In this era of liberalization, privatization and globalization, service sector has been growing at a very rapid pace and tourism industry is also affected by this high growth rate. Tourism industry is playing a very important role in the growth and advancement of Indian economy. It has emerged as a new source of income for the people of that part of the country where tourism related infrastructure is well developed, which results into the improvement of standard of living of the people. It is promoting the local art and culture of various region of the country. Tourism also creates awareness about maintenance of historical sites and conservation of natural resources and cultural heritage. "International Union of Official Travel Organization (IUOTO), now called as World Tourism Organization (WTO), has defined tourist as a temporary visitor staying for at least 24 hours in a country visited when the purpose of the journey can be classified under one of the following headings - a) Leisure: - recreation, holiday, health, study of religion and sports. b) Business, family, mission meetings. WTO has classified three types of tourism: - a) Domestic Tourism: It consists of residents visiting within their own country. No formalities are required in this kind of travel. b) Inbound Tourism: Comprises non-residents travelling into a country of their choice. c) Outbound Tourism: Comprises residents of a nation travelling out to foreign country."

In Himachal Pradesh there are ample opportunities for the development of tourism industry. Specifically, in Shimla the capital city of Himachal Pradesh various tourist destinations has been developed and there is further requirement of developing new destinations to attract more and more tourists from across the world. In Shimla City the main attractions of the tourists are: - Jakhu Temple, Tara Devi Temple, The ridge and Mall road, Kufri, Potter Hill, Chadwick's Fall, Narkanda, Tanu-Jubbal Lake, Chansal Peak and Chandra-Nahan lake, St. Mary's church, Kali Bari temple, Sankat mochan, Seven hills, Annandale, Himalayan bird park, Gaiety heritage cultural complex, Indian institute of advanced studies, Lakkar bazaar, Kalka to Shimla railway track, Mashobra, Fagu and Chail.

It is the fact that in the age of LPG, the tourism is gaining popularity at the global level. So, it is imperative to undertake and evaluate the different work conducted so far and works published in academic and non-academic journals, reference books and various other research need to be reviewed and acknowledged. The following is a review of some recent research work done in the field of tourism.

Naidoo Perunjodi (2011) [2] made a study to identify the factors that influence visitor satisfaction with Nature-based tourism attractions. He also tried to analyze the relationship between nature-based tourism attractions, overall satisfaction, and visitor loyalty. Satisfaction level of tourists was measured using a well-structured questionnaire. Convenience sampling was used for the selection of the attractions. Data was collected from the on-site survey method with a sample size of 600. He found that there is a relationship between nature-based tourism attractions, overall satisfaction, and visitors' loyalty intentions. It was also found that visitors' satisfaction plays an important role in enhancing visitors' loyalty intentions. At last, he suggested that to remain competitive, NBTA in Mauritius should satisfy first-time visitors so that they recommend the attraction to others. Parmar Jai Singh (2012) [3] in his research paper on "Tourism Development in Himachal Pradesh: Emerging Dimensions" has attempted to assess the trend of tourist inflow, assessment of the facilities available to the tourists in various tourist destinations of Himachal Pradesh. He also tried to analyze the attitude of the domestic and international tourists towards these facilities. He suggested that adequate accommodation and catering management need to be strengthened in these tourist destinations. More tourism reception centers need to be identified and organized with the objectives to cater the budget and high-class tourists traveling by road to visit different locations. Sukiman Mohd Fauzi et al. (2013) [4] conducted a study to measure tourist's satisfaction among international and domestic visitors while setting out for the occasion in Pahang, Malaysia. They used Holiday Satisfaction model HOLSAT in order to determine the gap between tourist's expectations and experiences. For this purpose, the expectations, and experiences of tourist's were based on 47 positive and negative attributes that were grouped into six categories namely; accessibility, accommodation, tourist activities, tourist amenities, meal, and tourist attractions. They concluded that global tourists were satisfied with the availability of tourism brochure in English but they were dissatisfied with the usage of these brochures among local people at the destinations which has been classified as poor. It was suggested that it is important for service providers like hotels, ticketing companies, travel agents, and tourist information centers in Pahang to recruit the front liner effectively for better hospitality and services for tourists. Chadha Nikita & Bhagti Heera (2014) [5] has concluded that Tourism is highly desirable to most hill stations because by attracting and serving visitors the destination can earn income from other parts of the country and globe. Shimla has many places of tourist interest. In order to mass attractive and friendly environment for tourism, it is essential to provide various facilities provided to them and also to understand and appreciate the historical and Confluence of current reasons for Tourist attraction. Das Pranab Kr. (2014) [6] made a study on "Mass Tourism & Environ- Infrastructural Crises of Shimla City: A Case Study" and found that the rapid urbanization, the uncontrolled practice of mass tourism and related urban-centric activities are responsible for the ecological and infrastructural debasement of Shimla. He suggested that tourism should be practiced in such a way that beauty and charm of the city should not be affected. Gupta Jeena (2015) [7] in her research paper on "Tourism in Himachal Pradesh: A Study of Kullu Manali" tried to study the facilities provided to the tourist and organized a SWOT analysis to collect in-depth information of tourism potential in Himachal Pradesh. It was concluded that Kullu district in Himachal Pradesh still has large unexploited tourism potential. The state govt should give high priority for the provision of wayside amenities like cafeterias, parks, information center, public convenience through the private sector and through public and private partnership (PPP). Sharma Pankaj & Parkash Ravi (2016) [8] has highlighted the very causes of customer dissatisfaction especially in case of three-star hotels in Shimla. The data was collected from direct personnel investigation and telephonic interviews. They concluded that the problems can be solved by revising pricing of the menu, maintaining proper hygienic conditions and provisioning of food which is more nutritious and healthier.

Objectives of the Study:

- 1. To evaluate the level of tourists' satisfaction with regards to existing tourism facilities in Shimla.
- 2. To identify the problems experienced by the tourists and to advance the suggestions for tackling the problems.

2. RESEARCH METHODOLOGY

Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically. In it we study the various steps that are generally adopted by a researcher in

studying his research problem along with the logic behind them. [9] In Himachal Pradesh tourism is the main source of revenue, after agriculture. Tourism is a major source of generating employment and income avenues in the state. Himachal Pradesh Government has declared tourism as an industry and provided subsidy along with some financial aid. Himachal Pradesh has great tourism potential with tourist resorts of different cultural background in all of its twelve districts. So, there is an urgent need to undertake a careful planning for the development of tourism industry in the state. After going through many texts on this matter, it was discussed that bulk of studies conducted so far analyze the performance of tourism development but no serious attempt has been made to explore the causes behind the stagnation of tourism development in the state of Himachal Pradesh. Moreover, there are certain basic questions which are unanswered in these studies. What is the satisfaction level of tourists? What are the problems faced by the tourists? What are the opinions of tourists regarding the development of Shimla on the basis of tourism? The development of tourism industry is the vital need at present, for this the facilities like accommodation, lodging, food and hoarding should be improved in much better way. Shimla is one of the most beautiful places to visit and also an important tourist destination from tourist point of view. Shimla has all facilities for tourist but sometimes there are problem during tourist peak season. Keeping in the view factor discussed above, the study of tourism, its role in the development of Shimla is essential. To study the satisfaction level of tourists in Shimla City the need of the present study has been raised. This study makes the effective contribution in achieving the objectives to improve the resources for the promotion of tourism in Shimla City. The study is based on both primary as well as secondary sources. On the basis of literature review a pilot survey was conducted. A total of 40 respondents were strategically selected to conduct the pilot survey in different destinations in Shimla. A reliability test has been done. On the basis of factors identified in the pilot study stage, a structured questionnaire has been constructed on Likert 3-point scale to conduct a survey. Besides, the secondary sources including various publications, research papers in journals, magazines and periodicals have been consulted for the present study. The data collected from different sources has been classified and arranged in tables in one or more forms according to the requirement of analysis. For the analysis of results, the mathematical tools viz. percentage has been used to analyze the collected data. Chi-square test has also been applied to study the relationship between the quantity variables and for analyzing the opinion of the

3. RESULTS AND DISCUSSION

The following paras present the analysis and interpretation of primary data which is collected with the help of questionnaire. The study is based on the sample of 134. Interpretation is based on descriptive and analytical study of collected data aiming at the attainment of study objectives. Himachal Pradesh has many places that have been always the main attraction of tourist from all over the world to visit this beautiful state. Shimla and its nearby areas have been main attractions for the tourists. Both domestic and foreign tourists come here. Shimla City has been made to cover demographic feature of tourists, purpose of their visit, accommodation facilities, transport facilities, the attitude of tourist towards these facilities, the problem faced by tourist during their stay, impact of tourism on general public and so on.

a) Demographic profile of the study area:

respondents regarding different factors.

The study was conducted in Shimla district of Himachal Pradesh. The following section mainly focuses on the demographic characteristics of the study area in terms of age, sex, marital status and income.

Percent Age Frequency Below25 27 20.1 25 to 35 39 29.1 35 to 45 28 20.9 29.9 Above 45 40 Total 134 100.0

Table 1: Profile of respondents on the basis of age

Source: Field Survey.

International Journal of Recent Research in Commerce Economics and Management (IJRRCEM)

Vol. 5, Issue 4, pp: (42-50), Month: October - December 2018, Available at: www.paperpublications.org

Table 2: Profile of respondents on the basis of Sex

Sex	Frequency	Percent	
Male	66	49.3	
Female	68	50.7	
Total	134	100	

Source: Field Survey.

Table 3: Profile of respondents on the basis of marital status

Marital status	Frequency	Percent
Married	84	62.7
Unmarried	50	37.3
Total	134	100

Source: Field Survey.

Table 4: Profile of respondents on the basis of Income

Yearly Income	Frequency	Percent	
100,000 to 300,000	26	19.4	
300,000 to 600,000	42	31.3	
600,000 to 900,000	38	28.4	
900,000 and above	28	20.9	
Total	134	100	

Source: Field Survey.

b) Relation of dependent variables with independent variables

Table 5: Classification of tourist on the basis of income and dislike the most during visit to Shimla

Yearly Income of	Dislike the Most During Visit to Shimla					Total
Tourists	pollution	traffic	crowd	lack of facilities	poor road conditions	
1,00,000 to 3,00,000	4 (3.0)	7 (5.2)	6 (4.5)	6 (4.5)	3 (2.2)	26 (19.4)
3,00,000 to 6,00,000	10 (7.5)	22 (16.4)	1 (0.7)	2 (1.5)	7 (5.2)	42 (31.3)
6,00,000 to 9,00,000	4 (3.0)	13 (9.7)	5 (3.7)	10 (7.5)	6 (4.5)	38 (28.4
Above 9,00,000	2 (1.5)	12 (9.0)	8 (6.0)	3 (2.2)	3(2.2)	28 (20.9)
Total	20 (14.9)	54 (40.3)	20 (14.9)	21 (15.7)	19 (14.2)	134 (100.0)

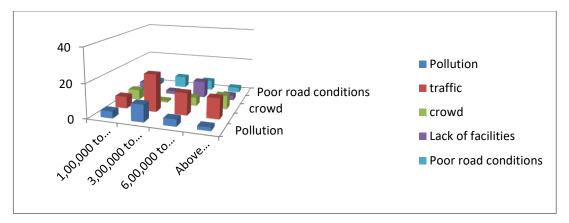
Source: Data collected through questionnaire.

Note: - Figure in parenthesis indicates percentage.

 X^2 : -23.987

P: -0.020

DF: -12



It has been observed from the table no 5 that among the income group 100,000 to 300,000; 3.0% tourists dislike the pollution they experience during their visit to Shimla, 5.2% tourists dislike the traffic they experience during their visit to Shimla.4.5% tourists dislike the crowd they experience during their visit to Shimla, 4.5% tourists dislike the lack of facilities they experience during their visit to shimla.2.2 % tourists dislike the poor road conditions the experience during their visit to Shimla. Among the income group 300,000 to 600,000; 7.5% tourists dislike the pollution they experience during their visit to Shimla, 16.4% tourists dislike the traffic they experience during their visit to Shimla.0.7% tourists dislike the crowd they experience during their visit to Shimla, 1.5% tourists dislike the lack of facilities they experience during their visit to shimla, 5.2 % tourists dislike the poor road conditions the experience during their visit to Shimla. Among the income group 600,000 to 900,000; 3.0% tourists dislike the pollution they experience during their visit to Shimla, 9.7% tourists dislike the traffic they experience during their visit to Shimla.3.7% tourists dislike the crowd they experience during their visit to Shimla, 7.5% tourists dislike the lack of facilities they experience during their visit to shimla.4.5 % tourists dislike the poor road conditions the experience during their visit to Shimla. Income Above 900,000; 1.5% tourists dislike the pollution they experience during their visit to Shimla, 9.0% tourists dislike the traffic they experience during their visit to Shimla6.0% tourists dislike the crowd they experience during their visit to Shimla, 2.2% tourists dislike the lack of facilities they experience during their visit to shimla.2.2 % tourists dislike the poor road conditions the experience during their visit to Shimla.

The calculated value of Chi-square is 23.987at 5% level of significance which is more than the table value 19.7. The results are significant it rejects the null hypothesis. There is significant relationship between dislike the most and income of the respondents. It can be concluded that majority of tourists with different income level dislike the traffic problem in Shimla.

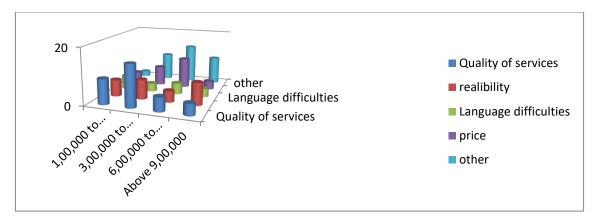
Table 6: Relationship between yearly income of tourists and challenging problems faced during their visit to Shimla

Yearly income of	Challenging Problems Faced During Visit to Shimla					
tourist	Quality of services	reliability	Language difficulties	price	other	
1,00,000 to 3,00,000	9 (6.7)	6 (4.5)	5 (3.7)	4 (3.0)	2 (1.5)	26 (19.4)
3,00,000 to 6,00,000	15 (11.2)	7 (5.2)	3 (2.2)	7 (5.2)	10 (7.5)	42 (31.3)
6,00,000 to 9,00,000	5 (3.7)	4 (3.0)	4 (3.0)	11 (8.2)	14 (10.4)	38(28.4)
Above 9,00,000	4 (3.0)	8 (6.0)	3 (2.2)	3 (2.2)	10 (7.5)	28 (20.9)
Total	33 (24.6)	25 (18.7)	15 (11.2)	25(18.7)	36 (26.9)	134(100.)

Source: Data collected through questionnaire.

Note: - Figure in parenthesis indicates percentage.

 X^2 : -20.985 P: -0.051 Df: -12



The classification of tourists on the basis of income and challenging problems faced during visit to Shimla has been given in the table no 6. It has been observed from the table that among the income level 1,00,000 to 3,00,000; 6.7% tourists faced quality of services as a challenging problem during their visit to Shimla, 4.5 % tourists faced reliability as a challenging problem during their visit to Shimla, 3.7% tourists faced language as a challenging problem during their visit to Shimla, 3.0% tourists faced price as a challenging problem and 1.5% tourists faced any other problem as a challenging problem during their visit to Shimla. Among the income level 3, 00,000 to 6, 00,000; 11.2% tourists faced quality of services as a challenging problem, 5.2% tourists faced reliability as a challenging problem, 2.2% tourists faced language as a challenging problem during their visit to Shimla. Similarly, among the income level 6,00,000 to 9,00,000; 3.7% tourists faced quality of services as a challenging problem, 3.0% tourists faced reliability as a challenging problem, 3.0% tourists faced language as a challenging problem during their visit to Shimla. Under category above 9, 00,000; 3.0% tourists faced quality of services as a challenging problem, 6.0% tourists faced reliability as a challenging problem, 2.2% tourists faced language as a challenging problem, 6.0% tourists faced reliability as a challenging problem, 2.2% tourists faced language as a challenging problem, 6.0% tourists faced reliability as a challenging problem, 2.2% tourists faced language as a challenging problem during their visit to Shimla.

The calculated value of Chi-square is 20.985 at 5% level of significance which is more than the table value 19.7 so it rejects the null hypothesis. It shows that here is significant relationship between income of the tourists and challenging problems. It is observed that tourists with different income level face quality of services, reliability, language and price as a challenging problem in Shimla. But majority of them faces some other problems.

Table 7: Classification of tourist on the basis of sex of tourist and purpose of visit

Sex Of Tourist	Purpose of visit						Total
	family vacation	adventure	business	Spiritual	educational	any other	
Male	33 (24.6)	13 (9.7)	10 (7.5)	8 (6.0)	2 (1.5)	0 (0.0)	66 (49.3)
Female	21 (15.7)	15 (11.2)	3 (2.2)	12 (9.0)	11 (8.2)	6 (4.5)	68 (50.7)
Total	54 (40.3)	28 (20.9)	13 (9.7)	20 (14.9)	13 (9.7)	6 (4.5)	134 (100.0)

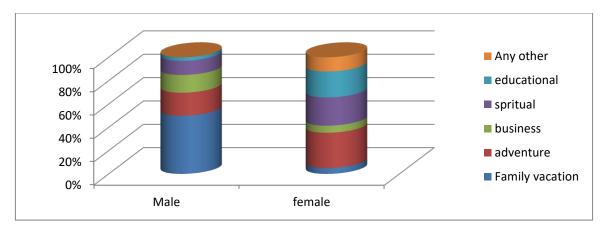
Source: - Data collected through questionnaire.

Note: - Figure in parenthesis indicates percentage.

 X^2 : - 19.584

P: -0.001

Df: -5



The breakup of tourists on the basis of sex purpose of their visit to Shimla is given in the table 7. The table reveals that 24.6% male tourists and 15.7% female tourist came for family vacation to Shimla, 9.7% male tourists and 11.2% female tourist came for adventure to Shimla, 7.5% male tourists and 2.2% female tourist came for business purpose to Shimla, 6.0% male tourists and 9.0% female tourist came for spiritual purpose to Shimla. The purpose of visit to Shimla of 1.5% male tourists and 8.2% female tourists was educational and 4.5% female tourist also came for any other purpose.

The calculated value of Chi-square is 19.584 at 5% significance level which is more than the table value 11.1 and it rejects the null hypothesis. So, there is significant relationship between these two variables i.e. sex of the tourists and purpose of visit to Shimla. It can be concluded that majority of male and female tourists came Shimla for family vacation.

Particular High Moderate Low **Total** Mean S.D. tourism promotional facility 50 68 16 134 like entertainment 2.2537 .65679 facility in Shimla tourism promotional facility like tourism information 54 63 17 134 2.2761 .67603 facility in Shimla tourism promotional facility like telecommunication 67 26 134 2.1119 .70081 tourism promotional facility like maintenance of 41 51 42 134 2.0672 .83349 tourist spot

Table 8: Views regarding tourism promotional facilities in Shimla

Source: Data collected through questionnaire

Entertainment Facilities: Entertainment facilities like cinema hell, picnic spot and tourist destinations are accessible in Shimla district. 50 respondents are highly satisfied while 68 respondents are moderate and 16 respondents do not satisfy at all with the entertainment facilities. The mean value is 2.2537 and standard deviation is .65679.

Tourism Information Facilities: Tourism facilities in Shimla are moderate as there is tourism department office in Shimla district. As 54 respondents agree to large extent that tourism facilities are very good in Shimla while 63 respondents agree to some extent with the statement and 17 respondents do not agree with the statement. The Mean value is 2.2761 and Standard deviation is .67603.

Telecommunication Facilities: Different respondents have different views about the telecommunication facilities in Shimla. As 41 respondents say there is very good telecommunication facilities while 67 respondents agree to some extent and 26 respondents do not agree with the statement. The mean value is 2.1119 and S.D. is .70081.

Maintenance of Tourist Spots: It is observed from the table 8 that respondents have different views about maintenance of tourist spot in Shimla. As 51 respondents say there is very good maintenance of tourist spots while 41 respondents agree to some extent and 41 respondents do not agree with the statement. The mean value is 2.0672 and S.D. is .83349.

4. FINDINGS

- The study found that 81.5% domestic tourists and 18.5% foreign tourists visited Himachal Pradesh for family vacations. There is no significant difference in the opinion of domestic and foreign visitors with regard to their purpose of visit.
- The study reveals that 19.4% tourists falls under the income level 1 to 3 lac. And 31.3 % falls under category 3 to 6 lac, 28.4% falls under category 6 to 9 lack and 20.9% falls under category above 9 lacks. It is found that majority of tourists those come to Shimla falls under the income category 6 to 9 lac.
- It is observed from the study that majority of married tourists visited to Shimla as 62.7% of respondents were married and 37.3% were unmarried.
- The study also reveals that majority of tourists are not highly satisfied with public transportation, parking and banking and medical facilities in Shimla as majority of respondents found it average.
- From the study, it is observed that out of 134 respondents, 47 respondents are highly satisfied with restaurants, bars and cafes of Shimla, 56 respondents are satisfied with restaurants, bars and cafes of Shimla and 31 respondents are not satisfied. So, it can be concluded that majority of respondents are satisfied with restaurants, bars and cafes of Shimla.
- The study reveals that tourists with different age groups are highly satisfied with behavior of shopkeepers in Shimla as 42.5% respondents strongly agree with it.
- From the study, it can be concluded that hotels in Shimla are business minded as majority of respondents strongly agree with it.
- It is observed from the study that majority of female tourists dislike the traffic problem in Shimla as 20.9% female respondents agree with it.
- The study also reveals that tourists with age group above 45 found no crime and cheating in Shimla as from all the age group of respondents, majority of respondents with age group above 45 do not agree with it.

5. SUGGESTIONS

- The tourism department and the Himachal Pradesh government should organize different trade fairs where local culture should be propagated among themselves along with the outsiders.
- Himachal Pradesh government should provide concession on tax on opening up of new hotels for few years to promote the tourism related facilities in Shimla.
- New modes of transportation like Heli taxi, low cost taxi services and electronic buses should be initiated that can reduce the time and cost of travelling to Shimla and they will be environment friendly as well.
- Various tourism promotional facilities like entertainment facility, parks, telecommunication and maintenance of tourist spots should be promoted.
- Government should promote creation of new tourist destinations in potential tourism regions which will further increase the number of visitors or tourists.
- Basic necessities like water availability, toilet facility and quality food in hotels must be provided.
- Government should take all possible measures to reduce the Pollution which is affecting the society as well as the natural beauty of this beautiful state.
- There is also need for the improvement of parking facilities in Shimla.

REFERENCES

- [1] https://www.scribd.com/document/190073239/06-Chapter-1 p. 22-23.
- [2] Naidoo, P. (2011). An assessment of visitor satisfaction with nature-based tourism attractions. *International journal of management and marketing research*, 4(1), 87-98.

- [3] Parmar, J. S. (2012). Tourism Development in Himachal Pradesh: Emerging Dimensions. *International Journal of Hospitality & Tourism Systems*, 5(1), 66-76.
- [4] Sukiman, M. F., Omar S. I., Muhibudin, M., Yussof, I. and Mohamed, B. (2013). Tourist Satisfaction as the Key to Destination Survival in Pahang. *Procedia Social and Behavioral Sciences*, 91, 78-87.
- [5] Chadha, N. & Bhagti, H. (2014). A Study of Tourist Satisfaction in Shimla City. *Confluence of Knowledge*, 2(3), 39-47.
- [6] Das, P. Kr. (2014). Mass Tourism & Environ- Infrastructural Crises of Shimla City: A Case Study. *International Journal of Science and Research*, 3(11), 1781-1790.
- [7] Gupta, J. (2015). Tourism in Himachal Pradesh: A Study of Kullu Manali. *International Journal of Engineering Research & Management Technology*, 2(3), 183-191.
- [8] Sharma, P. & Parkash, R. (2016). Customer Satisfaction: Evaluation of Three Star Category Hotels in Shimla. *International Journal of Engineering, Pure and Applied Sciences*, 1(2), 1-4.
- [9] Kothari, C.R. & Garg, G. (2019). *Research Methodology- Methods and Techniques* (4th ed.). New Delhi: new age international (p) limited, p-7.
- [10] Balokhra, "The Wonderland of Himachal Pradesh", HG publication, New Delhi p-23.
- [11] www.wikipedia.com
- [12] www.himachaleducation.net/commerce
- [13] www.commerce.gov/Careers/StudentCareerOpportunities/index.html
- [14] Wikipedia.org/wiki/Higher_education_in_India
- [15] www.mapsofindia.com/top_10_colleges_of_commerce_in_India
- [16] www.academia.edu.com
- [17] Rust and Oliver (1984), "New Educational Service Product Offering Model" chapter 5, P. No 98.
- [18] Gupta, S.P. (2001). Statistical Method, Sultan Chand and Sons, New Delhi.