

Index of Destination Attractiveness: a Quantitative Approach for Measuring Tourism Attractiveness

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Received: Jun 2020 | Accepted: November 2020

DOI: 10.5937/turizam25-27235

Abstract

The common perceptions about tourist destinations often hold even in the absence of facts and evidences. This research is an attempt to analyze the ground behind generic perceptions about tourism attractiveness of Kashmir valley. This has been done through primary survey of most important stakeholders; the visiting tourists. The data collected from 370 tourists has been used to deconstruct tourism attractiveness into different parameters and an Index of Destination Attractiveness has been prepared to understand the importance of each parameter to overall attractiveness. The evidences support the common perception that natural attractions play very important role in tourism attractiveness of valley but valley lacks other tourism motivators and falls short on most of the hygiene factors. These findings can be used to increase the attractiveness of valley by working on weak areas and the Index developed for the study can be used as a standard tool for continuous monitoring of attractiveness.

Keywords: Kashmir valley, Tourism attractiveness, Tourists' perception, Index of Destination Attractiveness, Motivation and Hygiene in tourism

Introduction

Tourism attractiveness of a destination is often considered to be one of the key determinants of its tourism pull. It reflects feelings, opinions, and perceptions of tourists about the destination's perceived ability to satisfy a vacation need (Hu, Ritchie, 1993; Mayo, Jarvis, 1981). Attractiveness displays the special features of a destination that makes it attractive to tourists (Cho, 2008). While, researchers found it dependent on the availability of resources and perceived values of these resources (Formica, Uysal, 2006). The concept relates to the destination image and influences the destination image (Fakeye, Crompton, 1991; Krešić, Prebežac, 2011; Zhou, 2005). Tourism attractiveness stems from the natural and man-made features. Researchers identified primary and secondary features behind the attractiveness of the destination (Morachat, 2003; Laws, 1995). Nature, culture, and traditional architecture were considered primary features and tourism infrastructure such as accommodation, transport, tourist services and facilities

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as secondary features. Various studies drew an analogy from Herzberg's theory of motivation and equated primary features into motivating factors and secondary features into hygiene factors and both were considered equally important for attractiveness of destination (Crompton, 2003; Jensen, 2007; Tkaczynski, Thiele, 2013).

The existing studies on tourism destination attractiveness posit the need for a consistent enquiry into the evolving measures of tourism attractiveness, forces behind these measures, and getting a workable measure with practical application. This research paper is an attempt to conduct an enquiry on these lines in the context of Kashmir valley in India which is a popular tourist place in north India and its natural beauty is commonly perceived to that of Switzerland. The reality of this common perception and its association with tourism attractiveness has not been studied and this study is an attempt to fill this gap by developing an Index of Destination Attractiveness (IDA) that can evolve and be used regularly. The main research query was addressed through the following research objectives;

1. Identification of the factors of tourism attractiveness of Kashmir valley
2. Finding the attractiveness level of the Kashmir valley on the identified factors
3. Designing a tourism attractiveness index of Kashmir valley
4. To get insight into the possible course of actions for improving the attractiveness of different factors and overall attractiveness

Study site description

Kashmir valley a popular tourist attraction in northern India Himalayas having boundaries with China and Pakistan. Sixteenth century European traveler Bernier described "Kashmir paradise of Indies" (Lawrence, 1895). The Government of India crowned it as "Switzerland of India" (Chaudhary, 2010). The valley holds rich natural and cultural resources and the main attractions are mountains, snow, gardens, pastures, wildlife, water bodies, handicrafts, and religion (Bhat, Shyju, 2014; Chaudhary, Islam, 2020; Ganie, Dar, 2020). The location and natural beauty of Kashmir have made it a world-famous tourist destination and has a huge market for niche tourism (IBEF, 2017).

Kashmir valley has undergone tremendous changes since the 16th century in terms of its social, cultural, political, and religious environment. The destination choice set of Indian and foreign tourists has expanded due to easy access to global destinations and these mobile and experienced tourists perceive a destination on a relative scale creating a need for updated narrative on the attractiveness of Kashmir valley in today's context.

Literature Review

The available literature on tourism attractiveness has theoretical and managerial connotations. It deals with the abstract, fluid, and ever-evolving concept and constructs of attractiveness. The role of attractiveness in tourism has been researched with a focus on quantification of measurement of attractiveness for practical purposes.

The concept of tourism attractiveness is abstract in nature though its measurement assists destination managers in comparing destinations and their competitiveness (Dupeyras, MacCallum, 2013; Gearing et. al., 1974). Tourism attractiveness measurement facilitates in identifying and strengthening the poor elements of destinations (Bhat, Malik, 2015; Chaudhary et al., 2017; Edward, George, 2008; Kumar, Dar 2017).

Attractiveness in tourism is multidimensional. Earlier divided into five dimensions namely natural, social, historical, recreational, and infrastructural features (Gearing et al., 1974). These were later extended to seven dimensions with the addition of price levels and visitor's satisfaction (Dupeyras, MacCallum, 2013; Ritchie, Zins, 1978). Three methods have been adopted to study these constructs; demand side (Blazeska et al., 2015; Hu, Ritchie, 1993; Kim, 1998; Morachat, 2003; Pompurová, Šimočková, 2014; Reitsamer et al., 2016; Vengesayi et al., 2009) supply-side (Kaur, 1981; Smith, 1987) and mix method (Castro et al., 2015; Edward, George, 2008; Formica, Uysal, 2006; Paul, 2017). However, the demand-side method is considered the most effective and used method to judge the quality of attractiveness (Blazeska et al., 2015).

The use of multiple constructs to measure destination attractiveness led to the development of a single Index of Destination Attractiveness (IDA). The purpose of IDA is to merge several interrelated measures into a single measure (Smith, 1987). Krešić, Prebezac (2011) proposed an index for measuring tourism attractiveness.

IDA helps in the quantification of attractiveness by measuring the attractiveness of each attraction individually and then merging these values into aggregate values (Krešić, Prebezac, 2011). The designing of an attractiveness index model requires identification of indicators that motivate tourists (Cugno et al., 2012). Identification of touristic pull factors and converting them into measurable units was found difficult (Mukhopadhyay, 2011). Indexing attractiveness has received adequate attention in academic research but it is yet to be used as a managerial technique to consistently track and improve destinations.

The review of literature on destination attractiveness leads to the following inferences;

1. Tourism attractiveness is an evolving measure
2. Factors of tourism attractiveness are destination specific and change with time
3. Tourism attractiveness can depend upon the experiences and attitudes of tourists
4. Tourism attractiveness can be built based on consistent inputs on different factors of attractiveness from different stakeholders
5. The tools and methods of measurement of tourism attractiveness require are not varied and non-comparable.

The above inferences form the basis of enquiry for this paper and an attempt has been made to find the gaps between the generic perceptions about tourism attractiveness of Kashmir valley and perceptions of tourists visiting Kashmir valley and this in situ study to develop a measure of attractiveness. Kashmir valley is commonly perceived parallel in natural beauty to Switzerland however no study is available to link this perceived beauty to tourism attractiveness. This makes the concept of tourism attractiveness an interesting subject of study for the valley.

Methodology

The tourism attractiveness of Kashmir valley has been assessed based on perceptions of visiting tourists during their stay in Kashmir. The perceptions have been captured through primary data collected with the help of the questionnaire on the selected parameters. These parameters were selected considering these as influencing factors for attractiveness based on past studies Castrol et al. (2015), Das et al. (2007), Krešić, Prebezac, (2011), Kim (1998), Morachat (2003), Sharma (2016) and discussion with tourism experts. In all 39 parameters were chosen and responses of tourists were collected on a five-point Likert type scale using endpoint descriptions of very low (1) to very high (5). The questionnaire was pretested on 50 tourists in the summer of 2018 and

was validated. The final questionnaire was used to collect data in two seasons; winters of 2018 and summers of 2019 to avoid the impact of seasonality and other events on tourists' perceptions. The respondents were approached at popular tourist sites of Srinagar, Gulmarg, Pahalgam, and Sonmarg. Tourists were also approached at Srinagar international airport. Each respondent was approached personally by the researcher and was briefed on the importance of study and the value of feedback before getting the questionnaire filled to ensure effective answers. In all 400 questionnaires were got filled out of which 370 (92.5%) were found usable.

Results

Descriptive analysis

Descriptive analysis has been used to know the demographic profile of 370 tourists and is presented in Table 1.

Table 1. *Tourists profile*

Variables		Number	Percent
Gender	Male	205	55.4
	Female	165	44.6
Age	Below 20	32	8.6
	21-35	199	53.8
	36-50	98	26.5
	51-65	33	8.9
	above 65	8	2.2
Marital status	Married	218	58.9
	Unmarried	152	49.1
Qualification	Below graduate	53	14.3
	Graduate	164	44.3
	Post graduate	142	38.4
	Other	11	3.0
Nationality	Indian	201	54.3
	Foreign	169	45.7

The demographic analysis of tourists showed male (55.4%), married (58.9%), graduates (44.3%), age group of 21-35 (53.8%) tourists in the majority. The domestic tourists were 54.3 percent while international tourists represented 45.7 percent.

Exploratory factor analysis

The data on different factors of attractiveness was tested before further analysis. Exploratory factor analysis (EFA) was run to extract the dimensionality of tourism attractiveness. The results of this step showed KMO of 0.865 and significant Bartlett's test of sphericity at 0.001. The KMO above recommended level indicates that data is appropriate for further analysis (Kothari, Garg, 2014; Malhotra, Briks, 2006).

Table 2. EFA results

Variables	FAC1	FAC2	FAC3	FAC4	FAC5	FAC6	FAC7	FAC8	FAC9	FAC10	FAC11
X1-Transportation cleanliness	0.798	0.079	0.258	0.050	0.044	0.072	-0.046	0.124	0.118	0.031	0.029
X2-Sites cleanliness	0.783	0.019	0.180	0.092	0.127	0.091	-0.085	0.077	0.077	0.052	0.087
X3-food cleanliness	0.737	0.169	0.163	0.084	0.037	0.215	-0.005	0.000	0.074	-0.025	0.023
X4-Accommdaion cleanliness	0.703	0.170	0.079	0.331	0.120	0.152	-0.047	-0.012	-0.025	0.046	-0.096
X5-F&B quality	0.119	0.811	0.118	0.117	0.128	0.082	-0.015	0.059	0.026	0.021	0.051
X6-F&B varieties	0.078	0.752	0.201	0.218	0.111	0.194	-0.124	0.041	0.034	0.022	0.028
X7-Local food	0.062	0.737	0.018	0.023	0.021	0.062	-0.023	0.328	0.087	-0.009	0.047
X8-customer support	0.205	0.611	0.231	0.249	0.124	0.089	0.047	0.135	0.163	0.105	-0.023
X9-Hospitality	0.099	0.433	0.114	0.285	0.079	0.183	0.112	0.196	0.114	0.095	-0.023
X10-Inside transport	0.217	0.118	0.814	0.145	0.072	0.155	0.005	0.087	0.076	0.072	0.066
X11-Accessibility over world	0.239	0.101	0.706	0.086	0.043	0.206	0.058	0.141	0.104	.0000	0.013
X12-Transport quality	0.250	0.217	0.701	0.058	0.041	0.108	0.115	0.047	0.166	0.197	0.042
X13-Road signage's	0.273	0.179	0.646	0.020	0.130	0.040	0.267	0.001	0.142	0.070	0.036
X14-Shopping	0.177	0.024	0.443	0.388	0.219	0.160	0.112	0.217	0.019	0.085	0.186
X15-Accommdation varieties	0.130	0.180	0.120	0.787	0.060	0.058	0.060	0.090	0.057	0.216	0.004
16-Accommodation quality	0.283	0.274	0.067	0.738	0.053	0.090	0.117	-0.002	0.039	0.036	0.002
X17Accommodation location	0.180	0.134	0.074	0.735	0.123	0.052	0.025	0.204	0.043	0.131	0.061
X18-Recreational activities	0.055	0.158	0.387	0.404	0.276	0.121	0.045	0.114	0.290	0.141	0.111
X19-Pahalgam	0.039	0.043	0.112	0.063	0.833	-0.004	0.025	0.014	0.095	0.080	-0.002
X20-Sonmarg	0.086	0.051	0.048	0.115	0.800	0.052	-0.025	0.073	-0.010	0.058	0.123
X21-Gulmarg	0.044	0.204	0.169	0.004	0.777	0.039	-0.064	-0.075	0.036	0.169	-0.087
X22-Srinagar	0.138	0.185	0.041	0.095	0.611	0.140	-0.071	0.106	0.030	0.079	0.102
X23-Cellular services	0.130	0.091	0.142	0.065	0.041	0.843	-0.118	-0.029	0.135	-0.017	0.049
X24-Internet services	0.080	0.212	0.127	0.013	0.094	0.782	0.150	0.031	0.243	0.059	0.003
X25-Banking- ATM	0.302	0.138	0.174	0.118	0.099	0.626	0.066	0.062	0.064	0.100	0.072
X26-Toilets-washrooms	0.347	0.110	0.223	0.222	0.049	0.452	0.096	-0.039	0.203	0.073	0.232
X27-F&B Cost*	-0.094	0.245	0.061	0.025	0.024	-0.026	0.722	0.043	-0.095	-0.049	-0.103
X28- Transport cost *	-0.050	0.020	0.265	0.102	0.077	-0.062	0.716	-0.145	-0.093	0.003	-0.065
X29-Accommodation cost*	0.058	0.025	0.021	0.321	0.007	0.095	0.689	0.014	-0.040	0.066	0.018
X30-Prices of tours *	0.067	0.257	0.002	0.002	0.090	-0.229	0.634	-0.088	0.136	-0.070	-0.070
X31-Handicrafts	0.021	0.111	0.116	0.233	0.003	-0.045	0.058	0.748	-0.029	0.020	0.159
X32-Costume	0.057	0.310	0.010	0.086	0.081	0.081	-0.048	0.670	0.019	0.119	-0.002
X33-Monuments	0.133	0.110	0.178	0.002	0.038	-0.007	-0.168	0.663	0.141	0.042	-0.131
X34-Information centers	0.111	0.110	0.154	0.093	0.097	0.203	-0.050	0.033	0.826	0.058	0.083
X35-Licensed guides	0.133	0.127	0.205	0.077	0.025	0.244	-0.048	0.086	0.783	0.018	0.031
X36-Climatic pleasantness	0.018	0.024	0.156	0.109	0.127	0.038	-0.065	0.093	-0.054	0.772	0.012
X37-Natural beauty	0.057	0.138	0.000	0.145	0.205	-0.019	0.035	0.055	0.112	0.742	0.026

Variables	FAC1	FAC2	FAC3	FAC4	FAC5	FAC6	FAC7	FAC8	FAC9	FAC10	FAC11
X38-Sightseeing opportunities	0.012	0.019	0.012	0.109	0.038	0.081	-0.069	-0.020	-0.036	0.059	0.893
X39-Heritage walk	0.088	0.081	0.205	0.091	0.148	0.070	0.198	0.080	0.334	0.047	0.593
Eigen values	3.114	3.113	3.105	2.719	2.703	2.438	2.222	1.866	1.849	1.417	1.397
Variance explained	24.661	6.598	6.064	5.236	4.743	4.057	3.794	3.194	2.866	2.751	2.606

**Inverse coded*

The factor loading is suppressed by 0.50 (Cerit, 2000; Hair et al., 2010; Pantouvakis, 2006; Smith, 1987). The loadings suggest that no item is required to delete as loadings of all items were greater than 0.50. Eleven factors were extracted with Eigen values greater than 1. In all eleven factors explained 66.5 percent of the variance. The factors of tourism attractiveness are presented in Table 2 with their loadings, Eigen values, and percentage of variance explained.

The eleven factors have been used to prepare the Index of Destination Attractiveness (IDA) based on their weightings presented in Table 3.

Table 3. Factor and variables weightings

Variable	FAC1	FAC2	FAC3	FAC4	FAC5	FAC6	FAC7	FAC8	FAC9	FAC10	FAC11
X1	0.20	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00
X2	0.20	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
X3	0.17	0.01	0.01	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00
X4	0.16	0.01	0.00	0.04	0.01	0.01	0.00	0.00	0.00	0.00	0.01
X5	0.00	0.21	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
X6	0.00	0.18	0.01	0.02	0.00	0.02	0.01	0.00	0.00	0.00	0.00
X7	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00
X8	0.01	0.12	0.02	0.02	0.01	0.00	0.00	0.01	0.01	0.01	0.00
X9	0.00	0.06	0.00	0.03	0.00	0.01	0.01	0.02	0.01	0.01	0.00
X10	0.02	0.00	0.21	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
X11	0.02	0.00	0.16	0.00	0.00	0.02	0.00	0.01	0.01	0.00	0.00
X12	0.02	0.02	0.16	0.00	0.00	0.00	0.01	0.00	0.01	0.03	0.00
X13	0.02	0.01	0.13	0.00	0.01	0.00	0.03	0.00	0.01	0.00	0.00
X14	0.01	0.00	0.06	0.06	0.02	0.01	0.01	0.03	0.00	0.01	0.02
X15	0.01	0.01	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.03	0.00
X16	0.03	0.02	0.00	0.20	0.00	0.00	0.01	0.00	0.00	0.00	0.00
X17	0.01	0.01	0.00	0.20	0.01	0.00	0.00	0.02	0.00	0.01	0.00
X18	0.00	0.01	0.05	0.06	0.03	0.01	0.00	0.01	0.05	0.01	0.01
X19	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00
X20	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.00	0.00	0.00	0.01
X21	0.00	0.01	0.01	0.00	0.22	0.00	0.00	0.00	0.00	0.02	0.01
X22	0.01	0.01	0.00	0.00	0.14	0.01	0.00	0.01	0.00	0.00	0.01
X23	0.01	0.00	0.01	0.00	0.00	0.29	0.01	0.00	0.01	0.00	0.00

Variable	FAC1	FAC2	FAC3	FAC4	FAC5	FAC6	FAC7	FAC8	FAC9	FAC10	FAC11
X24	0.00	0.01	0.01	0.00	0.00	0.25	0.01	0.00	0.03	0.00	0.00
X25	0.03	0.01	0.01	0.01	0.00	0.16	0.00	0.00	0.00	0.01	0.00
X26	0.04	0.00	0.02	0.02	0.00	0.08	0.00	0.00	0.02	0.00	0.04
X27	0.00	0.02	0.00	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.01
X28	0.00	0.00	0.02	0.00	0.00	0.00	0.23	0.01	0.00	0.00	0.00
X29	0.00	0.00	0.00	0.04	0.00	0.00	0.21	0.00	0.00	0.00	0.00
X30	0.00	0.02	0.00	0.00	0.00	0.02	0.18	0.00	0.01	0.00	0.00
X31	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.30	0.00	0.00	0.02
X32	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.01	0.00
X33	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.24	0.01	0.00	0.01
X34	0.00	0.00	0.01	0.00	0.00	0.02	0.00	0.00	0.37	0.00	0.00
X35	0.01	0.01	0.01	0.00	0.00	0.02	0.00	0.00	0.33	0.00	0.00
X36	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.42	0.00
X37	0.00	0.01	0.00	0.01	0.02	0.00	0.00	0.00	0.01	0.39	0.00
X38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.57
X39	0.00	0.00	0.01	0.00	0.01	0.00	0.02	0.00	0.06	0.00	0.25
Total	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Factor weight	0.12	0.12	0.12	0.10	0.10	0.09	0.09	0.07	0.07	0.05	0.05

IDA is based on the assumption that the weights of variables under every factor should be equal to 1. The unrepresented weights are referred to as residuals. The residual allows the sum of correlated variables to be equal to 1. The IDA is calculated using the following formula;

$$\sum_{i=1}^n \alpha_i \cdot \bar{X}_i$$

Where, α_i indicates variable weight, \bar{X}_i is indicates the mean of the variable. The sum of weights; variables and factors should be equal to 1 (Krešić, Prebezac, 2011).

The weightings presented in Table 3 would be used to define the equations to prepare the attractiveness index value for every single factor and an aggregate attractiveness value for the Kashmir valley. The equations with the name of factors are defined below;

FAC1 (Hygiene and cleanliness)

$$= (\bar{X}_1 \cdot 0.20) + (\bar{X}_2 \cdot 0.20) + (\bar{X}_3 \cdot 0.17) + (\bar{X}_4 \cdot 0.16) + (\bar{X}_{f1} \cdot 0.27)$$

FAC2 (Food attractions)

$$= (\bar{X}_5 \cdot 0.21) + (\bar{X}_6 \cdot 0.18) + (\bar{X}_7 \cdot 0.17) + (\bar{X}_8 \cdot 0.12) + (\bar{X}_9 \cdot 0.06) + (\bar{X}_{f2} \cdot 0.26)$$

FAC3 (Transport facilities)

$$= (\bar{X}_{10} \cdot 0.21) + (\bar{X}_{11} \cdot 0.16) + (\bar{X}_{12} \cdot 0.16) + (\bar{X}_{13} \cdot 0.13) + (\bar{X}_{14} \cdot 0.06) + (\bar{X}_{f3} \cdot 0.28)$$

FAC₄ (Accommodation facilities)

$$= (\bar{X}_{15} \cdot 0.23) + (\bar{X}_{16} \cdot 0.20) + (\bar{X}_{17} \cdot 0.20) + (\bar{X}_{18} \cdot 0.06) + (\bar{X}_{f4} \cdot 0.31)$$

FAC₅ (Site attractions)

$$= (\bar{X}_{19} \cdot 0.26) + (\bar{X}_{20} \cdot 0.24) + (\bar{X}_{21} \cdot 0.22) + (\bar{X}_{22} \cdot 0.14) + (\bar{X}_{f5} \cdot 0.14)$$

FAC₆ (Communication facilities)

$$= (\bar{X}_{23} \cdot 0.29) + (\bar{X}_{24} \cdot 0.25) + (\bar{X}_{25} \cdot 0.16) + (\bar{X}_{26} \cdot 0.08) + (\bar{X}_{f6} \cdot 0.22)$$

FAC₇ (Cost)

$$= (\bar{X}_{27} \cdot 0.39) + (\bar{X}_{28} \cdot 0.23) + (\bar{X}_{29} \cdot 0.21) + (\bar{X}_{30} \cdot 0.18) + (\bar{X}_{f7} \cdot 0.15)$$

FAC₈ (Cultural attractions)

$$= (\bar{X}_{31} \cdot 0.30) + (\bar{X}_{32} \cdot 0.24) + (\bar{X}_{33} \cdot 0.24) + (\bar{X}_{f8} \cdot 0.22)$$

FAC₉ (Tourist amenities)

$$= (\bar{X}_{34} \cdot 0.37) + (\bar{X}_{35} \cdot 0.33) + (\bar{X}_{f9} \cdot 0.30)$$

FAC₁₀ (Natural attractions)

$$= (\bar{X}_{36} \cdot 0.42) + (\bar{X}_{37} \cdot 0.39) + (\bar{X}_{f10} \cdot 0.19)$$

FAC₁₁ (Tourist activity)

$$= (\bar{X}_{38} \cdot 0.57) + (\bar{X}_{39} \cdot 0.25) + (\bar{X}_{f11} \cdot 0.18)$$

IDA (Aggregate index destination attractiveness)

$$= (\text{FAC}_1 \cdot 0.12) + (\text{FAC}_2 \cdot 0.12) + (\text{FAC}_3 \cdot 0.12) + (\text{FAC}_4 \cdot 0.10) + (\text{FAC}_5 \cdot 0.10) + (\text{FAC}_6 \cdot 0.09) + (\text{FAC}_7 \cdot 0.09) + (\text{FAC}_8 \cdot 0.07) + (\text{FAC}_9 \cdot 0.07) + (\text{FAC}_{10} \cdot 0.05) + (\text{FAC}_{11} \cdot 0.05)$$

Index of Destination Attractiveness of Kashmir valley

The attractiveness index model for Kashmir valley is presented in Table 4. The aggregated IDA value of valley (3.363) is taken as a benchmark to judge the attractiveness of different factors.

Table 4. Attractiveness index for Kashmir

Factors and variables		Loadings		Mean	IDA values
		Variable	Factor		
1	2	3	4	5	6
FAC1	Hygiene and cleanliness		0.12		3.405
X1	At transportation	0.20		3.316	0.663
X2	At sites	0.20		3.397	0.679
X3	At food outlets	0.17		3.268	0.556
X4	At accommodation	0.16		3.662	0.586
F1	Residual	0.27		3.411	0.921
FAC2	Food attractions		0.12		3.576
X5	Food quality	0.21		3.538	0.743
X6	Food varieties	0.18		3.362	0.605
X7	Local food	0.17		3.554	0.604
X8	Customer support	0.12		3.646	0.438
X9	Hospitality	0.06		4.043	0.243
F2	Residual	0.26		3.629	0.944
FAC3	Transport facilities		0.12		3.318
X10	Inside transport	0.21		3.327	0.699
X11	Accessibility over world	0.16		3.243	0.519
X12	Quality of transport	0.16		3.372	0.540
X13	Road signage	0.13		3.268	0.425
X14	Shopping	0.06		3.418	0.205
F3	Residual	0.28		3.326	0.931
FAC4	Accommodation facilities		0.10		3.809
X15	Accommodation varieties	0.23		3.811	0.877
X16	Accommodation quality	0.20		3.756	0.751
X17	Accommodation location	0.20		3.970	0.794
X18	Recreational activities	0.06		3.584	0.215
F4	Residual	0.31		3.780	1.172
FAC5	Site attraction		0.10		4.009
X19	Pahalgam	0.26		3.970	1.032
X20	Sonmarg	0.24		3.900	0.936
X21	Gulmarg	0.22		4.235	0.932
X22	Srinagar	0.14		3.916	0.548
F5	Residual	0.14		4.005	0.561
FAC6	Communication facilities		0.09		2.687
X23	Cellular services	0.29		2.465	0.715
X24	Internet services	0.25		2.535	0.634
X25	Banking and ATMs	0.16		3.046	0.487
X26	Toilets and washrooms	0.08		2.962	0.237
F7	Residual	0.22		2.752	0.605
FAC7	Cost		0.09		2.699
X27	Food and beverage cost	0.23		2.659	0.612
X28	Transport cost	0.23		2.749	0.632
X29	Accommodation cost	0.21		2.597	0.545
X30	Prices of tours	0.18		2.803	0.505
F7	Residual	0.15		2.702	0.405
FAC8	Cultural attractions		0.07		3.680
X31	Handicrafts	0.30		3.803	1.141
X32	Costume	0.24		3.565	0.856
X33	Monuments	0.24		3.649	0.876
F8	Residual	0.22		3.672	0.808

Factors and variables		Loadings		Mean	IDA values
		Variable	Factor		
1	2	3	4	5	6
FAC9	Tourist amenities		0.07		2.998
X34	Information centers	0.37		3.016	1.116
X35	Licensed guides	0.33		2.978	0.983
F9	Residual	0.30		2.997	0.899
FAC10	Natural attractions		0.05		4.560
X36	Climatic pleasantness	0.42		4.378	1.839
X37	Natural beauty	0.39		4.768	1.860
F10	Residual	0.19		4.537	0.862
FAC11	Tourist activity		0.05		3.314
X38	Sightseeing opportunities	0.57		3.289	1.875
X39	Heritage walk	0.25		3.362	0.841
F11	Residual	0.18		3.326	0.599
Aggregated value for index destination attractiveness (IDA)					3.363

The index values suggest natural attractions and site attraction are rated high in terms of attractiveness. The IDA values for both factors are 4.560 and 4.009 respectively. Further, IDA value for factors such as accommodation facilities, cultural attractions, and food attractions is 3.809, 3.680, and 3.576 respectively. These factors are followed by hygiene and cleanliness (3.405) transport facilities (3.318) and tourists' activity (3.314). The IDA values were found low for tourist amenities (2.998), Cost (2.699), and communication facilities (2.687).

The identified factors and their IDA values have been used to know if these can be categorized as Motivators and Hygiene factors based on Herzberg classification as has been done in earlier studies (Crompton, 2003; Jensen, 2007; Tkaczynski, Rundle, 2013). The motivators have been identified based on earlier studies of touristic attractiveness and motivation (see Table 5).

Table 5. Classification of factors

Factor	Factors Name	IDA Value	Classification	Studies using motivators and hygiene
FAC10	Natural attractions	4.560	Motivator	Baloglu, Uysal, (1996); Jensen, (2007)
FAC5	Site attractions	4.009	Motivator	Lim et.al. (2015); Jensen, (2007); Sharma, (2016)
FAC4	Accommodation facilities	3.809	Hygiene	Crompton, (2003); Jensen, (2007); Vengesayi et.al. (2009)
FAC8	Cultural attractions	3.680	Motivator	Chaudhary, (2000); Crompton, (2003); Jensen, (2007)
FAC2	Food attractions	3.576	Motivator	Jensen, (2007); Quan, Wang, (2003)
FAC1	Hygiene and Cleanliness	3.405	Hygiene	Chaudhary, (2000); Jensen, (2007)
FAC3	Transport facilities	3.318	Hygiene	Jensen, (2007); Vengesayi et al. (2009)
FAC11	Tourist activity	3.314	Motivator	Crompton, (2003); Jensen, (2007); Tkaczynski, Rundle, (2013)
FAC9	Tourist amenities	2.988	Hygiene	Barker, Crompton, (2000); Jensen, (2007)
FAC7	Cost	2.699	Motivator	Lou, (2014); Yuan, McDonald, (1990)
FAC6	Communication facilities	2.687	Hygiene	Jensen, (2007); Vengesayi et al. (2009)

The classification of factors showed six factors are having IDA value above aggregated value and five factors have lesser values. These have been placed in the matrix.

Table 6. *Attractiveness matrix*

Low IDA value	Cost Tourist activity	Tourist amenities Transport facilities Communication facilities
	Natural attractions Site attraction Cultural attractions Food attractions	Accommodation Hygiene and cleanliness
High IDA value	Motivators	Hygiene factors

The matrix Table 6 suggests that most of the motivating factors are rated high except cost and tourist activity. The natural and site attractions are rated high endorsing the common perception about Kashmir valley. However, food as an attraction is also rated high. The valley lacks on most of tourist amenities and facilities (hygiene factors) except accommodation and cleanliness.

Conclusions

The purpose of this study was to study tourism attractiveness of Kashmir valley in India and also to develop a measure that can evolve as a standard but evolving Index. An Index of Destination Attractiveness (IDA) has been developed and used to measure tourism attractiveness of Kashmir valley in India. The IDA helps in identifying eleven factors perceived important for attractiveness by tourists and are labeled as hygiene and cleanliness, food attractions, transport facilities, accommodation facilities, site attractiveness, communication facilities, cost, cultural attractions, tourist amenities, natural attractions, and tourist activity. Each factor further has a number of variables specific to valley. While these findings can be useful for destination managers to work on deficient areas and improve overall attractiveness, the index developed can be used annually or at any other appropriate interval for a sustained destination management programme. The repeat use of IDA will also help in fine tuning this index further and incorporate more factors as warranted by the future shape of destination Kashmir valley. IDA prepared for this study can also find application at other destinations with little modifications as warranted by the features of attractiveness these destinations.

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