Analysis of Host Community satisfaction and perception of Tourism Impacts in Bhilangana valley of Garhwal Himalayas of Uttarakhand

SHIVAM PRAKASH BHARTIYA* and R.K. DHODI**

*Shivam Prakash Bhartiya, Research Scholar, Centre for Mountain Tourism & Hospitality Studies, Hemwati Nandan Bahuguna Garhwal Central University, Srinagar (G), Uttarakhand
** R.K. Dhodi, Assistant Professor, Centre for Mountain Tourism & Hospitality Studies, Hemwati Nandan Bahuguna Garhwal Central University, Srinagar (G), Uttarakhand

ABSTRACT

This study analyzes the community's satisfaction, their perception of tourism impacts and relationship between satisfaction and perception. Study was conducted in Bhilangana valley with the stratified random sampling and questionnaires on 5 point likert's scale. 19 items were used in examination of the host community satisfaction and 22 items were used for perception analysis. It was found that host community satisfaction and perception had significant correlation at p value of 0.01 and 0.05. In conclusion, host community satisfaction and perception is useful in planning for tourism development in rural areas.

KEYWORDS: *Tourism impacts; host community satisfaction; community perception*

1. Introduction

Tourism has always been considered as an option for socio-economic development in developed and developing nations around the world. Tourism industry generates various direct, indirect, and induced employment opportunities and helps in nurturing cross cultural relationship among different communities residing in different parts of the same nation as well as the communities from other nations. Developing nations like India focuses on the development of rural communities through the promotion of tourism in rural and isolated areas which have potential for tourism development. Several national level schemes such as 'Hunar Se Rozgar' run by the Ministry of Tourism, Government of India, and various other projects are put in operation for Pro-Poor tourism in different states of India. Now days, tourism and its development are not only the concern for government and development agencies, but it is also a major income generating resource for the communities living in rural areas. Communities from rural areas invest their time, money, effort, and hope in tourism with the belief that it fetches various economic and social benefits for them.

> *Tourism is now the largest industry in the world by virtually any economic measure, including gross output, value added, employment, capital investment and tax contribution. (Wheatcroft, 1994)*

© South Asian Journal of Tourism and Heritage

Promoting tourism and development in rural areas is not possible without the engagement of host communities of that area, considered as tourism stakeholders for generating and distributing tourism related services and products.

Figure 1, graphically explains the participation of host community in tourism business. Host community can participate in tourism in several ways, they can be involved in decision-making processes related with the tourism development, initializing tourism projects, and tourism information centre. In accommodation services, they can provide the facility of Homestays, hotels, and guest houses. Rural areas are rich in natural and socio-cultural resources as they have large number of flora and fauna, pilgrimage places, fairs and festivals, and traditional agricultural practices etc. which they can provide to the tourists.

In rural areas most of the locals are involved in eateries, restaurants, and tea stall businesses through which they can provide the taste of local cuisine to the tourists. Transport, guiding, and porting services are also provided by the host community members to the tourists visiting their areas. A number of studies in recent years have examined host community satisfaction and impact of tourism on the community, and it continues to be an important issue. Allen, Long, Perdue, & Kieselbach, 1998 emphasizes on the involvement of community in the planning process and their attitudes towards tourism and importance of continuous assessment of its impact.
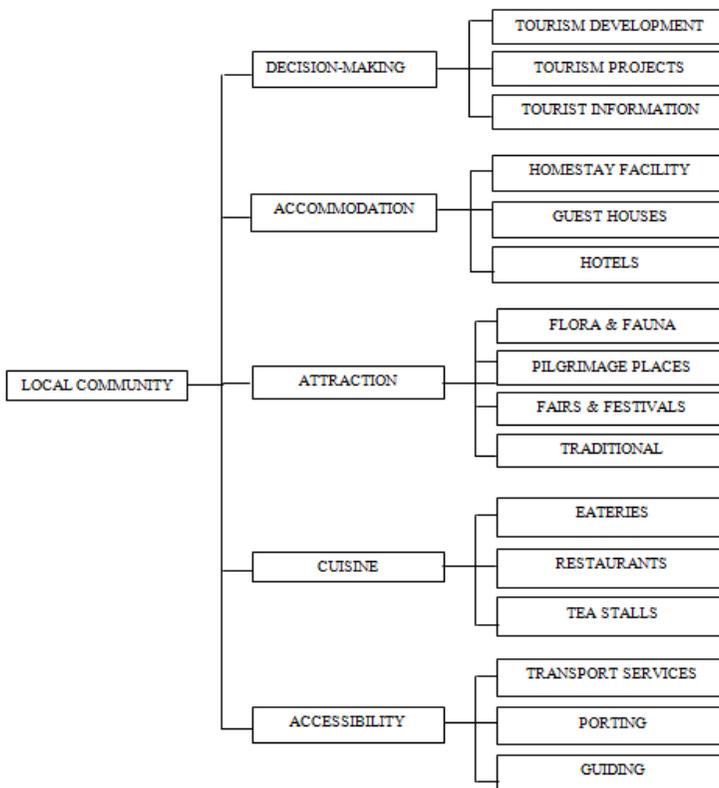

Fig. 1 : Participation of Host Community in Tourism Business

2. Conceptual model incorporating community satisfaction

Most of the studies are based on the differences in the perceived impacts on different types of residents of rural areas, a few have focused on the community satisfaction and their perception on the tourism impacts toward their own community.

McCool and Martin (1994) and Allen et al. (1998) revealed that community satisfaction and tourism development relationship is usually not in sequence with the most sensitive aspects such as community involvement, public services, and the environment. Regrettably, their study did not converse about the relationship of community perception of tourism impacts and their satisfaction.

Although very little research has directly examined the host community satisfaction and their perception towards tourism impacts. As a remarkable exception, Perdue et al. (1990) developed a model (Fig. 2), that examined relationships between resident's perception of tourism impacts and their support for it. His hypothetical model has nine path hypotheses with relationship between five latent constructs: personal benefits from tourism development, positive perceived tourism impacts, negative perceived tourism impacts, overall community satisfaction, and attitude for additional tourism development. Each path represents a hypothesized relationship with the direction of effect identified as either (+) or negative (-).
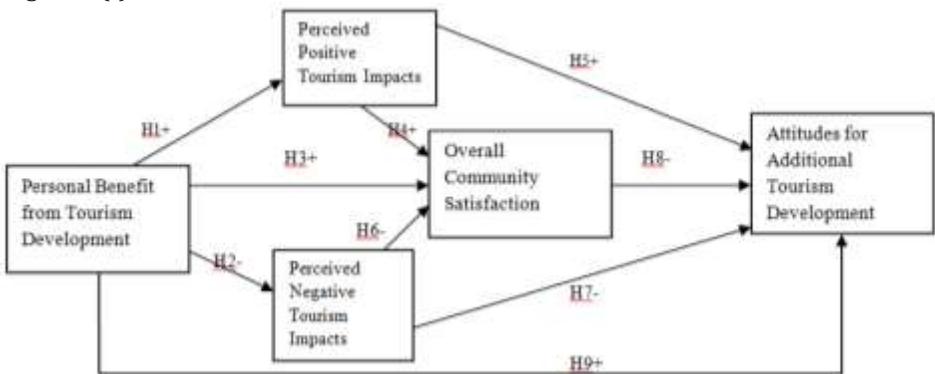
Fig. 2 : Relationships between residents' perceived tourism and attitudes towards host community (Adapted from Perdue et al., 1990)

Model based on the primary research questions directed at the perception of tourism impacts on overall community satisfaction and it extend to community satisfaction effects attitudes for additional tourism development. Perdue's model also hypothesizes relationship among five latent constructs. This research analyzes the host community perception of tourism, community satisfaction regarding the available resources and the relationship between tourism impacts and community satisfaction.

3. Method

3.1 study area

The study was conducted in Bhilangana valley in Garhwal region of Uttarakhand. Bhilangana valley falls under the Tehri Garhwal district of Uttarakhand. The entrance to the valley is from Gadolia to Khatling glacier. The Bhilangana valley, draining the river of the same name, is a beautiful and relatively

untouched valley. There is a well-trodden trekking route adjoining to the valley.

In two stages of 10 km each the trek reaches Gangi (via Reeh). This friendly village has a spectacular view. Due to the lack of exposure and inter-marriages, many in the community do not seem normal. Ahead, the trekk proceeds via Kalyani to Bhelbagi and finally to Bhumka, the last camping ground before the Khatling glacier. One of the early visitors here was Dr. J.B. Auden. During his exploratory visit to the Gangotri area he had finally crossed a pass between Gangotri III (6577 m) and Jogin (6465 m) peaks from Rudugaira Bamak. He descended to the Bhilangana valley. This col is now called 'Auden's Col' and the route was repeated twice in 1983, from both directions (H.J. Vol. 40, p.168).

On the north-west of Bhilangana valley lays group of peaks: Kairi (5435 m), Draupadi-ka-Danda (5724 m) and even an approach to Janoli (6632 m) is possible. On the north-east, via the Dudhganga Bamak one can join the route of Vasuki tal and descend to Kedarnath. Towards Gangi, the old pilgrim route traversed valleys: from Gangotri to Booda Kedar, down to Gangi, across Bhilangana valley to climb the eastern ridge, locally called Panwali Kanta. The route proceeds to the north on the flattish ridge awarding some of the finest views of peaks – Janoli, Thalay Sagar and others. Towards east to descend Mugu Chatti and Triyugi Narayan near the Kedarnath route.

3.2 Procedures

The study was based on the stratified random sampling in 10 villages of Bhilangana valley. The sample size was 500, 50 respondent from each village including both male and female. The response rate was 100% due to the friendly behavior of the local residents'. Respondents consisted of 343 males (68.6%) and 157 females (31.4%). Their age ranged from 20 to 60 years with 45.8% being 20-30 years, 36.2% being 31-40 years, 17.6% being 41-50 years and .4% being 51-60 years old.

The items in the study for host communities' perception of tourism impacts were taken from several empirical studies e.g. Pizam, 1978; Belisle & Hoy, 1980; Liu & Var, 1986; Milman & Pizam, 1988; Perdue, Long, & Allen, 1987; Lankford & Howard, 1994; Haralambopoulos & Pizam, 1996. Community satisfaction items were taken from studies related to Allen, Long, Perdue, Allen and Beattie (1984) and Allen et al. (1988). In this study questionnaire is based on 5-point Likert type scale. Questionnaire for community perception had 5 point scale ranging from 1= very disagree to 5= very agree and questionnaire for community satisfaction had 5 point scale ranging from 1= very dissatisfy to 5= very satisfy. Data analysis was carried out in two stages. In the first stage reliability analysis was conducted for each item individually and in the second stage bivariate correlation was conducted by adding the sum total of all the items.

4. Results

4.1 Reliability analysis

Parsauraman, Zeithaml, & Berry, 1988 suggested that the reliability analysis was used to evaluate the stability and consistency for measured items of each latent constructs. This criteria used in deciding whether to delete an item were its corrected items-total correlation and whether the elimination improves the corresponding alpha values. The corrected item-total correlation should be >0.30, in this study items with corrected item-total correlation below 0.30 were eliminated.

In two stage reliability analysis was performed. First stage directed at scales related to perceived tourism impact and community satisfaction. Summated rating scales comprised of many items. The corrected items-total correlation and Cronbach Alpha Coefficients for perceived tourism impacts are shown in Table 1 (positive tourism impact) and Table 2 (negative tourism impact). In Table 1 the items of positive perceived economic impacts (three items) had Cronbach alpha coefficient .034 which did not support the Bernstein's (1994) recommendation of 0.70, but it showed the increase of .739 in the mentioned item i.e. improves development and infrastructure in the village was deleted, as it was qualitatively distinct from the other two items which deal directly with the economic aspect. Five items of positive socio-cultural impact had alpha value of .230 and showed the increase of .741 in three items. Positive environment impact had alpha value of .072 with the increase up to .743 in one item. The three item of positive socio-cultural impact and one item of positive environment impact were no useful in the scale but, their corrected item-total correlation value is greater than 0.30, and thus these items were retained for analysis.

Table 1: Reliability of perceived positive tourism impact scales

Variables	Mean	Std. Deviation	Item-total Correlation	Alpha if item deleted
Economic				**.034**
Improves development and infrastructure in the village	4.36	.569	.414	.739
Increase employment opportunities	4.48	.567	.433	.738
Contribute to income and standard of living	4.41	.561	.447	.737
Socio-cultural				**.230**
Improves quality of life	4.39	.558	.391	.741
Increase no. of recreational facilities and entertainment centres	4.28	.608	.370	.741
Improves the images of different communities and cultures	4.35	.559	.394	.741
Promote variety of cultural activities	4.36	.550	.403	.740
Improves quality of safety measures	4.36	.596	.392	.740
Environment				**.072**
Preserves environment and improves the appearance of an area	4.42	.579	.349	.743
Improves living utilities infrastructure	4.44	.582	.390	.740
Improves public facilities	4.42	.562	.449	.737

Mean value of each item in Table 1 shows that most of the respondents very much agreed with perceived positive tourism impacts. Most positive response item in positive economic is increase employment opportunities with the mean value of 4.48, item in positive socio-cultural impacts is improves quality of life and the mean

value of the item is 4.39, and most very agree item in environment impacts is improves living utilities infrastructure with the mean value of 4.44.

Cronbach alpha value of each item of negative tourism impacts shown in Table 2 is less than 0.70, but they all showed increase of .753 in negative tourism impact, .757 in negative socio-cultural impact, and .753 in negative environment impact. All the items of negative tourism impact had corrected item-total correlation less than 0.30 so no items from negative tourism impacts were used for analysis.

Table 2: Reliability of perceived negative tourism impacts scales

Variables	Mean	Std. Deviation	Item-total Correlation	Alpha if item deleted
Economic				**.162**
Unfairly increase in cost of land and taxes	2.36	.696	.286	.747
Increase cost of living	2.37	.686	.328	.744
Increase price of goods and services	2.48	.819	.215	.753
Socio-cultural				**.356**
Increase accidents	2.05	.881	.221	.754
Increase crime	1.78	.734	.194	.754
Increase exploitation of local natives	1.85	.815	.173	.757
Increase alcoholism, prostitution etc.	1.74	.716	.237	.750
Increase illegal games	1.71	.661	.235	.750
Environment				**.147**
Damage natural environment & landscape	2.13	.745	.210	.753
Destroy local ecosystem	2.16	.778	.237	.751
Increase pollution	2.21	.752	.242	.750

Table 2 shows that most of the respondents disagreed with the perceived negative tourism impacts like, increase in cost of living with the mean value of 2.37, unfairly increase in the cost of land and taxes and the mean value is 2.36, the response rate in the item increase price of goods and services had mean value of 2.48 which means most of the respondents were neutral regarding the increase in price of goods and other services when tourism related activities were increased in the area.

In negative socio-cultural impact only few respondents disagreed with the item increase accidents having mean value of 2.05 while most of the respondents were very disagree with the negative socio-cultural impacts. Negative environment impact had maximum response with disagreement in item increase pollution with the mean value of 2.21 and the other items also having large number of response of disagreement in the item damage natural environment &landscape, and destroy local ecosystem with the mean value of 2.13 and 2.16 respectively.

Table 3: Reliability of community satisfaction scales

Variables	Mean	Std. Deviation	Item-total Correlation	Alpha if item deleted
Public service satisfaction				**.375**
Fire protection	1.58	.609	.338	.830
Social services	1.75	.682	.562	.820
Public transportation	1.54	.690	.439	.825
Police protection	1.89	.818	.614	.816
Local government	2.97	.816	.600	.817
Roads	1.35	.751	.588	.818
Public health services	1.33	.607	.729	.814
Formal education satisfaction				**.467**
Schools	2.21	.704	.566	.820
College/University	1.19	.397	.671	.822
Technical training centres	1.16	.366	.561	.825
Recreation opportunities satisfaction				**.561**
Public funded recreation (social, cultural, sports, etc.)	1.68	.638	.425	.826
Parks and open space	1.60	.592	.278	.832
Economic satisfaction				**.337**
Shopping facilities	2.02	.837	.685	.812
Cost of living	2.29	.682	.353	.829
Utilities (water, gas, electricity, sewage, etc.)	1.39	.731	.648	.815
Job opportunities	1.19	.414	.694	.820
Medical service satisfaction				**.482**
Hospital and medical facilities	1.18	.420	.588	.823
Medical doctors	1.15	.391	.566	.824
Emergency services	1.24	.504	.673	.819

In Table 3 reliability of community satisfaction had public service satisfaction (7 items), formal education satisfaction (3 items), recreation opportunities satisfaction (2 items), economic satisfaction (5 items), and medical service satisfaction (3 items) scales. Each scale had alpha value of .375, .467, .561, .337, and .482 respectively, all items in each scale showed the increase in their alpha value ranges from .814 to .832 which is greater than 0.70 and their corrected item-total correlation was also greater than 0.30 ranges from .338 to .729, which shows that all the items were useful in reliability analysis.

In Table 3 respondents were ranging between mostly very dissatisfied and dissatisfied regarding the available resources in their area, only respondents were neutral having mean value of 2.97 with the item local government in public service satisfaction.

4.2 Correlation

Another objective of this study was to analyze the relationship between host community perceptions' of tourism impacts and their satisfaction. Table 4 shows the community perception and satisfaction correlation, positive (+) correlation indicates the increase in the value of one item will increase in the value of related item and Negative (-) correlation indicates the increase in the value of one item but decrease in the value of related item. All the items in each scale were summed up and the bivariate correlation method was used. Public service had positive correlation with formal education system satisfaction (.648, p<0.01), recreational opportunities satisfaction (.244, p<0.01), economic satisfaction (.727, p<0.01), medical satisfaction (.707, p<0.01), and had a negative correlation with environment satisfaction (-.462, p<0.01). Formal education system satisfaction had a positive correlation with recreation opportunities satisfaction (.266, p<0.01), economic satisfaction (.656, p<0.01), medical satisfaction (.670, p<0.01), negative socio-cultural impact (.158, p<0.01), negative environment impact (.136, p<0.01), and negative correlation with environment satisfaction (-.425, p<0.01), positive economic impact (-.146, p<0.01), positive socio-cultural impact (-.120, p<0.01), and positive environment impact (-.152, p<0.01). Environment satisfaction had negative correlation with economic satisfaction (-.350, p<0.01), medical satisfaction (-.482, p<0.01), negative economic impact (-.131, p<0.01), negative socio-cultural impact (-.180, p<0.01), and negative environment impact (-.150, p<0.01).

Recreational opportunity had positive correlation with economic satisfaction (.387, p<0.01), medical satisfaction (.146, p<0.01), and negative environment impact (.088, p<0.05). Economic satisfaction had positive correlation with medical satisfaction (.600, p<0.01), negative socio-cultural impact (.149, p<0.01), and negative environment impact (.115, p<0.01). Medical satisfaction had negative correlation with positive socio-cultural impact (-.088, p<0.05), positive environment impact (-.099, p<0.05) and positive correlation with negative socio-cultural impact (.108, p<0.05), and negative environment impact (.089, p<0.05). Positive economic impact had positive correlation with positive socio-cultural impact (.934, p<0.01) and positive correlation with positive environment impact (.939, p<0.01), and had a negative correlation with negative economic impact, negative socio-cultural impact, and negative environment impact (-.370, -.426, and -.327, p<0.01) respectively.

Positive socio-cultural impact had positive correlation with positive environment impact (.897, p<0.01), and negative correlation with negative economic impact (-.430, p<0.01), negative socio-cultural impact (-.436, p<0.01), and negative environment impact (-.379, p<0.01). Positive environment impact had negative correlation with negative economic impact (-.390, p<0.01), negative socio-cultural impact (-.428, p<0.01), and negative environment impact (-.382, p<0.01). Negative economic impact had positive correlation with negative socio-cultural impact (.587, p<0.01) and negative environment impact (.620, p<0.01).

Negative socio-cultural impact had positive correlation with negative environment impact (.526, p<0.01). Correlation table shows the significant positive and negative correlations among several variables. In variables which are positively correlated indicates, if the value of one variable increases the value of other variable also increases, and variables which are negatively correlated indicates that the value of one variable increases, the value of another variable decreases.

Table 4: Community perception and satisfaction: Correlation

	Total of Public services Satisfaction	Total of Formal Education system Satisfaction	Total of Environment satisfaction	Total of Recreational opportunity satisfaction	Total of Economic satisfaction	Total of Medical satisfaction	Total of Positive Economic impact	Total of Positive Socio-cultural impact	Total of Positive Environment impact	Total of Negative Economic impact	Total of Negative Socio-cultural impact	Total of Negative Environment impact
Total of Public services Satisfaction	-											
Total of Formal Education system Satisfaction	.648**	-										
Total of Environment satisfaction	-.462**	-.425**	-									
Total of Recreational opportunity satisfaction	.244**	.266**	.009	-								
Total of Economic satisfaction	.727**	.656**	-.350**	.387**	-							
Total of Medical satisfaction	.707**	.670**	-.482**	.146**	.600**	-						
Total of Positive Economic impact	-.011	-.146**	.037	-.032	-.057	-.101	-					
Total of Positive Socio-cultural impact	-.007	-.120**	.037	-.057	-.046	-.088*	.934**	-				
Total of Positive Environment impact	-.020	-.152**	.048	-.054	-.074	-.099*	.939**	.897**	-			
Total of Negative Economic impact	-.043	.059	-.131**	.054	.047	.058	-.370**	-.430**	-.390**	-		
Total of Negative Socio-cultural impact	.072	.158**	-.180**	.031	.149**	.108*	-.426**	-.436**	-.428**	.587**	-	
Total of Negative Environment impact	.024	.136**	-.150**	.088*	.115**	.089*	-.327**	-.379**	-.382**	.620**	.526**	-

**correlation is significant at 0.01 level
*correlation is significant at 0.05 level

5. Conclusion

The purpose of this study was to analyze the perception of host community of tourism impacts, community satisfaction, and the relationship between community perception of tourism impacts and their satisfaction. Reliability analysis on community satisfaction indicates that most of the community is facing several issues at basic resources but they are very well aware of the positive impacts of tourism and are willing to be involved in tourism development and in tourism related activities. This study found that host community satisfaction was closely related with the perceived tourism impacts both positive and negative. Tourism development is taken as tool for community development but not as a goal.

Community satisfaction will be considered for analyzing the perception of host communities' for tourism impacts and posture for additional tourism development. Several studies have suggested that host community posture is directly associated with the stage of development within the host community. Further research study is needed to understand the relationship of community perception of tourism impacts and community satisfaction for additional tourism development.

References

Allen, L.R., & Beattie, R. (1984). The role of leisure as an indicator of overall satisfaction with community life. *Journal of Leisure Research, 16*(2), 99-109.

Allen, L.R., Haffer, H.R., Long, P.T., & Perdue, R.R. (1993). Rural residents' attitudes toward recreation and tourism development. *Journal of Travel Research, 31*(4), 27-33.

Allen, L.R., Long, P.T., Perdue, R.R., & Kieselbach, S. (1998). The impacts of tourism development on residents' perceptions of community life. *Journal of Travel Research, 26* (1), 16-21.

Belisle, F.J., & Hoy, D.R. (1980). The perceived impact of tourism by residents: a case study in Martia Colombia. *Annals of Tourism Research, 7*(1), 83-101.

Haralambopoulos, N., & Pizam, A. (1996). Perceived impacts tourism: the case of Samos. *Annals of Tourism Research, 23*(3), 503-526.

Kpadia, H. (1999). Peaks and Passes in Garhwal Himalaya. *Indus publishing*, New Delhi.

Lankford, S.V. & Howard, D.R. (1994). Developing a tourism impacts attitude scale. *Annals of Tourism Research, 21*(1), 121-139.

Liu, J.C. & Var. T. (1986). Resident attitudes toward tourism impacts in Hawaii. *Annals of Tourism Research, 13*(2), 193-214.

McCool, S.F., & Martin, S.R. (1994). Community attachment and attitudes toward tourism development. *Journal of Travel Research, 32*(3), 29-34.

Milman, A., & Pizam, A. (1998). Social impacts of tourism in Central Florida. *Annals of Tourism Research, 15*(2), 191-204.

Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric theory* (3rd ed.). New York: McGraw-Hill.

Parasuraman, A., Zeithaml, V., & Berry, L.L. (1980). Servqual: a multiple-item scale for measuring consumer perceptions of services quality. *Journal of Retailing, 64*, 12-40.

Perdue, R.R., Long, P.T., & Allen, L.R. (1987). Rural resident of tourism perceptions and attitudes. *Annals of Tourism Research, 14*(3), 420-429.

Perdue, R.R., Long, P.T., & Allen, L.R. (1990). Resident support for tourism development. *Annals of Tourism Research, 17*(4) 586-599.

Pizam, A. (1978). Tourism impacts: the social costs to the destination community as perceived by its residents. *Journal of Travel Research, 16*(4), 8-12.