

INTERNATIONAL STUDENTS' IMAGE OF RURAL PENNSYLVANIA AS A TRAVEL DESTINATION

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Abstract: The purpose of this study was to examine the image international students at Penn State have of rural travel destinations in the state of Pennsylvania. In addition, this study investigated whether destination image differed depending upon travel behavior and socio-demographic variables. Four distinct image dimensions, "tourism infrastructure," "atmosphere," "natural amenity," and "farm life" were uncovered. Overall image scores on the image dimensions differed with respect to one travel behavior variable, future travel intention, and four socio-demographic variables: household status, class standing, gender, and country of origin. There was a relationship between image dimensions and age. The findings could be helpful to marketers interested in positioning their rural tourism destination and could offer image profiles to generate targeted campaigns to sub-groups of the international student market.

Introduction

The average international traveler visits environments with a high quality of life (Lundberg & Lundberg, 1985). According to Betz and Perdue (1993), such tourists are not drawn to a specific resource or attraction, but to the entire "experience" of a city or town, to the distinctive and attractive places of rural communities and surrounding areas. While this may be true, international travelers have not proven to be a lucrative market for rural tourism destinations. Why is this? It may be due to the fact that international tourists' choice to visit pleasure travel destinations such as rural communities may depend heavily on their image of the destination (Fakeye & Crompton, 1991; McLellan & Foushee, 1983; Um & Crompton, 1990; Woodside & Lysonski, 1989). Image, which has been defined by Assael (1984) as "The total perception of the destination that is formed by processing information from various sources over time" (in Fakeye & Crompton, 1991, p. 10), is critically important because it is likely to detract from, or contribute to, the success of a tourism destination (Hunt, 1975). In light of the apparent importance of "image" in individuals' decision to travel for pleasure, it is imperative that research be conducted to substantiate the image

international travelers have of rural tourism destination areas.

Study Objectives

There were three objectives of this study. The first objective was to conduct an exploratory examination of the image international students have of rural tourism destinations in the state of Pennsylvania. This approach was adopted because research (c.f. Mathieson & Wall, 1982; McIntosh & Goeldner, 1990) has shown that increased levels of education heighten the propensity to travel. The second objective was to examine whether destination image differed depending on travel behavior (e.g., past travel behavior, future intention to travel to rural destinations). This objective was based on conflicting results presented by Hunt (1975) and Fakeye and Crompton (1991). The final objective was to document whether destination image differed depending on socio-demographic variables. Crompton (1979), Goodrich (1978), and Reilly (1990) have confirmed that differences do exist.

Description of the Instrument

A multi-method approach was used to develop the survey instrument. First, a review of literature was conducted to develop a master list of attributes which theoretically measure destination image. This initial list consisted of 26 attributes. The master list was then modified specifically based on the work of Echtner and Ritchie (1993), Fakeye and Crompton (1991), and Hu and Ritchie (1993). The modification resulted in an expanded list of 37 image attributes. The list was then further modified and additional input was obtained by conducting a focus group and employing a two-phase pilot study with a convenience sample of international students. The responses from the focus group and the pilot study were used to generate the final list of image attributes. The final list of image attributes contained 48 items. Finally, five international students were given the developed instrument and asked to provide feedback on layout and wording. The study instrument consisted of a self-administered questionnaire comprised of two sections: (a) destination image section which consisted of 48 image items measured on a 10-point scale and (b) general socio-demographic/travel behavior section focusing on respondents' age, marital status, household status, class standing, gender, past residence, past travel experience to rural Pennsylvania, and future intention to travel to rural Pennsylvania as a travel destination.

Data Collection

International students, graduate or undergraduate, whose permanent residence is outside of the United States of America and who were registered at The Pennsylvania State University during fall or spring semester, 1996-1997, comprised the study population. A random sample of 700 individuals from a pool of 2,537 international students at Penn State were surveyed. Questionnaire packets were mailed by the Office of International Students (OIS) on January 15, 1997, to the randomly selected sample. A post card reminder and one additional questionnaire packet, sent only to non-respondents, completed the data collection process. After six weeks of data collection, a total of 332 international students had returned completed

questionnaires; however, only 329 were useable. Seven of the three hundred sixty-eight non-responses were due to bad addresses. Thus, the overall response rate was 48 percent.

Data Analysis and Results Respondent Profile

The overall demographic and travel behavior profiles were determined using the frequency procedure in SPSS (version

6.1.3) for Windows. Respondents ranged in age from 18 to 55 with the average age being 28. Approximately one-third (36%) of the respondents were married. However, most of the respondents (83%) reported that they live alone. Less than one-fifth (17%) lived with children and/or relatives. The majority (86%) were graduate international students and 60 percent were male.

Table 1. Image Dimensions

Attribute Statement	Tourism Infrastructure	Atmosphere	Natural Amenity	Farm Life
Good local infrastructure	.77519			
A wide variety of restaurants	.74425			
Lots of things to do in the evening	.73379			
A wide variety of accommodations	.72633			
Good local transportation	.72467			
Very accessible	.71135			
Good service	.70422			
Quality service	.67305			
Good shopping centers / facilities	.66325			
A wide variety of types of foods	.65065			
Good nightlife possibilities	.64436			
Easy to communicate	.62078			
A wide variety of recreation activities	.61717			
High standard of living	.60896			
Good climate / weather	.57862			
Technologically advanced	.57565			
Ample local information	.57284			
Good opportunities for local tours	.57057			
Plentiful cultural and historical sites	.51997			
Relaxing atmosphere		.75301		
Fresh air		.74947		
Lack of crime / safe		.73362		
Lack of traffic congestion		.68975		
Quiet		.66664		
Friendly people		.64175		
Peaceful / tranquil		.59080		
Traditional "home cooking"		.57813		
Lots of open space		.47682		
Attractive scenery			.74513	
Beautiful parks			.67976	
Plentiful wilderness activities/parks			.63379	
Beautiful greenery			.55336	
Good opportunity for adventure			.46213	
A wide variety of outdoor activities			.43220	
Many places of interest to visit			.43128	
Many farms				.64791
Old population				.64537
Homogeneous population				.56954
Simple life-style				.48724
Eigenvalue	12.68	5.55	2.60	1.75
Variance Explained	30.2%	13.2%	6.2%	4.2%
Cumulative Variance Explained	30.2%	43.4%	49.6%	53.8%
Cronbach Alpha	.94	.88	.83	.71

Respondents reported that they had lived in the United States about 34 months on average. They had, however, spent less time in Pennsylvania. The average length of stay in Pennsylvania was about two years (25 months). Forty-six percent of the respondents reported that they had lived in a rural community previously. With respect to travel behavior, 59 percent of respondents reported having traveled to a rural area in Pennsylvania. Among those international students who had traveled to a rural area in Pennsylvania, the number of trips ranged between 1 to 210, with the average being 8 trips. However, four individuals indicated that they had taken 50 or more trips. When they were removed from the frequency analysis, the average number of trips dropped to six. Over 70 percent of the respondents expressed an intention to travel to rural Pennsylvania in the next 12 months. Fifty nine percent of respondents came from Asia, including East Asia, South and Central Asia, and Southeast Asia (n=186). Forty-one percent of respondents came from regions other than Asia (n=129).

Image Dimensions

The frequency procedure was also used to highlight responses to the destination image attributes. The image items individuals most strongly agreed with were "fresh air," "quiet," and "peaceful/tranquil." Those items that they were least likely to agree about represented a rural area in Pennsylvania including: "good shopping centers/facilities," "good nightlife possibilities," and "a variety of good bars." Principal-axis factor analysis with a varimax rotation was used to determine whether image dimensions existed. Several other criteria were also used to determine the viability of each dimension. For example, only items with a factor loading of at least 0.4 were retained (Kim & Mueller, 1978; Tabachnick & Fidell, 1989). Furthermore, for item retention within a factor (dimension) the criterion of at least .10 difference between the item's loading with its factor and factor loadings under each of the other factors was used (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1975). Third, each dimension was subjected to reliability testing. Items which reduced the reliability of a dimension were eliminated from further analysis. And, the Cronbach Alpha reliability coefficient was adopted to test the internal consistency of reliability for each resulting dimension. Only those factor dimensions with Cronbach Alpha values greater than 0.6 were deemed acceptable. After the four criteria were applied, the optimal number of factor dimensions was found to be between three and four. In order to further verify the optimal number of factor dimensions, a second principal-axis factor analysis, now

using an oblique rotation, was adopted. The results confirmed that a three- or four-factor solution was suitable for this study. However, when the resulting factor dimensions and their associated items were reviewed and examined for face validity, and Cronbach Alpha statistics were referenced, the four-factor solution was judged most suitable.

The final four image dimensions/factors were named Tourism Infrastructure (Factor 1), Atmosphere (Factor 2), Natural Amenity (Factor 3), and Farm Life (Factor 4). The image dimensions are presented in Table 1. The four-factor solution accounted for approximately 54% of the variance. Cronbach Alphas of the four factors ranged from .71 to .94. The overall mean scores for the four image dimensions were: Tourism Infrastructure, 5.58 ($SD = 1.61$); Atmosphere, 8.16 ($SD = 1.39$); Natural Amenity, 7.48 ($SD = 1.48$); and Farm Life, 6.71 ($SD = 1.63$). The dimensions respondents most strongly agreed with were "Atmosphere" ($M = 8.16$) and Natural Amenity ($M = 7.48$).

To explore differences of mean scores on image dimensions by, or relationships between the image dimensions and, socio-demographic as well as travel behavior variables, multiple analysis of variance (MANOVA) and correlation analyses were used. If significant differences were identified through the MANOVA procedure, follow-up one-way analysis of variance procedures were used to determine where the significant differences existed. MANOVA revealed that overall image scores on the image dimensions differed with respect to one travel behavior variable, future travel intention, and four socio-demographic variables: household status, class standing, gender, and country of origin. There was also a relationship between image dimensions and age. (Table 2)

Image Dimensions and Travel Behavior Variables

Two travel behavior variables, past travel and future intention were addressed in this study. MANOVA indicated that image dimensions differed depending upon future intention travel to rural areas. The overall mean scores on image dimensions did not differ with respect to past travel to rural Pennsylvania. A follow-up ONEWAY procedure showed that there were significant differences with two of the four image dimensions, Tourism Infrastructure and Natural Amenity. Individuals who indicated that they intend to travel to rural areas in the future were more likely than individuals who do not have this intention to agree with the Tourism Infrastructure and Natural Amenity dimensions. Table 2 highlights the results.

Table 2. Overall Mean Score on Image Dimensions by Travel Behavior Variables Using Oneway Analysis of Variance.

Travel Behavior Variables	Tourism Infrastructure	Atmosphere	Natural Amenity	Farm Life
<i>Future Travel Intention</i>				
Yes	5.13**	8.03	7.06**	6.67
No	5.72**	8.32	7.72**	6.78

** sig. at .01 level

*** sig. at .01 level

Note: Dimension scores were coded on a 10-point Likert scale ranging from 1 "strongly disagree" to 10 "strongly agree."

Image Dimensions and Socio-demographic Variables

The socio-demographic variables consisted of intervally scaled variables (age, length of stay in the United States, length of stay in Pennsylvania) and nominally scaled variables (marital status, household status, class standing, gender, country of origin).

Correlation analysis was adopted to explore the relationship between the four image dimensions and three intervally scaled variables: age, length of stay in the United States and length of stay in Pennsylvania. One significant relationship was uncovered. Age was found to be positively and significantly related to the Natural Amenity dimension. The result indicated that the older the international students the higher the score or level of agreement associated with the Natural Amenity dimension. Table 3 highlights the results.

To document whether mean scores on image dimensions differed depending upon nominally scaled socio-demographic variables, MANOVA and ONEWAY procedure were adopted. MANOVA revealed that overall image scores on the image dimensions differed with respect to four socio-demographic variables: household status,

class standing, gender, and country of origin. Follow-up ONEWAY procedures showed that:

- (1) Respondents who lived with children and/or relatives were more likely than respondents who lived alone to agree with the Tourism Infrastructure dimension (5.97 versus 5.44, respectively) and the Natural Amenity dimension (7.94 versus 7.40, respectively).
- (2) Graduate international students were more likely than undergraduate international students to agree (have higher scores) with the image attributes associated with the Natural Amenity dimension.
- (3) Females were more likely than males to agree with the Tourism Infrastructure and the Natural Amenity dimensions.
- (4) International students whose country of origin fell within the Asia region were more likely than those who came from Other regions to agree with the Farm Life dimension. (see Table 3).

Table 3. Overall Mean Score on Image Dimensions by Socio-demographic Variables Using Oneway Analysis of Variance.

Socio-demographic Variables	Tourism Infrastructure	Atmosphere	Natural Amenity	Farm Life
Age (bivariate relationship: Pearson's r)	.01	.09	.07***	-.03
<i>Household Status</i>				
Lived Alone	5.44**	8.20	7.40*	6.78
Lived w/children &/or relatives	5.97**	8.34	7.94*	6.29
<i>Class Standing</i>				
Undergraduate	5.23	7.93	6.79***	6.71
Graduate	5.57	8.26	7.60***	6.72
<i>Gender</i>				
Male	5.28**	8.10	7.31*	6.61
Female	5.82**	8.37	7.72*	6.84
<i>Country of Origin</i>				
Asia	5.69	8.27	7.44	6.99***
Other Region	5.34	8.15	7.59	6.34***

* sig. at .05 level

** sig. at .01 level

*** sig. at .01 level

Note: Dimension scores were coded on a 10-point Likert scale ranging from 1 "strongly disagree" to 10 "strongly agree."

Conclusions and Implications

Destination images may be considered as favorable (positive) or unfavorable (negative) (Milman & Pizam, 1995; Willits, Bealer, & Timbers, 1990). McLellan and Foushee (1983) suggested images of a travel destination are a mixture of both positive and negative perceptions. The results of this study supported McLellan and Foushee's contention. International students' images of rural areas in Pennsylvania were mixed. Their mean scores ranged from 3.80 on the image item, "good shopping centers/facilities" to 8.90 on the image item, "fresh air." With respect to the mean scores on the image dimensions, they were mixed as well. Image dimensions receiving the highest mean scores

were "Atmosphere" ($M=8.16$) and "Natural Amenity" ($M=7.48$). The "Farm Life" and "Tourism Infrastructure" dimensions had lower mean scores, 6.71 and 5.58 respectively.

International students' overall images of rural Pennsylvania could be summarized and generalized as positive images (Atmosphere, Natural Amenity) and neutral to negative images (Farm Life, Tourism Infrastructure). This generalization appears to complement a study performed by Willits, et al. (1990). They found that the image of rural America can be summarized into two categories: positive images which have been generated from qualitative

impressions such as nostalgic pictures of simpler lifestyles in previous generations, linkage from this nation's heritage and basic American character, and the negative images from impressions that rural areas are disadvantaged in the quality of life and quantity of opportunities.

Older international students tended to have more positive images of rural Pennsylvania than those who were younger. And, graduate international students tended to have more positive images of rural Pennsylvania than undergraduates. Additionally, female international students were more likely than male international students to have higher image scores on the Tourism Infrastructure and Natural Amenity dimensions. This finding contradicts results presented by Ross (1993) who stated that female travelers are less likely to evaluate their destination positively because they perceive that activities and attractions are more suited to males than to females. Asian students were more likely than students from the "Other" region to have statistically significant higher mean scores on the Farm Life dimension. The reasons for this significant difference on the Farm Life dimension are not apparent. However, destination image differences across country of origin could potentially be used in segmenting tourist markets and in tourism planning efforts (Calantone, di Benedetto, Hakam, & Bojanic, 1989). Further study on the inter-relationships between general image dimensions and age, gender, class standing and country of origin should be performed in the future.

Also of significance was the fact that respondents who intend to travel to rural areas in the next 12 months were significantly more likely to agree with the Tourism Infrastructure and Natural Amenity dimensions. This finding suggests that both dimensions may be attractive to individuals interested in visiting rural areas. Further research to validate this finding would be of real value to tourism professionals responsible for marketing rural destination areas.

In conclusion, international students do have distinct images of rural Pennsylvania and, overall, their images were reasonably positive. However, there were a number of findings which contradicted results reported in other image related studies. Thus, further research similar to this study is warranted.

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