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ABSTRACT

This study aims to examine how residents and visitors perceive social and environmental changes using photo sorting methods. The data for this study was collected using historic photographs representing various human and environmental change in the Khumbu (Mt Everest) region of Nepal as stimuli in two photo sorting tasks (multiple sort and Q sort). The multidimensional scaling models of multiple sort data revealed the three major dimensions of changes including tourism, cultural and landscape. The Q sort data shows that there are differences between local residents and outsiders, and younger and older groups of respondents in terms of how these changes were perceived. Local residents' and outsiders' perspectives differ on modernization, such as TV, the internet, and other technology, which supports the despondency theory.

INTRODUCTION

The purpose of this study was to examine how residents and visitors perceive social and environmental changes. This research used historical photographs that documented human and environmental change to determine variations and commonalities in residents' and visitors' understanding, interpretation and opinions of the aforementioned changes. Tourism is a major factor behind economic, social and environmental changes in many destinations. The Khumbu region (Mt Everest) of Nepal evolved from a remote, inaccessible valley to a modern, popular tourist destination. It is one of the few places in the world where these changes took place so quickly (Fisher, 1990), which makes it an ideal place to study this phenomenon. The Khumbu region is the main artery for expeditions to Mt. Everest Basecamp, a popular trekking destination. Trekking and mountaineering in this region has grown steadily since the early 1960s, from 20 visitors in 1964 to 25,814 in 2007 (SNP, 2008). Although the numbers are relatively small, they still represent more than 26 percent of the trekkers and more than half of the mountaineering expeditions to Nepal (MCTCA, 2007). This influx of tourists has brought employment and income opportunities to communities along the major trekking routes, as well as modern values, lifestyles and technologies. It has also

resulted in developmental pressures and environmental consequences such as deforestation, and solid waste and sanitation issues, especially along the main trekking routes.

Theoretical framework

People's perceptions of changes vary based on whether they are local residents or outsiders, which can be explained by the despondency theory (Sahlins, 1999). The despondency theory is a consequence of the cultural shock and psychological anomie imposed by the West. According to this theory, Western people want to see the third world as primitive and remote. If indigenous people change, they would think "the others become just like us" (Sahlins, 1999, p.3). There are often conflicting views of change between residents in developing countries and the mostly Western tourists who visit them. The roots of these conflicting views can be traced to ideological differences with regard to "modernization" and "development" and the Western tourists' view of non-Western peoples as unknown and primitive. Margaret Jolly gave an excellent portrayal of this phenomenon when she wrote that, "when Europeans change it is called 'progress', but when 'they' (the others) change, notably when they adopt some of our progressive attributes, it is a loss of their culture, some kind of adulteration" (Sahlins, 1999, p. 2). This has also been reflected in tourism literature as tourists search for authenticity or the real lives of others (MacCannell, 1973). Similarly, environmental changes are also perceived differently by tourists and local residents (Nyaupane, 1999). Locals are more concerned with the use of resources for their livelihoods. They tend to take a utilitarian view of the environment. For example, they look at the environment as a source for drinking water and irrigation, and they are concerned with the prevention of erosion and landslides because of their farms. Tourists, on the other hand, are more concerned with the aesthetic values of the environment. This study, therefore, applied the despondency theory in order to understand the perceptions of social and environmental changes.

RESEARCH METHODS

The methodology for this research is based on residents' and visitors' interpretations of photographs that depict key elements of change in the Khumbu region over a 40 year time period. The use of photographs is an appropriate method for assessing the perceptions of changes because photographs offer a level of experimental control over the research context and procedures. The validity of the use of photographic representations of landscape elements has been well established in comparative methodological research (Kellomäki and Savolainen, 1984; Zube et al. 1987), including cross-national settings involving respondents with dissimilar cultural backgrounds and languages (Manaster and Havighurst, 1972). This is because the use of photographs eliminates environmental influences (e.g, time of day, sound, and weather conditions) and simplifies the experience and interpretation to the gathering of information through sight (Real et al., 2000). In addition, the use of photographs and oral responses is ideal for places where literacy rates are low, such as in Nepal, as this methodology does not require that respondents read a text-based survey instrument (Green, 2005).

The researchers initially selected 116 photographs published in Armington, 1975; Gibson, 1987; Willison and Bourke, 1989; and Burbank, 2001. These photographs covered the physical landscape, traditional lifestyles and cultural activities, trekking and

climbing, and contemporary lifestyles and festivals of the upper Khumbu Valley, where the climate is harsher and the trekking industry has had the most significant impact, but some of the photographs were from the lush lower Khumbu Valley. From this initial set of scanned photographs, 74 were printed on 4x6 inch photograph paper, and of those 45 were selected. After the pretest which consisted of three interviews, the total was reduced to 40 photographs.

The research used two forms of the photograph sorting method. The first method was a multiple sorting method, in which respondents (N=25) were asked to place the photographs into groupings of their own selection (Scott and Canter, 1997; Bimler and Kirkland, 1998; Real et al. 2000). Respondents were next asked to define and explain their groupings without significant researcher-imposed concepts interfering with those interpretations. Most of these discussions were recorded for later transcription and translation, where necessary. The Multidimensional Scaling (MDS) method was used to explore the dimensions of social and environmental changes (Fenton and Pearce, 1988; Nasar, 1988; Hair, 1995). First, an aggregated symmetrical matrix (40x40) was prepared based on the binary co-occurrence of data. The original matrix was reduced to a 24x24 matrix excluding the least occurred photos in order to avoid potential statistical errors. The second method had respondents sort the same photographs based on depictions of conditions that are more beneficial to their community, and those that are less beneficial (Palmer, 1983). The purpose of this sorting was to directly assess which elements in the changing environment and culture are perceived as positive as opposed to those perceived as negative. These photos were compared among different groups of respondents.

RESULTS AND DISCUSSION

In order to classify the underlying dimensions that the respondents used to categorize the changes, several MDS models were generated using the alternative least squares scaling algorithm (ASLCAL). Among the 2-5 dimensions generated, the 3 dimensional solution was selected based on changes in stress values (Kruskal's formula). The stress for the three-dimensional solution was .27715 and the square correlation (RSQ) was .26301. The three major dimensions that emerged from the analysis include tourism/trekking/climbing, religion/culture, and environment/landscape. Changes related to tourism/trekking/climbing include advancement in technology, in terms of climbing, and how tourism has evolved the last 40 years. Many residents recalled many changes in the Khumbu and considered tourism as a major force behind these changes. The next dimension, religion/culture depicts various changes including local festivals, rituals, the traditional way of life, and farming. The third dimension includes changes in environment, landscape, buildings, and wildlife.

Further, respondents were asked to sort the photographs into two piles: changes they considered positive and changes they considered negative. Among the 40 photographs, 5 photographs were considered positive by each of the respondents. These photographs represented pride, religious traditions and festivals, education, and wildlife conservation. One photograph (litter around Mt Everest Basecamp) was considered negative by all of the respondents, suggesting that litter has been a major issue in the region. The photographs that received mixed responses were the ones which evoked differences in perspectives between local residents and outsiders, and younger and older groups of respondents. How different groups of respondents categorized each of the

photographs was analyzed using a cross-tabulation analysis. The analysis revealed some interesting findings. For example, the introduction of TV to the Khumbu region was considered positive by all local residents, while those who considered negative (only two) were outsiders. Similarly, outsiders considered Internet cafés a negative change. This suggests that there is a contradiction between local residents' and outsiders' perspectives on modernization, such as TV, the internet, and other technology. Similarly, old and traditional homes and bridges, the traditional but harsh way of life, and old style cooking using open pit stoves were perceived negatively by local residents, whereas these photographs were perceived positively by outsiders. This difference in perspective suggests that outsiders consider poor or even a lack of infrastructure as the traditional way of life and as a representation of authenticity, whereas local residents view them as barriers to development, suggesting that despondency theory (Sahlins, 1999) helps to explain the differences in their perceptions of these changes. Similar differences also emerged between younger and older groups of respondents. The older group considered poor infrastructure, old homes, and the traditional agrarian way of life as negative. The younger people see these things as positive since they did not have to live under these conditions. They perceived them as their heritage.

CONCLUSION

The findings of this study suggested that the changes in the Khumbu region over the last 40 years can be conceptualized using three overarching dimensions namely; tourism, culture and environment. Tourism includes trekking, climbing, and major economic activities such as lodging, restaurants and guiding services. Overall, tourism has brought economic prosperity, and cultural appreciation and awareness to the Khumbu region. Along with economic prosperity, tourism and other micro and macro level changes have brought some cultural and environmental changes to the region. The perceptions of these changes varied between local residents and outsiders, and younger and older group of respondents. While local residents perceived modernity as development and progression, tourists and outsiders often viewed the modernity as negative, which supports despondency theory (Sahlins, 1999). In addition to some management implications, the findings contribute to scholarship and a broader understanding of human perception of social and environmental changes in today's world.

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