Transport Policy 52 (2016) 153–163

Contents lists available at ScienceDirect

Transport Policy

journal homepage: www.elsevier.com/locate/tranpol

Measuring the motivation to ride bicycles for tourism through a comparison of tourist attractions

Duangdao Watthanaklang [a], Vatanavongs Ratanavaraha [a,*], Vuttichai Chatpattananan [b], Sajjakaj Jomnonkwao [c]

[a] School of Transportation Engineering, Institute of Engineering, Suranaree University of Technology, 111 University Avenue, Suranaree Sub-district, Muang District, Nakhon Ratchasima 30000, Thailand
[b] Department of Civil Engineering, Faculty of Engineering, King Mongkut's Institute of Technology, Ladkrabang 10520, Thailand
[c] Department of Logistics Engineering, Faculty of Industrial Technology, Pibulsongkram Rajabhat University, 156 Singhawat Avenue, Playchumphol Sub-district, Muang District, Phitsanulok 65000, Thailand

ARTICLE INFO

Article history:
Received 11 July 2015
Received in revised form
5 August 2016
Accepted 12 August 2016

Keywords:
Motivation
Bicycle riding for tourism
Confirmatory factor analysis
Invariance analysis
Mountain tourist attractions
Sea tourist attractions

ABSTRACT

In Thailand, supporting bicycle riding is regarded as an essential strategy. Many organizations are developing campaigns and activities to promote bicycle riding. However, most Thai people do not enjoy riding bicycles. Thus, this study aims to understand the motivational components and compare the different motivations for bicycle riding in various areas using confirmatory factor analysis (CFA). Six factors were considered: self-development, contemplation, exploration, physical challenge, stimulus seeking, and social interaction. The samples used in this study were 798 Thai tourists. The results of the second-order CFA indicate that six factors indicated motivation to ride bicycles at these tourist attractions at a statistical significance of 0.01. Moreover, the invariance analysis of the model parameters for the two areas through chi-square difference testing shows that factor loadings, intercepts, and the structural path have different values for tourist attractions in the mountains and those by the sea at a statistical significance of 0.01. Thus, models for tourist attractions in the mountain and those by the sea should be developed separately to determine suitable policies for these areas. Consequently, the government sectors and other involved organizations should use these indicators to develop more precise and suitable policies to promote bicycle riding for targeted groups. The CFA loadings obtained from this study can be used for ranking the priority of improving motivation for riding bicycles. Regarding mountain tourist attractions, contemplation was the factor having maximum CFA loading (β=0.935), followed by exploration (β=0.900). For sea tourist attractions, contemplation was the factor having the highest CFA loadings equal 0.992 followed by stimulus seeking (β=0.937).

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Riding a bicycle is a useful, health-related activity that saves energy and does not pollute the environment. Thailand recognizes the importance of bicycle riding, and the country has developed strategies to promote this activity (Thailand Transport Portal, 2015). Previously, many organizations promoted bicycle riding both locally and nationally for health and tourism reasons; however, the Thai people do not frequently ride bicycles. Thus, studying tourists' motivation to ride bicycles is beneficial for developing and adjusting suitable strategies to promote the activity.

An accurate understanding of tourists' motivations can be applied to efficiently identify and respond to tourists' needs (Awaritefe, 2003; Keng and Cheng, 1999; Poria et al., 2004). Most previous research on the subject has studied the motivations for nature-based tourism (Beh and Bruyere, 2007; Mehmetoglu, 2007; Raadik et al., 2010; Tangeland and Aas, 2011; Tangeland et al., 2013). Ritchie (1998) studied motivations for bicycle tourism on the south island of New Zealand; Skår et al. (2008) examined motivations for mountain biking in Norway. If the motivations of various tourist groups are studied in this way, more effective strategies can be developed to serve each group (Beh and Bruyere, 2007). This study aims to understand the components of motivation for bicycle use in natural tourism according to the types of Thai natural parks, such as mountain natural parks and sea natural parks. If the primary motivations for bicycle tourism in each setting can be identified, a more appropriate policy can be determined for each geographic area.

* Corresponding author.
E-mail addresses: d5440320@g.sut.ac.th (D. Watthanaklang), vatanavongs@g.sut.ac.th (V. Ratanavaraha), vuttich@hotmail.com (V. Chatpattananan), sajjakaj@gmail.com (S. Jomnonkwao).

http://dx.doi.org/10.1016/j.tranpol.2016.08.004
0967-070X/© 2016 Elsevier Ltd. All rights reserved.

2. Literature review

Motivation is the force that drives individuals to serve their need to achieve a goal (Iso-Ahola, 1982). In tourism, motivation is accepted as a crucial variable that explains tourism behavior, and it is employed to assist in reasoning with respect to decision making (Bansal and Eiselt, 2004), which enhances the identification of tourists' needs and their promotion to meet the needs of target groups.

Table 1 summarizes the related literature. As noted above, most similar research investigated motivations for nature-based tourism. These studies measured motivation in terms of some or all of the following factors: self-development (Beh and Bruyere, 2007; Raadik et al., 2010), contemplation (Beh and Bruyere, 2007; Mehmetoglu, 2007; Raadik et al., 2010; Tangeland et al., 2013), exploration (Raadik et al., 2010; Tangeland et al., 2013), physical challenge (Mehmetoglu, 2007; Raadik et al., 2010; Tangeland et al., 2013), stimulus seeking (Beh and Bruyere, 2007; Mehmetoglu, 2007), and social interaction (Tangeland and Aas, 2011; Tangeland et al., 2013). Ritchie's (1998) study on New Zealand is the only previous study to have examined motivations for bicycle use through principal component analysis. Ritchie found that the motivating factors included competence, mastery, solitude, exploration, physical challenge, stimulus seeking/avoidance, social encounters, and social escapism. Furthermore, Skår et al.(2008) organized motivations for mountain biking using factor analysis; in their study, the crucial factors identified were physical exercise, contemplation, nature and place, speed and excitement, managing challenges, social relations and equipment, and appreciation. Although the particular names used for the factors have varied between studies, it appears that the six factors used in the nature-based studies (i.e., self-development, contemplation, exploration, physical challenge, stimulus seeking, and social interaction) can be used to cover all the categories delineated by Ritchie and by Skår et al. as well.

The present study used these six factors as latent variables as previous studies which considered these factors examined them by using exploratory factor analyses without any clear supporting theories. Thus, this study aims to confirm that the six factors can be motivations for Thai travelers to engage in bicycle tourism. Confirmatory factor analysis (CFA) was the statistical technique used to confirm the model.

Thus, this study uses these factors to determine Thai citizens' motivation for bicycle riding in tourism. Furthermore, a comparison of tourist attractions in the mountains and tourist attractions by the sea was conducted using the following hypotheses.

Hypothesis 1. All six factors contribute to the motivation for bicycle tourism.

Hypothesis 2. Based on the factor loadings, intercepts, and structural path, the motivation to ride bicycles at tourist attractions in the mountains and the motivation to ride bicycles at tourist attractions by the sea were equal.

3. Methodology

3.1. Participants and data collection

The samples in this study comprised Thai tourists who engaged in nature-based tourism throughout Thailand. This study aimed to establish the motivations of both current bicycle users and nonusers who could potentially become bicycle users. Hence, random sampling was employed to identify the participants, all of whom were Thai residents who traveled to natural (either mountain or sea) tourist attractions. The mountainous tourist attractions included Khao Yai National Park, Kaeng Krachan National Park, Doi Suthep-Pui National Park, and Khao Luang National Park. The sea tourist attractions were Koh Chang, and Khao Sam Roi Yot National Park. As part of the study, the participants were interviewed at these locations.

The research tool used for data collection was a questionnaire with questions adjusted in accordance with the literature review and the research objectives. The questionnaire comprised two sections. The first section contained questions related to respondents' general information and their travel behaviors. The second section contained questions related to attitudes and the motivation for traveling. The questions used a 5-point rating scale (5=strongly agree; 1=disagree). The researcher tested the questionnaire's reliability using Cronbach's alpha, which should have values higher than 0.70 (Tavakol and Dennick, 2011). The Cronbach's alpha values for the questions on the questionnaire were between 0.650 and 0.960.

The two methods used for factor analysis were (1) the determination of exact sample size and (2) subject-to-variable ratio. With regard to exact sample size, Comrey and Lee (1992) suggested that a sample size of 50 can be considered very poor, 100 as

Table 1
Summary of Related Research.

Author (year)	Type/Country	Analysis method	Motivation					
			Self-development	Contemplation	Exploration	Physical challenge	Stimulus seeking	Social interaction
Ritchie (1998)	Bicycle/New Zealand	Principal component analysis (PCA)	✓	✓	✓	✓	✓	✓
Beh and Bruyere (2007)	North-central Kenya	Principal components analysis (PCA)	✓	✓	–	–	✓	–
Mehmetoglu (2007)	Northern Norway	Principal components analysis (PCA)	–	✓	–	✓	✓	–
Skår et al. (2008)	Mountain biking/ Norway	Factor analysis	–	✓	✓	✓	✓	✓
Raadik et al. (2010)	Sweden	Exploratory factor analyses (EFA)	✓	–	✓	✓	–	–
Tangeland and Aas (2011)	Norway	Factor analysis	–	–	–	✓	–	✓
Tangeland et al. (2013)	Norway	Reliability	✓	✓	✓	✓	–	✓

Note: ✓ means the variables which were used to study, – means the variables which were not used to study.

Download English Version:

https://daneshyari.com/en/article/7497436

Download Persian Version:

https://daneshyari.com/article/7497436

Daneshyari.com