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Intention to Revisit a National Park and Its Vicinity

Effect of Place Attachment and
Quality Perceptions

Abstract: In rural areas, structural changes such as decreasing primary production have forced communities to seek alternatives in order to maintain their economic viability. Park tourism has been identified as an opportunity to strengthen the rural economy in regions that can provide natural amenity values and recreation services. For the rural communities around parks, while new visitors are undoubtedly important, the intention of previous visitors to revisit the park and region is equally important.

The purpose of this study was to examine how the perceived quality of recreation services, with the intervening factors of place attachment, explain the future intention to revisit a national park region. Furthermore, we analyzed how social bonds with an area relate to place attachment and revisit intention. A case study on Seitsemäniemi, Linnansaari, and Repovesi National Parks in Southern Finland provided empirical data on the interaction of park visitors with the park and surrounding rural area. Using onsite visitor sampling, a mail questionnaire was completed by 736 park visitors.

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The results showed that social networks, such as relatives or a recreational home in the region, were positively associated with place attachment and visit intention. A structural equation model revealed a positive interaction between the perceived quality of services, the recreation environment, hospitality, and place attachment. Those who were more satisfied with the services, recreation environment, and hospitality were more attached to the region. Among park visitors, perceptions of a high quality of both services and recreational environment correlated positively with attachment to the park and the region. A positive place attachment also increased the intention of respondents to revisit the region in the future.

In many countries, national parks as destinations for tourism are identified as providing an opportunity to strengthen the otherwise declining rural economy with the income flow brought by park visitors. The magnitude of the economic impact of tourism depends on the number of visitors and their expenditure on local and regional services and products. The number of new visitors as well as revisits by previous visitors form the total visitor flow, which creates the basis for the demand for tourism services in the region.

Although some previous studies have shown that repeat visitors are often willing to spend less than newcomers (Alegre and Juaneda 2006; Jang et al. 2004), tourists expressing satisfaction with tourism service quality and showing emotional place attachment have accounted for a higher proportion of overall expenditures, even if they have been repeat visitors (Alegre and Juaneda 2006). Satisfied and loyal visitors may also be otherwise important for local enterprises, as a visitor's loyalty toward a destination can imply willingness to recommend the destination to other visitors and thus support the marketing of local services.

The interest of previous visitors in revisiting a region can be explained partly by tourism service provision in the region (Lee 2006, 2009; Lee, Graefe, and Burns 2007), and also by visitors' overall attachment to the region (Hailu, Boxall, and McFarlane 2005). Furthermore, attachment to a place has been found to be connected to a visitor's perception of service quality (Hwang, Lee, and Chen 2005; Kyle et al. 2004a). Thus, the intention to revisit can be explained by two types of factors: those associated with the individual characteristics of the visitor, including place attachment, and those that correlate with the services provided and their perceived quality. Although some previous studies have focused on the combined effect of place attachment and perceived service quality on visit intentions (Alexandris, Kouthouris, and Meligdis 2006), the relative importance of these factors is not well known, particularly in the national park setting.

To analyze the factors underlying revisit intention, this study focused on three national parks in Finland. In 2008, the combined total number of visits to all national parks in Finland was 1.8 million, but the number of visits varied considerably between parks, from 3,500 to 329,500 (Metsähallitus 2008). The national parks that were selected for inclusion in this study, Seitsemien, Linnansaari, and Repovesi, had 44,500, 29,000, and 75,500 visits, respectively, in 2008. According to visitor surveys conducted in the parks, two out of three visitors had visited the

particular park eight times on average during the previous five years, and one-third of visitors were visiting the park for the first time (i.e., no previous visits) (Metsähallitus 2009).

For the park managers and tourism entrepreneurs who plan investments, marketing, and service development as well as for local policymakers, it is particularly important to know whether the supply and management of tourism services can affect visitor flows, or whether visitation is more related to an individual's personal ties and bonds to the region. If management has a key role, it is important to know what types of tourism and recreation services affect the intention to revisit. Furthermore, it is essential for these operators to be aware of how the perceived quality of tourism services is related to the visitor flow.

The aim of this study was to examine how place attachment as well as experiences of tourism and recreation services and the recreation environment explain the intention to revisit a particular national park and the park region. It was assumed that the strength of attachment of recreationists to a park and the perceived quality of the services affect their intention to revisit. In addition, the interaction between place attachment and recreation service satisfaction was tested, and the relative importance of these two factors in explaining revisit intention was examined. In particular, the study aimed at identifying whether there is any causal relationship between these factors. An empirical model based on this structure was estimated to explain the intention to visit a national park. Furthermore, the model was extended by including variables related to visit history and also to social bonds, such as relatives living in the region or a recreational home in the region.

Theoretical Framework and Hypothesis of the Study

In this study, we were particularly interested in the future intention to visit national parks and regions as a function of the perceived service quality, place attachment, social bonds, and visitation history. In the following sections, we briefly describe the concepts used and our assumptions of their relationships based on previous literature.

Perceived Service Quality and Satisfaction

A general assumption is that satisfied visitors are those who are also interested in revisiting the destination in the future. Tourist satisfaction is a positive perception or feeling, or an expressed degree of pleasure that tourists gain from a visit (Beard and Ragheb 1980). The conceptual difference between satisfaction and perceived service quality has been analyzed and constructed in some studies (Baker and Crompton 2000; Tian-Cole and Crompton 2003), although in many studies these concepts overlap. However, they focus on different objects: perceived service quality is an evaluation of the quality of services/destinations, whereas satisfaction is an evaluation of the visit experience at the destination, or experience of

using services in general (Tian-Cole and Crompton 2003). Previous research has indicated that both a high perceived service quality and high satisfaction make revisitation more likely (Appiah-Adu, Fyall, and Singh 2000; Baker and Crompton 2000; Bigné, Sánchez, and Sánchez 2001; Cai, Wu, and Bai 2004; Huang and Hsu 2009; Lee, Graefe, and Burns 2007; Petrick 2004; Yoon and Uysal 2005; Um, Chon, and Ro 2006). This connection has been found in several different contexts, some of which relate to nature tourism destinations (Lee 2006, 2009; Lee, Graefe, and Burns 2007) and some to other destination types (Bigné, Sánchez, and Sánchez 2001; Huang and Hsu 2009; Lee, Yoon, and Lee 2007; Yoon and Uysal 2005; Um, Chon, and Ro 2006).

From the managerial perspective, perceptions of service quality are likely to provide more useful information than general visitor satisfaction, offering beneficial guidance for management changes and improvements, since service quality is under the management's control (e.g., Baker and Crompton 2000). Moreover, perceived service quality attributes have been found to more strongly affect behavioral intentions than general satisfaction (*ibid.*).

The literature provides a number of service quality measurement methods that can also be applied in the nature tourism setting. The majority of methods are attribute-based, and the most frequently used group of measures is based on the SERVQUAL instrument (Parasuraman, Zeithaml, and Berry 1988). The SERVQUAL is a multi-item scale developed to assess customer perceptions of service quality in service and retail businesses. In the original form of the measure, service quality is interpreted as the discrepancy between a customer's expectations of a service offering and the customer's perceptions of the service received. A more complicated variant of the measure has also included the relative importance of service as a weighting factor. A simplified variant of SERVQUAL, which includes only the evaluation of performance and excludes the measures of expectations and of the relative importance of attributes, has been recommended and applied by several authors (Absher 1998; Churchill and Suprenant 1982; Cronin and Taylor 1992). Despite its deficiencies (Babakus and Boller 1992; Carman 1990), the SERVQUAL instrument has been found useful in the nature tourism setting (Akama and Kieti 2003).

The scale has decomposed the notion of service quality into several constructs, depending on the application, such as tangibles (physical facilities, equipment, staff appearance), reliability (trustworthiness and accuracy) responsiveness (willingness to help and respond), assurance (confidence and trust), and empathy (caring individualized service) (Carman 1990). In many cases the emphasis is on staff performance. However, when the focus is on nature tourism services in a region, the content shifts more in the direction of tangible (e.g., practical and functional) services such as transportation, accommodation, and food supply. Tangible components of recreation services such as trails, shelters, signposting, and information boards are particularly important in the recreation setting (Burns, Graefe, and Absher 2003; Howat et al. 1996; Tarrant and Smith 2002).

Place Attachment

The intention to visit a place has been explained by inner social psychological factors such as attachment to the place (Hailu, Boxall, and McFarlane 2005). Place attachment refers to the emotional and symbolic relationship that an individual forms with a place (Williams and Vaske 2003), and is suggested to be a two-dimensional conceptualization consisting of place identity and place dependence (Williams et al. 1992). Place identity is the emotional component of attachment, that is, “the symbolic importance of a place as a repository for emotions and relationships that give meanings and purpose to life” (Williams and Vaske 2003 <<page no. of quote?>>). Place identity has been interpreted as part of self-identity, enhancing an individual’s self-esteem and increasing feelings of belonging to his/her community (Bricker and Kerstetter 2000; Kaltenborn and Williams 2002; Williams and Vaske 2002; Kyle et al. 2004a, 2004b). The meaning of place dependence relates more to the functional importance of a place. It refers to those conditions or functions that are essential in satisfying an individual’s needs and goals (Williams and Vaske 2003). These conditions might be related to the physical aspects of the place, such as opportunities to participate in a particular recreational activity, or accessibility.

The components of place attachment have been found to be associated with evaluations of service quality (Alexandris, Kouthouris, and Meligdis 2006; Bonaiuto et al. 1999; Hwang, Lee, and Chen 2005). The proposal of causality in the study by Alexandris, Kouthouris, and Meligdis (2006) suggests that the perception of service quality affects place attachment. However, their model did not allow testing of the direction of the causal relationship. A study by Bonaiuto and coworkers (1999) revealed that the perception of the quality of environmental attributes, such as the landscape, also strengthens place attachment. On the other hand, place attachment has been shown to affect the perception of the quality of interpretation services (Hwang, Lee, and Chen 2005). In our study, the interest was in both the strength and the direction of the causality between place attachment and perceived service quality, and their components. To examine this causality, different correlation structures between the variables were tested with structural equation modeling.

Social Dimension of Place—Social Bonds

Social bonds contribute to the development of place attachment, particularly in one’s own neighborhood (Hidalgo and Hernández 2001; Mesch and Manor 1998; Uzzell, Pol, and Badenas 2002). If a natural setting such as a national park and the surrounding region provides a context for meaningful social relationships and shared experiences, some of these meanings merge with the feelings toward the place. In many regions, national parks are located in areas with special natural beauty and opportunities for nature-based recreation, which also provide resources for holiday resorts. In Finland, the same areas are attractive locations for recreational homes. People may have social ties to the national park region because of family

or relatives, and because of their own recreational home, which offers a basis for frequent contacts with local people (Tuulentie 2007).

Past Behavior

Past corresponding behavior has also been found to be a good predictor of behavioral intentions in the case of tourism and recreation (Sönmez and Graefe 1998; Sparks 2007). Some studies have looked at the familiarity of a setting as a predictor of future visit intentions, showing either a nonsignificant association (Woodside and Lysonski 1989) or an increasing likelihood of future visits (Gyte and Phelps 1989; Juaneda 1996).

It can be assumed that without previous experiences of an area there can be no attachment to it, but how intensive must use history be to create an attachment? The mechanism behind the effect of previous visits has been suggested to be based merely on repeated exposure, meaning that place identity is formed primarily via repeated visits to a place (Backlund and Williams 2004; Zajonc 2001). It has also been shown that recreation habits such as the frequency of previous visits have a stronger direct effect on current visitation than does place identity. However, the habitual tendency to visit a place has a very strong association with place identity (Hailu, Boxall, and McFarlane 2005).

Hypothesis of the Study

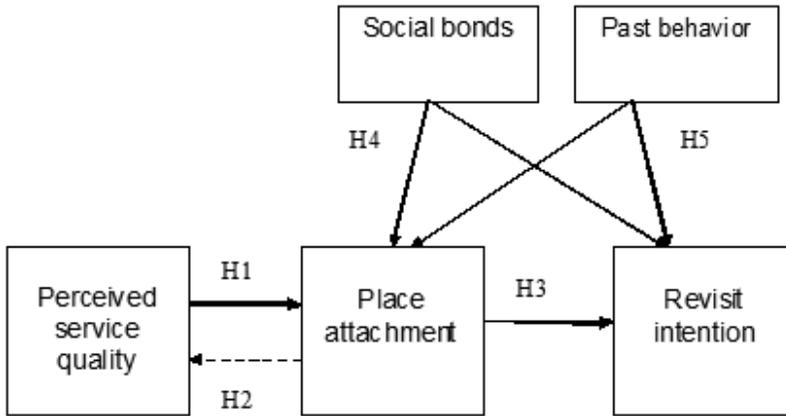
In this study we focused on the relationships between the concepts of place attachment (i.e., place dependence and identity), perceived service quality, and visit intention. Furthermore, we included past behavior (number of previous visits) and social bonds in the analysis. The hypothesized relationships are described in Figure 1.

Data and Methods

Study Area and Data Collection

All of the parks selected as case areas are located in southern Finland, where the development of nature tourism is more challenging than in northern Finland, which has richer resources for recreation (Puustinen et al. 2009). Linnansaari National Park is located in the middle of a larger lake complex in eastern Finland, and Repovesi National Park is surrounded by several smaller lakes. In Seitsemien National Park, forest is the most typical natural element. The parks were established in separate decades: Linnansaari in 1956, Seitsemien in 1982, and Repovesi, one the newest parks in Finland, in 2003. Linnansaari and Seitsemien provide a high level of services within the park, whereas Repovesi's services are less developed. The area close to Linnansaari National Park is more urbanized and provides more services for visitors than do the municipalities close to Seitsemien and Repovesi.

Figure 1. Theoretical Structural Model



H1: Perceived quality of recreation services is positively associated with place attachment, preceding it in causal relations.

H2: Alternatively, place attachment is positively associated with perceived quality of recreation services, preceding it in causal relations.

H3: Place attachment is positively associated with revisit intention.

H4: Social bonds are positively associated with place attachment and revisit intention.

H5: Past behavior (a high number of previous visits to a national park) is positively related to place attachment and revisit intention.

The empirical data used here were collected together with Metsähallitus, the state-owned forest administration service, from Seitsemien and Linnansaari National Parks in 2006 and from Repovesi in 2007. The data collection period extended from mid-May until the beginning of October. Altogether, 736 respondents returned the questionnaire handed to them during their visit to the parks. The response rate was 72 percent in Seitsemien, 63 percent in Linnansaari, and 68 percent in Repovesi National Park.

The Questionnaire

The park area and surrounding countryside were presented in a map that was distributed together with the questionnaire. The individual questions were focused either on the park or on the region surrounding the park. In designing the questionnaire, previous literature (particularly Kyle et al. 2004b; Moore and Scott 2002 <<references cite 2003>>; Stedman 2003; Williams and Vaske 2003) was applied to formulate the measures of place attachment in the components of place dependence and place identity. Four measures for each component were defined and adapted to suit the Finnish language. The eight measures were first focused on the park, and second, on the region surrounding the park. In this manner we

used sixteen measures for place attachment. These measures are provided in Table 2. <<Please clarify; tables must be called out in order; Table 1 has not been called out yet and Table 2 is mentioned again below>>

Measurement of perceived service quality consisted of several dimensions such as evaluation of the facilities (e.g., shops, transportation, lodging, restaurants, and information on them), the personnel (e.g., friendliness and willingness to serve), and the landscape and environment.

Visitation history was measured in terms of the number of visits to the region. Social bonds were measured with four dichotomous questions focusing on friends and relatives, the ownership of a recreational home in the region, relations with local people, and activities in the region other than visiting the national park.

Statistical Methods

We applied structural equation modeling to examine the relationships between various factors affecting a visitor's intention to revisit a national park and the rural region surrounding it. A structural equation model is commonly described as the combination of a structural model and a measurement model (Shipley 2002). To estimate the model, the hypothesized causal structure of the relationship between the variables was first specified. Linear equations were then formulated to transfer the structure into an observational model. The third step was to define the covariance between each pair of variables. Determination of covariance is a way to express the path coefficients, variances, and covariances that have to be estimated from the data. In the fourth step, free parameters were estimated by using maximum-likelihood estimation. Finally, the extent to which the covariances predicted by the model corresponded to the observed covariances in the data was calculated using χ^2 statistics. The data were analyzed with EQS for Windows.

In addition to the a priori hypothesis of the structure presented in Figure 1, several competing structures were also tested. The most interesting alternative structure was one in which place-attachment variables were causal precursors of perceived service quality. From these two model alternatives, the best model was selected based on goodness-of-fit measures. For the comparative fit index (CFI), the goodness-of-fit index (GFI), and Bentler and Bonett's normed fit index (NFI), values > 0.90 indicate an acceptable fit, while for the root mean square error (RMSEA) values < 0.08 indicates an acceptable fit.

Results

Respondent Profile

The majority of respondents reported their intention to revisit the surrounding rural area (64 percent) and the park itself (69 percent). Comparing the three parks, visitors to Seitsemien National Park were most willing to revisit the area in the

near future, and they differed statistically significantly in their intentions from the visitors to Repovesi National Park, who were least interested in revisiting the park region. The revisit intention as well as the variables used in the models are reported for each park in Table 1.

Internal Consistency and Construct Validity of the Concepts

In the first stage, we constructed a measurement model (here a factor model) to reduce the number of variables. With factor models we obtained latent variables for place attachment, place identity, quality perceptions (tourism facilities, landscape and environment, hospitality), and social bonds. The factor loadings were used as weights to calculate new index variables for place attachment, quality perceptions, and social bonds. We were unable to find an adequate solution for the full model including all individual items as well as all latent variables. To improve the fit we tried to capture the unexplained variance by fixing the covariances, but this did not provide an adequate solution. We did not want to end up with a model that had a complicated covariance structure, and therefore used factor loadings from factor models as weights to calculate new index variables for place attachment, quality perceptions, and social bonds. The factor loadings as well as Cronbach's alphas are presented in Table 2. Cronbach's alpha is used as an estimator of the internal consistency and reliability of a set of measures. For the sixteen observed items to measure place attachment, eight items for place attachment in the national park and eight for the region surrounding the park, Cronbach's alphas (> 0.790) indicated acceptable consistency of these measures. For the three measures of the perceptions for recreational service quality, that is, facilities, environment, and personnel, Cronbach's alphas were also reasonable (all > 0.776). As we had seven items measuring various conceptually different dimensions of social relations with the place (e.g., number of contacts with local people), we did not expect internal consistency between the measures, but formed an indicator covering these various aspects of social bonds.

Relationships Between the Concepts

In the second stage, to assess how the index variables for the three quality perceptions, place identity and dependence, and social bonds associated with revisit intention, we first used correlations (Table 3) and then a structural equation path model. In addition to the constructed index variables, the tested models included the number of previous visits.

We were first interested in defining the causal structure between place attachment and quality perception components underlying the intention to revisit. Figure 2 illustrates the path diagrams for two alternative model structures and Table 4 provides the model-fit indicators for these two models. The alternative model—that place attachment alters quality perceptions—was rejected, as the goodness of fit of the model was lower than in the structure shown uppermost in Figure 2.

Table 1

Revisit intention, place attachment, perceived service quality, social bonds, and the number of visits, as well as travel distance and costs for visitors to Seitsemien, Linnansaari and Repovesi National Parks in Southern Finland <<can title be shortened to "Various Indexes for Visitors to Seitsemien....."?>>

Park	Seitsemien	Linnansaari	Repovesi	Total	χ^2 test (p-value)
Visitors intending to revisit the region (%)	68 ^A	64 ^{AB}	55 ^B	64	8.422 (0.015)
Visitors intending to revisit the park (%)	71	64	70	69	2.504 (0.286)
		Mean			F-test (p-value)
Index of place dependency	12.3 ^A	13.2 ^B	12.6 ^{AB}	12.6	3.713 (0.025)
Index of place identity	14.6	15.1	14.7	14.8	1.049 (0.351)
Index of perceptions of the local tourism services	9.1 ^A	11.4 ^B	8.3 ^A	9.6	16.059 (< 0.001)
Index of perceptions of landscape and environment	11.4	11.8	11.6	11.6	2.047 (0.130)
Index of perceptions of local hospitality	5.3 ^A	6.9 ^B	5.6 ^A	5.8	18.039 (< 0.001)
Index of social bonds	1.04	1.01	0.97	1.02	0.261 (0.770)
Number of visits to the park (during five years)	8.6	6.9	9.3	8.2	0.423 (0.656)
Distance traveled to the area, km	233 ^A	497 ^B	208 ^A	264	27.096 (< 0.001)
Personal travel cost, P	90 ^A	223 ^B	91 ^A	113	23.775 (< 0.001)

A, B, and C <<there is no "C" indicated>> indicate that the parks differ statistically significantly from each other at $p < 0.05$ (Tukey) <<what does Tukey represent?>>.

Table 2

Measurement of Items, Results of Factor Analysis

Variables	Mean	Factor loading	Cronbach's alpha
Place dependence (national park)	For me the national park is a more pleasant travel destination than any other area.	0.676	0.792
	The national park is the best place for my activities.	0.574	
	I wouldn't substitute any other area for doing the types of things I do at the national park.	0.618	
	Many other places can compare with the national park ¹	0.220	
Place dependence (surrounding area)	For me, this region is more pleasant to visit than any other region.	0.789	
	This region is the best place for my activities.	0.721	
	For me, lots of other regions could substitute for this region. ¹	0.263	
	I wouldn't substitute any other region for doing the types of things I do in this region.	0.725	
Place identity (national park)	I feel very attached to the national park.	0.623	0.798
	I feel that I can really be myself in the national park.	0.528	
	Visiting the national park says a lot about who I am.	0.566	
	I feel no commitment to the national park. ¹	0.397	
Place identity (surrounding area)	I feel that I can really be myself in this region.	0.609	
	I feel no commitment to the region. ¹	0.535	
	Visiting this region says a lot about who I am.	0.677	
	I feel very attached to this region.	0.679	

Perceived quality of tourism facilities		0.809
Public transportation		0.373
Retail trades, shops		0.528
Accommodation services		0.595
Restaurants, coffee shops		0.597
Program services		0.624
Service stations		0.510
Information on the local services		0.572
Cultural events, exhibitions		0.677
Services for outdoor recreation (outside the park)		0.565
Perceived quality of landscape and environment		0.777
Beautiful landscape		0.612
Tidiness		0.759
Peacefulness		0.789
Safeness		0.605
Perceived quality of hospitality		0.869
Friendliness of the local personnel		0.967
Willingness to be of service		0.833
I have relatives or friends living in the area surrounding the national park		-0.746
The only connection to the local people was when I used the local services (shops, guides, etc.)		-0.090
My main purpose is to visit the national park when I come to this region.		0.352
I regularly participate in the events organized in the region.		0.581
I regularly visit the region for other activities than those that are related to my visit to the park.		0.537
I have a vacation home in the region.		0.324
Other reason to visit, what is it?		— ²

¹Item was reverse coded prior to the analyses.

²Cronbach's alpha is not a valid measure because the purpose of this set of questions is not to test internal consistency but provide information on the various aspects of social bonds to the region.

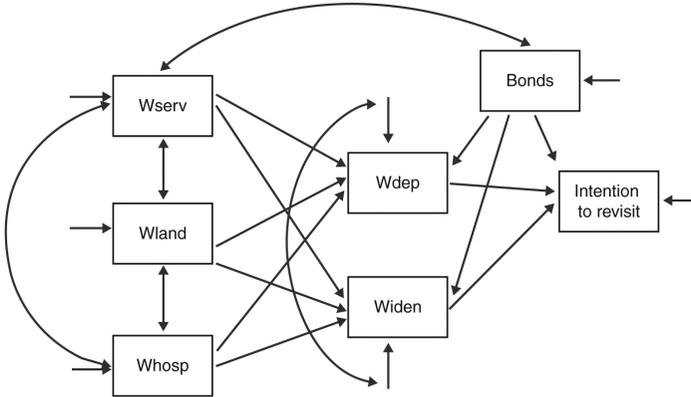
Table 3

Correlation Matrix of the Studied Variables

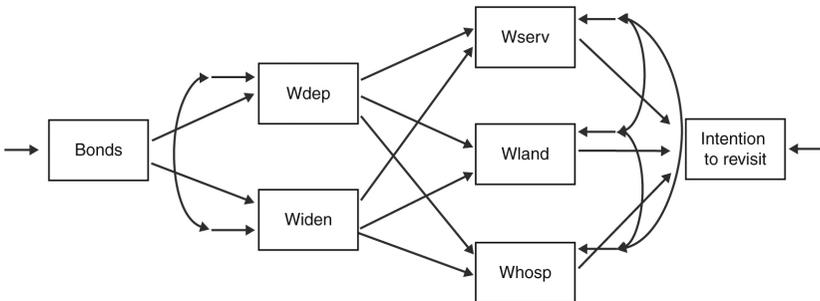
Variables	Revisit intention	Bonds	Place dependence	Place identity	Services	Landscape and environment	Hospitality
Revisit intention	1.000						
Bonds	0.354 (< 0.001)	1.000					
Place dependence	0.331 (< 0.001)	0.284 (< 0.001)	1.000				
Place identity	0.322 (0.000)	0.286 (< 0.001)	0.686 (< 0.001)	1.000			
Perceived quality of tourism services	0.150 (< 0.001)	0.255 (< 0.001)	0.352 (< 0.001)	0.294 (< 0.001)	1.000		
Perceived quality of landscape and environment	0.024 (0.530)	-0.025 (0.532)	0.205 (< 0.001)	0.177 (< 0.001)	0.252 (< 0.001)	1.000	
Perceived quality of hospitality	0.056 (0.149)	0.138 (< 0.001)	0.166 (< 0.001)	0.136 (0.001)	0.423 (< 0.001)	0.349 (< 0.001)	1.000
Number of previous visits to the park	0.128 (0.004)	0.181 (< 0.001)	0.190 (< 0.001)	0.131 (0.004)	0.066 (0.149)	-0.066 (0.139)	-0.047 (0.288)

Figure 2. <<TITLE?>>

Model presented in Table 5



Alternative model



All model-fitting parameters indicated that the selected structure had an acceptable fit to the data (Table 4). Two quality perception factors (tourism facilities, and landscape and environment) interacted positively and statistically significantly with place attachment, supporting H1. The model indicates that positive quality perceptions increased place attachment. Those who were satisfied with the local facilities and environment felt that the park and its region provided good opportunities for their activities and were emotionally more attached to the area. A high perception of the quality of tourism services had a slightly higher impact on place dependence, which was measured by the provision of opportunities for recreational activities, than on place identity. On the other hand, the perceptions of landscape and environmental quality had a stronger influence on place identity, which is the emotional dimension of place attachment, than on place dependence. Local hospitality was not significantly related to either of the place attachment

Table 4

Model Selection Between the Model Hypothesized in Figure 1 and an Alternative Model Where Place Attachment Precedes the Quality Perceptions

Variables	χ^2	Pr > χ^2	df	CFI	NFI	GFI	RMSEA
Model based on hypothesis in Figure 1	20.365	0.001	5	0.978	0.909	0.989	0.077
Alternative model: Place attachment → Perceived quality of tourism services	117.342	0.000	6	0.843	0.840	0.946	0.189

$$df_1 = 7(7 + 1) / 2 - 23 = 5; df_2 = 7(7+1) / 2 - 22 = 6.$$

components (not supporting H1).

A positive place attachment increased the respondents' future intentions to revisit an area (H2 supportive). Both place identity and place dependence had a significant effect on revisit intentions, although the effect of dependence was stronger. The overall effect implies that those who perceived a high quality of local tourism facilities, as well as landscape and environment, and who were attached to the region/park, were also more likely to revisit the area.

Strong social bonds to the region increased both the place attachment and the intention to revisit the park and the rural area (H3 supportive). Its relative effect on the revisit intention was even stronger than the effect of place attachment. The number of previous visits correlated positively with place attachment and with revisit intention (Table 3), but had no significant effect in the model (not supporting H4), and was dropped from the final model in Table 5.

Overall, the model indicates that both quality perceptions of tourism services with intervening factors of place attachment, together with social bonds, most comprehensively explained ($R^2 = 0.180$) the intention of respondents to revisit a national park region (Table 5).

Conclusions and Discussion

In this study, place attachment was found to have considerable importance in explaining the intention of national park visitors to revisit. Although revisit intention was affected by both place attachment and perceptions of service quality, our model

Table 5

Structural Equation Model

Predictor	Dependent variable	Standardized coefficient	T-value
Perceived quality of tourism services (Wserv)→	Place dependence	0.269	5.928
	Place identity	0.220	4.732
Perceived quality of landscape and environment (Wland)→	Place dependence	0.139	3.253
	Place identity	0.148	3.396
Perceived quality of local hospitality (Whosp)→	Place dependence	-0.023	-0.500
	Place identity	-0.042	-0.909
Place dependence (Wdep)→	Intention to revisit	0.159	3.004
	Intention to revisit	0.125	2.361
Social bonds (Bonds)→	Place dependence	0.223	5.438
	Place identity	0.215	5.114
	Intention to revisit	0.262	6.256

Notes: $n = 518$; T -values > 1.960 significant at $p < 0.05$, $T > 2.576$ significant at $p < 0.01$, and $T > 3.291$ significant at $p < 0.001$; squared multiple correlations: Intention to revisit $R^2 = 0.176$, place dependence $R^2 = 0.180$, place identity $R^2 = 0.143$; correlations among independent variables: $Wserv - Bonds = 0.220$, $Wland - Wserv = 0.254$, $Whosp - Wserv = 0.407$, $Whosp - Wland = 0.329$.

illustrated that the effect of quality perceptions takes place via place attachment. This result is supported by other studies (Alexandris, Kouthouris, and Meligdis 2006; Bonaiuto et al. 1999). Our results indicate the importance of social bonds to the surrounding region of national parks in explaining future visits, as they act directly as well as via place attachment on visit intention.

Even though past behavior is a strong predictor of visit intentions in general (Huang and Hsu 2009; Sönmez and Graefe 1998; Sparks 2007), in our study the measurement of place attachment appeared to be effective enough without past behavior to explain the intention to revisit. However, past behavior could also have

been a good explanatory variable if it had been used independently without the place attachment variable.

Visitors to Linnansaari National Park had the highest scores for place attachment, but they expressed the least interest in revisiting the park compared with visitors to the two other parks. Even though the overall tendency is that a high degree of place attachment reflects a high degree of revisit intention, there are obviously some differences depending on the specific place (park). In our case, visitors to Seitsemien National Park most frequently visited only the park and not the neighboring area, which can partly be explained by the fact that 64 percent of Seitsemien visitors were “locals” living in adjacent regions. In Repovesi, 57 percent and in Linnansaari, 42 percent of visitors were from the same region as the park or from a neighboring region (Metsähallitus 2009). Visitors to Linnansaari National Park could be most strongly characterized as representing tourists from throughout Finland. Despite these park-specific differences, the same structural model could be constructed for all three parks, which indicates more general associations between the variables than could be shown with a case study focusing on a single park.

Our results help national park management to understand the challenges they face in seeking to enhance revisitation. As place attachment seems to have an important role in the decision to revisit, managers are encouraged to develop recreation services that deepen place attachment. Building place dependence seems to be an easier task for managers than building place identity because place identity is less related to perceptions of service quality and more connected to personal meaning and emotional ties with the park (cf. Alexandris, Kouthouris, and Meligdis 2006). However, place dependence has been noted to relate to personal commitment to a particular recreational activity (Moore and Scott 2003), and the improved provision of activity opportunities may thus affect revisit intention. However, the good news for managers is that satisfaction with recreation services and place attachment are both important factors influencing the number of visits, and that place attachment is to some extent manageable via service supply.

Information on the importance of social bonds would help local entrepreneurs to define the key clientele for their business. Visitors who have social ties to the region are easily reachable and an easy target group for marketing. For local entrepreneurs, it is ideal to have a group of loyal, frequent visitors who return to the region, have strong emotional feelings toward the area, and are thus most likely to create a positive atmosphere and recommend the destination to other possible visitors.

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