

Can we predict visitor loyalty in protected areas? The case of Kornati National Park

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Introduction

The Kornati Archipelago (Croatia) stretches over an area of 320 km² and includes 149 islands, isles, and reefs. Part of the Archipelago, encompassing 89 land units and adjacent marine area with total area 217 m² was proclaimed a National Park in 1980 due to exceptional geomorphological features, anthropogenic terrestrial vegetation, rich marine biodiversity, and oceanographic specificities.

The Kornati Archipelago is visited exclusively by boat. Visitors to Kornati National Park (Kornati NP) can be divided into two basic groups: individual visitors and group visitors. The number of visits has increased over time, from 166,941 in 2015 to 172,603 in 2017 (according solely to the tickets sold). The main motives to visit Kornati NP are leisure and relaxation and enjoying nature (Markov et al., 2016).

It is generally believed that in tourism, high service quality and resulting satisfaction lead to positive word-of-mouth endorsements, referrals, and repeat visits, which ultimately affect the financial performance of suppliers associated with the tourism industry (Žabkar et al., 2010). Satisfaction is the most commonly used customer perceptual metric by managers - because it is generic and can be universally gauged for all products and services and it is clearly understood by respondents (Gupta and Zeithaml, 2007). The degree of tourists' loyalty to a destination is reflected in their intentions to revisit the destination and in their recommendations to others, and thus, information about tourists' loyalty is important to destination marketers and managers (Yoon and Uysal, 2005). Depending on temporal orientation, loyalty can be measured as past account or future prediction. When measured in future temporal manner, loyalty can be expressed as the likelihood to recommend, the likelihood to repurchase, or depending on the context, the likelihood to visit/repurchase from the retailer again. Understanding how satisfaction during a tourism-related service encounter develops and how it affects behavioural intention to return or to develop positive word of mouth is of substantial interest to managers and researchers.

Aim of the research

The aim of the paper is to analyse the relationship between visitor satisfaction and loyalty in Kornati National Park.

Method

The survey was conducted by Polytechnic of Šibenik in the period 2015 - 2016 by using a structured questionnaire prepared in five languages. The sampling was conducted using a stratified random sampling. Although the sample includes group visitors (visitors on excursion boats) and individual visitors, here we analyse only visitors on excursion boats (in total, after data cleansing, 250 group visitors were interviewed in 2015 and 177 in 2016). The survey was conducted by using a self-filling questionnaire under the supervision of interviewers at several locations in Murter and Kornati NP. The research content includes sociodemographic characteristics of visitors, travel information, motives and information sources and self-developed items to measure satisfaction on several attributes that were relevant for managers in protected areas and questions about willingness on recommendation and revisiting. Visitors' satisfaction was analysed for 10 different categories: park information availability (*sinf1*), usefulness of guides and maps for visitors available in the park (*sinf2*), usefulness of information on biodiversity (*sinf3*), staff professionalism and kindness (*sval1*), possibility to enjoy in nature (*sval3*), availability of local products (*sval4*), range of available activities (*sval5*), number of other visitors in the park (*sval6*), value for money (*sval9*), and overall satisfaction with the park (*sovr*). The relationship between visitor satisfaction and loyalty is analysed by performing univariate tests and by applying structural equation modelling (SEM).

Results

In this paper, data collected in 2015 served as training data, while data collected in 2016 served as the test dataset. The degree of visitors' loyalty to a destination is measured by means of behavioural intentions which were operationalised with two indicators related to re-visitation and recommendation. Visitors' satisfaction was analysed for 3 different satisfaction categories: *satisfaction with information* (this was operationalised with three indicators: *sinf1*, *sinf2*, *sinf3*), *satisfaction with activities* (*sval4*, *sval5*), and *main satisfaction indicator* (*sval1*, *sval3*, *sval6*, *sval9*, *sovr*). Most of the visitors were on their first visit (~80%) thus loyalty was oriented in the forward temporal oriented manner expressed as willingness to recommend the destination and to revisit the destination. In total, 40.2% of visitors stated that they intend to revisit NP Kornati, while 16.4% of visitors stated that they don't intend to revisit with 43.4% not sure about their revisiting. Moreover, most of the visitors would recommend visiting Kornati National Park (86%), 12% of visitors would maybe recommend, while a minority (2%) would not recommend a visit. Each satisfaction indicator was analysed separately due to loyalty variables. All satisfaction indicators except *sinf3* were significantly higher in the group of loyal visitors (recommending/revisiting) than in the group of non-loyal visitors. Afterwards, due to the fact that both, satisfaction and loyalty are latent constructs, the relationship between loyalty and satisfaction was analysed by applying structural equation modelling (SEM) (Figure 1).

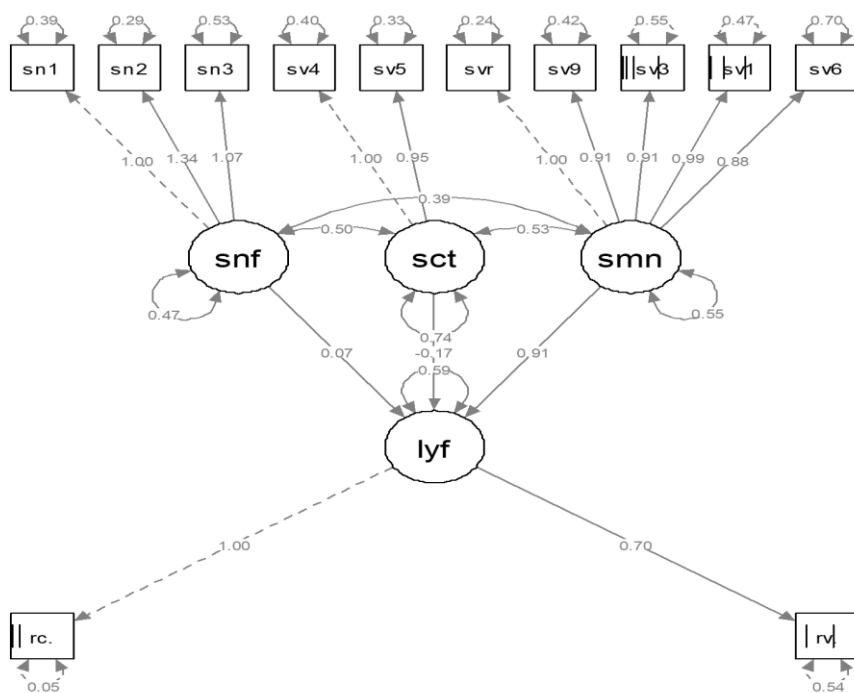


Figure 1. SEM results (Robust estimation: $\chi^2=91.275$ ($p=0$), CFI=0.934, TLI=0.910, SRMR =0.047, RMSEA=0.069)

In the SEM model, one regression equation has been set: regressing *main satisfaction factor*, satisfaction with information, and satisfaction with activities on loyalty factor. The results suggest that visitor loyalty is positively related to visitor satisfaction where only *main satisfaction factor* stands out as a significant predictor of loyalty. A standard deviation increase in *main satisfaction factor* brings about 0.91 standard deviation increase in loyalty factor. In particular, overall satisfaction, staff professionalism and kindness, value for money, and the possibility to enjoy nature are main drivers of *visitor loyalty*. This model was tested on the 2016 survey data. The SEM model confirms the same structure having visitor *loyalty* positively related to visitor satisfaction where only *main satisfaction factor* stands out as a significant predictor of *loyalty*.

Conclusion

Understanding which factors increase visitor loyalty is a valuable input for developing marketing and management strategies in NP Kornati.

Visitor loyalty is positively affected by visitor satisfaction where overall satisfaction, staff professionalism and kindness, the possibility to enjoy nature, and value for money are the main indicators of visitor satisfaction. The results are not surprising since they show that main drivers of visitor loyalty comprise overall satisfaction dimension, monetary dimension, social interaction, and primary motives for visiting.

References

1. Gupta, S. and Zeithaml, V.A. (2007), "Customer metrics and their impact on financial performance", *Marketing Science* 25, pp 718–739
2. Perišić A., Beljo I. and Mečev D. (2016) "Istraživanje strukture i stavova posjetitelja Nacionalnog parka Kornati", Polytechnic of Šibenik.

3. Perišić A., Beljo I. and Mečev D. (2017) "Istraživanje strukture i stavova posjetitelja Nacionalnog parka Kornati II", Polytechnic of Šibenik
4. Yoon, Y. and Uysal, M. (2005) An examination of the effects of motivation and satisfaction on destination loyalty: a structural model. *Tourism management*, 26, pp 45-56.
5. Žabkar, V., Makovec Brenčič M. and Dmitrović, T. (2010) Modelling perceived quality, visitor satisfaction and behavioural intentions at the destination level. *Tourism Management*, 31 (4), pp 537-546.
6. Markov, M., Radić Lakoš T., Perišić, A., Bračanov, V. (2016) Profile characteristics and satisfaction of Kornati National Park visitors, *Monitoring and Management of Visitors in Recreational and Protected Areas (MMV)*, Novi Sad, Srbija.