

Identifying health and wellbeing benefits perceived by visitors in Finnish protected areas

Veikko Virkkunen, Metsähallitus Natural Heritage Services, Finland, veikko.virkkunen@metsa.fi

Joel Erkkonen, Metsähallitus Natural Heritage Services, Finland

Liisa Kajala, Metsähallitus Natural Heritage Services, Finland

Martti Aarnio, Metsähallitus Natural Heritage Services, Finland

Riikka Mansikkaviita, Metsähallitus Natural Heritage Services, Finland

Tapio Lepikkö, Metsähallitus Natural Heritage Services, Finland

Hannu Kaikkonen, Oulu Deaconess Institute, Finland

Raija Korpelainen, Oulu Deaconess Institute, Finland

Introduction

A growing body of research indicates that contact with nature has diverse and profound benefits on human health. Regular and short-duration physical activities in green spaces contribute to immediate mental health benefits, such as improved self-esteem and mood (Barton & Pretty 2010). Contact with nature helps to cope with and recover from stress and promotes social relations (Maller et al. 2008). Green spaces improve motivation for exercise, resulting in higher activity levels (Karjalainen et al. 2010). Furthermore, natural settings provide inspirational spaces for recreation. However, Maller et al. (2008) have pointed out a lack of research demonstrating health opportunities and benefits specific to protected areas.

Metsähallitus Natural Heritage Services (NHS) manages Finnish national parks and other state-owned protected areas. NHS works to improve public well-being and the viability of tourism, as well as the state of biodiversity in Finland. In 2010, NHS launched Healthy Parks, Healthy People Finland programme that aims to improve public health by activating people to get out into natural settings, enjoying positive and genuine experiences and improving their physical health through a wide range of outdoor activities. The key aim in the programme is that health benefits resulting from the use of protected areas are effectively monitored and measured, so that the findings can be used to enhance services. Better understanding of the health benefits also affects decision-making and funding becomes available from more diverse sources. Project OPEN (Oulu Parks, Enjoying Nature) included an action to develop methodology to survey the health and well-being benefits provided by natural settings.

This paper describes the design and preliminary results of a survey that identifies health and well-being benefits perceived by Finnish protected areas' visitors.

Survey design and implementation

The survey design began in late 2012 with two priorities. Firstly, new information was needed to verify and monitor the overall effectiveness of parks in provision of health and well-being benefits. Secondly, in order to enhance the quality of visitor experience on a protected area level, NHS aims for better understanding of connections between attributes related to protected areas, their users and various dimensions of health.

Utilizing NHS' experience in visitor monitoring, the chosen approach was a modified visitor survey to provide information on the subject. To complement traditional visitor surveys implemented on-site, two survey types were created: a small set of questions (see table 1) in conjunction with the visitor survey on-site questionnaire, and an extensive web questionnaire to be filled approximately one week after the visit. The web questionnaire was designed based on previous research on impacts of nature on human health and in particular on experiences of Lemieux et al. (2012) within

Canadian protected areas. It covered following sections:

- relationship with nature and particular area
- mental, social and physical health and well-being
- duration of effects
- valuation of effects
- perceived effects on children

The survey was field-tested in 2013 jointly with the visitor surveys conducted in four protected areas representing different regions of the country: Kurjenrahka, Patvinsuo and Repovesi National Parks and Kevo Strict Nature Reserve. Approximately 143 000 visits are made to these areas annually. Respondents of the visitor surveys (n=2 052) were asked to provide their email address for subsequent delivery of the link to the questionnaire. The questionnaire link was sent to 1 197 respondents who had registered their email address. Within them, the response rate was 73 % (n=871). Research staff in Oulu Deaconess Institute were assigned to data analysis and reporting the results.

Preliminary results and discussion

The preliminary results indicate that the health and well-being benefits perceived by visitors were very positive in all study areas (table 1). The benefits match visit motivations well, since over 80 percent of respondents considered relaxation, mental health and well-being and being together with own group important. The impacts were independent of respondents' characteristics, such as education level, age, body weight or reported health. According to the results of the web questionnaire, visitors in groups perceived more health and well-being benefits than single visitors. In addition, increase in the duration of the visit had positive effect on the duration of effects. The results indicate that visiting protected areas can be considered as a health enhancing activity for the whole population. The findings are consistent with conclusions made in Canadian studies by Lemieux et al (2012).

Table 1. The health and well-being benefits perceived by the visitors of the parks. (5 = totally agree – 1 = totally disagree). Source: on-site visitor surveys in 2013.

Question: How did this visit to the protected area influence the state of your health and well-being in the following sectors?	Responses		Evaluation, %					Average
	n	%	totally disagree	some-what disagree	no opinion	some-what agree	totally agree	
Increased social well-being ¹	2011	98	0	2	14	40	43	4,24
Increased psychological well-being ²	2007	98	0	1	8	39	52	4,41
Increased physical well-being ³	2010	98	0	1	9	38	52	4,41

1. i.e. strengthened social relations, improved working capacity, enjoyed doing things alone or together

2. i.e. satisfaction with life, improved mood, recovery from mental stress, learned something new

3. i.e. enjoyed sensing the nature, maintained the fitness, learned new skills, physical well-being

An exploration of health benefits can be a very useful addition to visitor monitoring implemented in natural settings. This enables systematic, long-term and nation-wide approach in monitoring the benefits. The web survey provides important additional data to estimate the benefits in depth and to enhance services on-site. The evidence provided by the surveys helps in demonstrating and communicating the importance of nature experiences, e.g. how important it is to provide citizens with possibilities to experience nature. In addition to the health benefits perceived by visitors, it

would be important to obtain information of economic significance of health benefits related to recreation in protected areas. International and cross-sectoral expert co-operation and scientific research is essential in developing new approaches to exploring the various dimensions between nature and health.

References

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