

“Understanding challenges in studying visitor’s compliance to recreational funding models: lessons learnt from a study of cross-country skiers in Sweden.”

Introduction

This study is the first research output coming out from a newly launched project on *Recreational mobility and trails in mountain destinations: Understanding Behavioural insights and New technology in relation to funding systems for high quality trails in a Swedish context*, funded by the Swedish KK-foundation. The overall purpose is to analyse prerequisites for funding and management of trails as part of developing nature-based tourist destinations.

This specific study looks at the challenge of understanding the consumer behaviour of tourists when it comes to the decision to contribute to trail funding by buying a trail pass and to understand if and how context of resort ownership, other visitors’ behaviour and the social norm, matters for the decision. Related to this challenge, gaining reliable knowledge about the visitor’s compliance to a funding model is key to ensure its well-functioning and economic and environmental sustainability. However, studying compliance to a norm-based system holds challenges and one of our field observations during the project’s first data collection indicate the well-known bias introduced by the presence of the data collector on respondent’s survey responses. This confirms previous studies and points in the direction that reliable data can only be achieved, in combining data on stated behavior with data on the actual behaviour of the visitors. Combining these data sources in a coherent way, however, holds challenges which we identify and discuss in this study.

Background and previous studies

Tourist’s compliance towards local norms and pro-environmental behaviour has been studied in the past (for example: Solstrand & Gressnes, 2014; Panwanitdumrong & Chen, 2022; Gessa & Rothman, 2021) proving compliance as well as non-compliance. Literature has shown, quantitative data to be influenced not only by the ethnics and characteristics (for example Pietrelli, d’Errico, Dassel, 2020) but also the presence of the data collector during the data collection (for example: Roxas, Lindsay 2011; Leggett et al. 2003). This phenomenon becomes critical, when studying ethical questions using survey method resulting in a gap between stated vs actual behaviour. Such gap has already been identified in field experiments for example conducted in Tanzania by Alem et al. (2018) who studied stated and revealed behaviour, in the context of accidental money transfer. Their findings indicate that hypothetical surveys seem to insufficiently reflect human’s behaviour. Studying compliance to a funding model holds the ethical question, due to the most likely expectation of a punishment, i.e shame or guilt feelings.

Studying visitor’s compliance to a funding model in nature-based tourism is of special interest in a Nordic context. Northern European countries, such as Sweden, have a long tradition in the *right of public access*, allowing access to private land for recreational purposes. So, in a Nordic context, achieving compliance to a chosen funding model faces two challenges: Firstly, understanding compliances to an entrance fee for recreational trails can be difficult due to the open- and vastness of the field. And secondly, an entrance fee can be perceived as a contradiction to the well-known and appreciated law of public access.

A high compliance will however ensure sustainable funding which in turn makes it possible for the resort or trail provider to offer a high quality.

Purpose

The overall purpose with our study is to improve the understanding of the consumer behaviour of tourists when it comes to the decision to contribute to trail funding by buying a trail pass. In specific, our study aims at providing new insights on the challenges on studying compliance to a norm-based funding system.

Method and Data collection

The data collection process was designed to generate two types of data about the visitor’s behaviour:

An on-site self-administrated paper-based survey in Swedish was conducted to investigate about cross-country skier’s **stated** compliance to the trail pass-system, with the most relevant question being how and whether they had purchased a trail pass.

By installing two counters along the tracks, we aimed to collect data about the amount of track users. Data of the ticket sales in the same time frame give insight about the **actual** purchase behaviour.

Combining these two types of data would enable the identification of stated vs actual behaviour and would reflect the visitor’s compliance.

The data collection took place between week 6 to week 14 of 2023 in Orsa Grönklitt, Sweden, and the target group were cross-country skiers that have finished their skiing session. Whereas the counters counted all passages, the sampling rule for the paper-based survey was that every third skier was approached for participating.

Results

In total, 346 surveys were answered, and 67804 passages through the counters along the tracks were recorded.

Preliminary data show a high compliance to the funding system according to the survey results. These findings match with a previous study conducted in Orsa Grönklitt in 2021, showing a stated compliance of close to 100% (Fleckhaus & Heldt, 2021).

During the data collection we observed and received participant's feedback about the data collector's presence having affected the respondents' answers.

Comparing the stated behaviour of the survey responses and the counters' data in relation to the ticket purchases, we see a gap between stated and actual behavior. The counters however were unable to differentiate between skiers vs walkers or animals, and due to the circle layout of the tracks, a multi-counting of skiers could not be avoided. The number of passages therefore can not be taken for the numbers of visitors used the track during the data collection period.

Skiers who entered and left the track at a not designated entry/exit spot and did not pass a counter form an uncounted unit.

Lessons learnt

Preliminary results indicate that anonymity being the key aspect when it comes to studying actual behaviour towards critical question. Anonymity however differs according to the data collection method. Past studies have used QR codes to allow participants to answer the survey online instead of paper based (Nowak & Heldt, 2023). We however believe that our high response rate of estimated 85% was mainly driven by the data collector's interaction with the participant. QR based exit surveys have partly shown low response rates in past studies with tourists in the close by areas (Waleghwa & Heldt, 2022). Furthermore, it could not be assumed that all participants carry a smartphone during their workout (Heldt, 2010).

We identify the multiple challenges that come with studying compliance and cause limitations to such research.

How should the quantitative data be collected to lower possible bias by the data collector's presence without lowering the response rate? Will mixed methods be necessary to allow capturing behaviour in a norm-based system?

Our learnings will contribute to the improvement of studying compliances to funding systems of natural tourist attractions without geographical borders, such as hiking, fishing, canoeing, hunting etc.).

Keywords: visitor's compliance, recreational funding models, cross-country ski, surveys

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