

Latent demand and constraints to water-oriented outdoor recreation in Denmark

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Background

Denmark is a small and highly coastal country with 7,300 km of coastlines and over 400 islands as well as many lakes and streams. Consequently, the outdoor recreation patterns are particularly linked to the coastal and marine environments. Based on a national survey, this paper focuses on assessing latent demand and constraints in relation to water-oriented outdoor recreation.

Previous national surveys show that 12 % of the adult Danish population had not visit forests within the last year in 2008 (Jensen 2012) while 9 % had not visited any nature area (Jensen 2014). However, knowledge of the constraints to outdoor recreation participation in a Danish context is limited. As participation in outdoor recreation has many positive personal and societal effects, a deeper understanding of the constraints for participation is important for planners and managers.

Aim

The aim of the paper is to analyze latent demand and constraints to participation in water-oriented outdoor recreation among three groups: 1) water-oriented outdoor recreationists, 2) land-oriented outdoor recreationists, and 3) non-recreationists.

The study explores the existence of a latent demand even among participants due to constraints reducing their preferred participation.

Methodology

The paper is based on a national survey, representative of the adult population (age 18-80) in Denmark, which was conducted through a market research company in 2015. The 10,291 valid responses reflect a 26 % response rate. Data is weighted to be representative of the adult population. Water-oriented outdoor recreation was defined as including all outdoor recreation activities involving water directly (e.g. water sports) or indirectly (e.g. walking along the beach). It was restricted to activities that had happened in Denmark in the 12 months prior.

Results

Participation

The results show that 77.4 % of the adult Danish population were water-oriented recreationists (they may also have done land activities), while 10.0 % of the population only participated in land-oriented activities and 12.6 % did not participate in any outdoor recreation within the last year.

Latent demand for water-oriented recreation

The highest level of satisfaction was found among the current participants in water-oriented outdoor activities where half (49.7 %) fulfilled their demands for participation in water-oriented outdoor activities. However, the other half (50.3 %) experienced either partial, low or no fulfillment of their demand for water-oriented outdoor recreation hereby indicating a latent demand for more participation. The land-only group had a lower level of fulfillment of their needs for water-oriented recreation as 41.8 % was fully satisfied with not doing water-oriented outdoor recreation activities while over half (58.2 %) experienced partial, low or no satisfaction levels. This suggests a rather high latent demand among land-only recreationists for participating in water-oriented outdoor recreation activities. The non-recreationists had the lowest level of satisfaction of their need for water-oriented outdoor recreation with 36.2 % being fully satisfied with not participating. The remaining 63.8 % expressed either partial, low or no satisfaction levels indicating the highest latent demand in this group.

Constraints to participation

The study included 25 different constraints covering both the demand and supply sides, i.e. intrapersonal, interpersonal and structural constraints (Crawford et al., 1991). Differences were identified in constraints among the three groups. The non-recreationists were strongly constrained by lack of time, lack of interest, being too tired, bad health condition, and low physical condition. The land-only recreationists were constrained by lack of time, distance to activity opportunities, lack of interest, bad weather and being too tired. The participants were mostly constrained by lack of time, bad weather, being too tired, distance to activity opportunities, and family obligations.

Discussion

Hidden latent demand and a proposed dynamic model

The study found that latent demand is not solely linked to the non-participants as often depicted in theoretical models. The study shows that all three groups experience quite high levels of latent demand and that the latent demand increases with reduced recreation involvement. Even half of the participants experience latent demand linked to a wish for participating more in water-oriented activities than they currently do. A revised model of latent demand is presented below. It indicates that among non-participants only some have a latent demand while others are generally uninterested in participating. Among participants, there is a group of mostly satisfied participants (dark blue) but also a group with a latent demand for participating more than they do at present due to a range of constraints. There is likely a dynamic between the groups as non-participants may overcome their constraints and become participants, while participants may become more constrained and drop out into the non-participants with latent demand. A similar dynamic may occur between participants feeling content and those with a latent demand for more participation. In our study we also included a land-water dichotomy and it is likely that an exchange takes place where

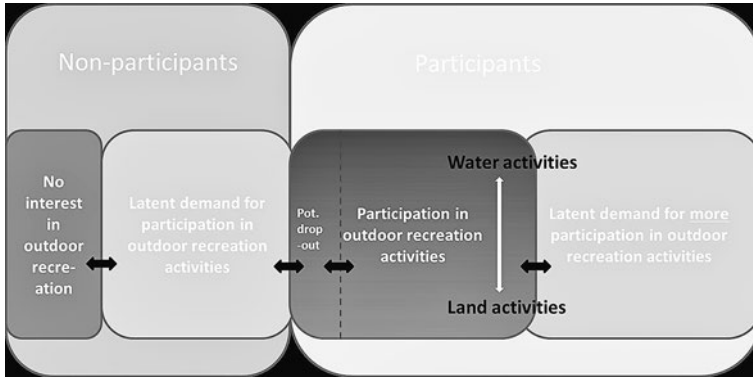


Figure 1. A proposed model of latent demand dynamics

land-only recreationists overcome constraints for water-oriented activities and water-oriented recreationists become constrained and opt for land activities. However, the model does not need this dichotomy to be applicable.

Conclusions

The study found a high participation in water-oriented outdoor recreation in Denmark but also, that both water-oriented, land-oriented, and non-recreationists have a latent demand for participation in water-oriented outdoor recreation. The study identified a relatively high latent demand among participants for participating more in water-oriented outdoor recreation. All three groups experienced constraints but they are of different importance across groups.

Most constraints were linked to the demand side of intra-personal, inter-personal and structural barriers. It appears difficult to reduce the overall pressures from lack of time, family obligations and being too tired and health problems. However, some constraints linked to lack of swimming skills, lack of companions and economic constraints may be reduced through educational, social and economic initiatives.

In contrast, a limited number of the constraints were linked to the supply side. Improvements through planning, development, and management in amount, quality and access to the supply may help reduce some of the constraints for example improving the knowledge on existing opportunities, reducing crowding by establishing more facilities, improving the water quality, or improving access.



Crawford, D. W., Jackson, E. L., & Godbey, G. (1991). A hierarchical model of leisure constraints. *Leisure sciences*, 13(4), 309-320.

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