

Theme 6: Behavior, policy, and future change

Towards sustainable development in the sport and outdoor recreation sectors

Theme leader: Prof. Dimitri Ioannides, Mid Sweden University.

Learning group: Behaviour, policy, and future change (5 practitioners, 4 researchers).

Theme 6 addresses the way that coordinated efforts can be developed leading to streamlined decision-making to enhance environmental sustainability within the sports and outdoor recreation sectors. Specifically, *it examines the combination of policies, strategies, tools, and practices that can most effectively lead to a society-wide movement for environmentally sustainable sport and outdoor recreation.* Further, it seeks to explain how the sport and outdoor recreation sectors can guide consumers, businesses, and organizations to embrace a more sustainable behaviour. Other than the theme leader, four researchers have been hired by the project. These include three senior researchers and one licentiate student.

To begin with, one of the senior researchers in theme 6 has collaborated closely with theme 4 in an examination of the policy context relating to the use of artificial turf in sports' facilities throughout Sweden. Specifically, this study identifies that environmental sustainability in managing artificial turf is governed by a complex policy terrain ranging from the supra-national to the national and local levels. This scenario leads to barriers in seeking to implement sustainable practices. This study resulted in a peer-reviewed article, which uses the value-action gap model to interpret the results of interviews with stakeholders. Based on this, themes 6 and 4 have continued their collaborative efforts and are examining the policy context relating to the production of artificial snow. Data are being gathered during the

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fall of 2023 and the hope is to generate an additional manuscript, ready for submission by the end of March 2024. The value of these studies is that they demonstrate the complexity surrounding many aspects of the sport and outdoor recreation sectors, which encumbers the ability to easily generate solutions for more sustainable practices. Gaining understanding about such barriers is useful step before coming up with realistic actions to overcome these and generate implementable policies for environmental sustainability.

On the environmental behaviour front, theme 6 has been involved in several projects. First, a state-of-the-art report on pro-environmental behaviour was produced by the first senior researcher and others as a Mistra Sport and Outdoors report. This document served as a backdrop to a series of research endeavours, which began in late 2022. Specifically, during the summer of



2023, the second senior researcher in theme 6 collaborated with researchers from theme 5, to investigate sustainable behaviours at the orienteering event O-Ringen in Åre. This study was finalized in August 2023. Drawing on theories on behavioural change, an experimental design was used to study the role of psychological determinants and a message targeting key behavioural determinants (e.g., efficacy beliefs) for environmental behaviours at the event. The study will improve the understanding of drivers of environmental behaviours among event participants, thereby advancing research on the role of socio-cultural factors in environmental psychology. It will also provide insights for O-Ringen and event organizers more generally. A scientific publication should be finalized early 2024.

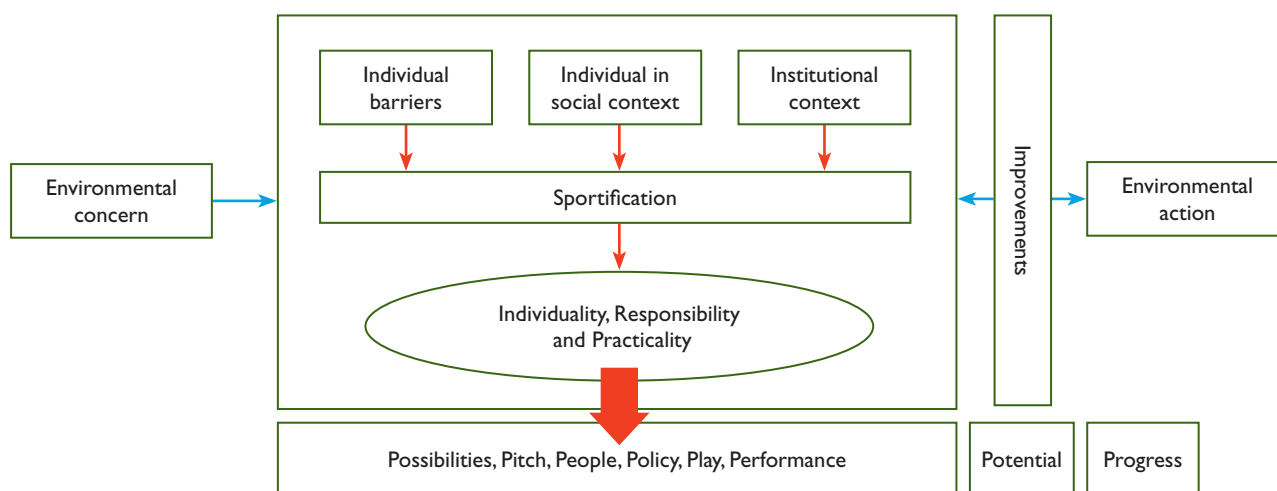
Additionally, the second senior researcher has conducted a nationwide survey study – finalized in June 2023 – on environmental behaviours connected to physical activity of the public at-large. Drawing on theories on human motivation and identity, the aim has been to study to what extent a physically active lifestyle is compatible with an ecologically sustainable lifestyle by considering psychological drivers and environmental behaviours. This study will provide insights on psychological processes relevant for environmental behaviours in the domain of sports and outdoors, clarifying how drivers of physical activity are relevant in environmental psychology. It has implications for how a physically active and ecologically sustainable lifestyle may be supported. A scientific publication is expected to be finalized in March 2024. Additional projects of note in which the second senior researcher is involved include: the development of a pedagogical behavioural model

in collaboration with the Learning Group (LG) in theme 1; integrating a consumption perspective on functional clothing as part of a circular economy business model that has been initiated in collaboration with the LG in theme 4; supporting the Swedish Tourist Association (STF) for a survey and other initiatives conducted as part of Klimatelefanten (a project aimed at reducing the climate impact from transportation); and support to students working on perceived versus actual functionality of shell jackets at Mid Sweden University.

Meanwhile, the third senior researcher has collaborated with the Swedish Canoe Federation to support responsible environmental behaviour through paddle educational activities. The project focuses on the Swedish Canoe Federation's deliberate initiative to develop kayak training, which embraces environmental issues. Activities include design of a new paddle curriculum for canoe instructors, training of instructors, and an evaluation of its effects. These actions aim to gain more knowledge about the contextual conditions required for individual transformation in outdoor contexts. The theoretical framework builds upon the assumptions that the potential contribution of such training relates to its abilities to control critical factors that place individual outdoor practices into context. A scientific article is expected to be finalized early 2024.

The final major project focuses on promoting sustainable mobility behaviours among mountain bike (MTB) tourists, when accessing peripheral mountain bike destinations. This project, which is run by the licentiate student, aims to understand eco-centric orientations concerning MTB tourists' mobility choices as well as explore the factors influencing their decisions, their in-

Adaptation of Blake's (1999) value-gap model based on interview results about environmental behavior.



infrastructural needs, and the attributes of their preferred sustainable mobility choices. The project consists of two research studies: the first uses a quantitative approach to analyze the willingness and determinants of sustainable mobility behaviours, while the second qualitative approach examines the behavioural discrepancies among mountain bike tourists with eco-centric dispositions. Data collection for the first study began in July 2023 and is expected to yield results by mid-December 2023. The second study, for which 20 participants have already been registered, will be designed based on the results of the first. The project's key contribution is to inform policymakers about necessary steps to improve sustainable accessibility to (selected) mountain bike destinations in Sweden, while concurrently seeking to improve sustainable mobility behaviours by mountain bike tourists themselves.

Beyond the aforementioned activities it is important to mention the actions of the learning group in theme 6. Earlier in 2023, the group had a physical meeting where a back-casting exercise was run relating to improving the sustainability of transportation in Sweden by 2035. This exercise led to several ideas for projects that can be continued if Mistra Sport & Outdoors receives funding for a second phase. For instance, it would be productive to try to better understand people's motivation to cycle

to work and the barriers, which dissuade them from doing so. The group was also interested in understanding social media's role in fuelling overcrowding in certain natural areas. A possible follow-up study would be to look at how nature guides play a role in attracting people to places that become hotspots. A key realisation emerging from the meetings with the theme 6 learning group was that the issues discussed and investigated have many implications for all the other learning groups. Thus, connections and mobility across learning groups should be considered in the future.

A key strength of theme 6, whose overriding purpose has been to be a cross-cutting work package collaborating with several if not all other themes is that this ambition has been largely met. Of note have been the strong collaborative efforts between theme 6 and themes 3 and 4 and, more recently, with the other three themes. The ongoing research endeavours in theme 6 should lead to several peer-reviewed publications during 2024. Based on the quality of the researchers and the endeavours they have been engaged in so far, the actions within theme 6 meet the scientific goals of Mistra Sports & Outdoors.

