

This is the published version of a paper published in *International Journal of Circumpolar Health*.

Citation for the original published paper (version of record):

Furberg, M., Evengård, B., Nilsson, M. (2013)

FACING THE LIMIT OF RESILIENCE: PERCEPTIONS OF CLIMATE CHANGE AMONG REINDEER HERDING SAMI IN SWEDEN.

International Journal of Circumpolar Health, 72 (Supplement 1): 520-520

Access to the published version may require subscription.

N.B. When citing this work, cite the original published paper.

Permanent link to this version:

http://urn.kb.se/resolve?urn=urn:nbn:se:umu:diva-83795

planet: increased seasonal temperatures; decreased snow and ice quality, stability, and extent; melting permafrost; decreased water levels in ponds and brooks; increased frequency and intensity of severe storms; later ice formation and earlier ice break-up; and alterations to wildlife migration and plant growth patterns. These changes are decreasing the ability of Inuit to hunt, trap, forage, or travel on the land, which directly disrupts the socio-cultural fabric of the communities and individual livelihoods. These changes also impact on the health of individuals and communities. While there is a burgeoning field of research examining climate-health relations, most studies rarely consider the implications for mental health and well-being. Yet, from data gathered as part of a multi-year, community-driven, participatory project in Nunatsiavut, Canada, it is clear that the emotional and mental consequences of climatic and environmental change are of increasing concern and importance to Northern residents. Drawing from 85 in-depth interviews and 112 questionnaires conducted in Rigolet from 2009 to 2010, community members reported experiencing climate-related mental health impacts through eight interrelated pathways: increased reports of family stress; increased reports of drug and alcohol usage; increased reports of suicide ideation; the amplification of other traumas or mental health stressors; decreased placebased mental solace; a sense of identity loss; and grief for a changing environment. This work represents the first research to examine the mental and emotional health impacts of environmental change within a Canadian Inuit context, and one of the first such studies globally. These findings indicate the urgent need for more research on environmental-change related mental health impacts and emotio-mental adaptive processes in Canada and internationally, and for more mental health programming to enhance resilience to and assist with the mental health impacts of climate change.

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FACING THE LIMIT OF RESILIENCE: PERCEPTIONS OF CLIMATE CHANGE AMONG REINDEER HERDING SAMI IN SWEDEN

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Background. The Arctic area is a part of the globe where the increase in global temperature has had the earliest noticeable effect and indigenous peoples, including the Swedish reindeer herding Sami, are amongst the first to be affected by these changes.

Objective. To explore the experiences and perceptions of climate change among Swedish reindeer herding Sami.

Study design. In-depth interviews with 14 Swedish reindeer herding Sami were performed, with purposive sampling. The interviews focused on their experiences of climate change, observed consequences and thoughts about this. The interviews were analyzed using content analysis.

Results. One core theme emerged from the interviews: facing the limit of resilience. Swedish reindeer-herding Sami perceive climate change as yet another stressor in their daily struggle. They have experienced severe and more rapidly shifting, unstable weather with associated changes in vegetation and alterations in the freezethaw cycle, all of which affect reindeer herding. The forecasts about climate change from authorities and scientists have contributed to stress and anxiety. Other societal developments have led to decreased flexibility that obstructs adaptation. Some adaptive strategies are discordant with the traditional life of reindeer herding, and there is a fear among the Sami of being the last generation practicing traditional reindeer herding.

Conclusions. The study illustrates the vulnerable situation of the reindeer herders and that climate change impact may have serious consequences for the trade and their overall way of life. Decision makers on all levels, both in Sweden and internationally, need improved insights into these complex issues to be able to make adequate decisions about adaptive climate change strategies. Full text free article at: http://www.globalhealthaction.net

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COMPARING PERCEPTIONS OF CLIMATE CHANGE TO OBSERVATIONAL DATA FROM THE SAMI REGION OF NORTHERN SWEDEN

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The indigenous peoples of the Arctic are amongst the populations expected to be most impacted by changes to Earth's climate. An increase in average air temperatures in the Arctic region is one of the most widely documented changes from the past century and is expected to continue or accelerate in the future. The indigenous Sami in northern Sweden, however, perceive that their daily lives have been instead impacted by significant changes in climate variability and extremes. Interviews with reindeer herding Sami indicated more drastic daily changes in temperature and precipitation and a tendency toward longer wet and dry spells in the cold season. We sought to develop quantitative measurements of climate variability in northern Sweden over the past four decades to compare to respondents' perceptions. Daily climate data were obtained from several meteorological stations in the Sami region with continuous observations over the