

Vulnerability and adaptive capacity of Inuit women to climate change: A case study from Iqaluit, Nunavut

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Photovoice photo of tent in Apex area of Iqaluit taken by Ooloota "There are so many mosquitoes... They're huge already!"



Photovoice photo of Sylvia Grinnell River taken by Napatchie. "Just to be out there is soothing"



Photovoice photo of snow bunting eggs between rocks taken by Napatchie "Good memories. Just to see eggs like that as an adult I remember as a kid [being out on the land]"

Introduction

Climate change impacts in the Arctic will be differentiated by gender, yet few empirical studies have investigated how. Using a case study from Iqaluit, Nunavut, we identify and characterize vulnerability and adaptive capacity of Inuit women to changing climatic conditions.

Methods



Photovoice with 3 participants



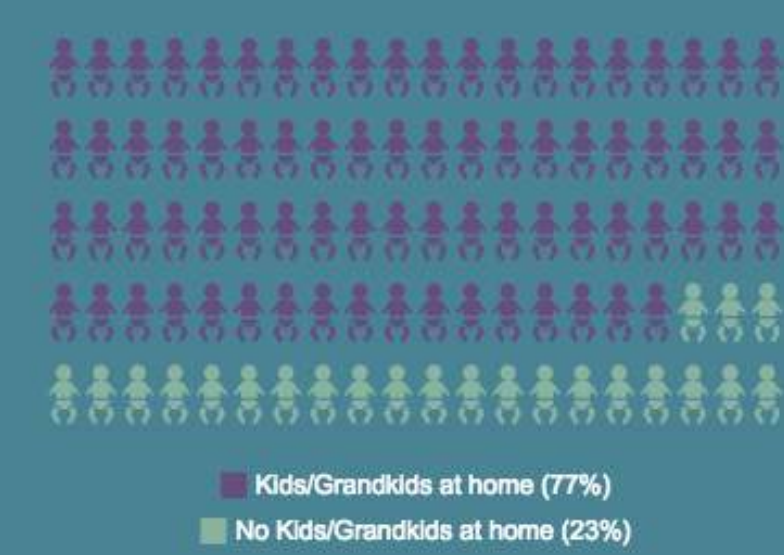
42 Community Interviews



3 Stakeholder Focus Groups

Participant Profile

Most interviewees had children in the home



Employment Status



Majority of interviewees rent their home



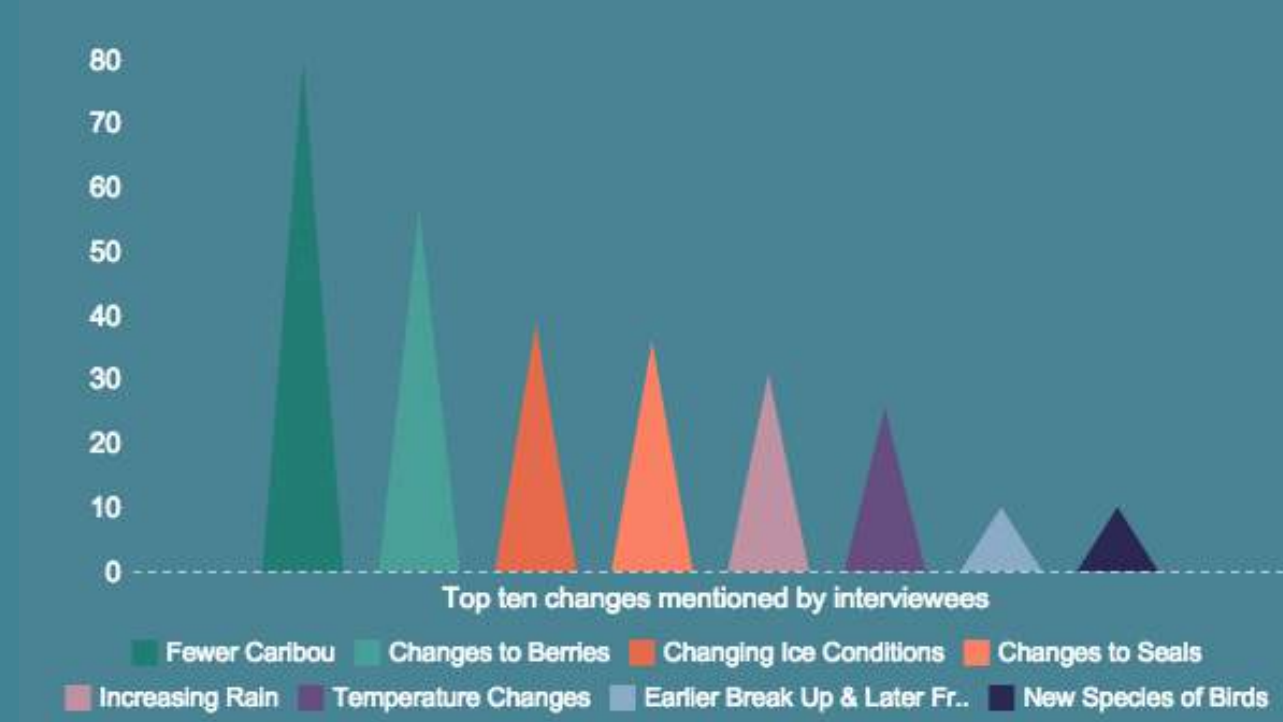
Majority have lived in Iqaluit for 20+ years



Observations of Change

"It's not just scien[ce], it's not just somebody telling us the ice is melting; we're actually living it here." – Interviewee

Main changes in environmental conditions reported by Inuit women



Consistent with research across the North, women in Iqaluit were experiencing considerable environmental changes in and around the community. While interviewees did not always explicitly link these changes to longer term climate change, many of the observed changes are consistent with those identified as symptomatic of longer term directional change in the scientific literature. Ten changes were reported by more than one participant and are presented in the graph above

Impact of Changes

Berry Picking

- Women reported "bad" berry harvesting years becoming more frequent
- Poor berry seasons have had a particular impact on women as this is a female led harvesting activity
- Berry picking provides mental health benefits

Sewing

- Sewing was reported to help women connect to Inuit identity, de-stress, and potentially provide income
- Women reported skins being thinner and more prone to ripping
- Interviewees reported reduced access to skins as a result of reduced hunting
- Knowledge of how to clean skins is a skillset many interviewees regretted not having

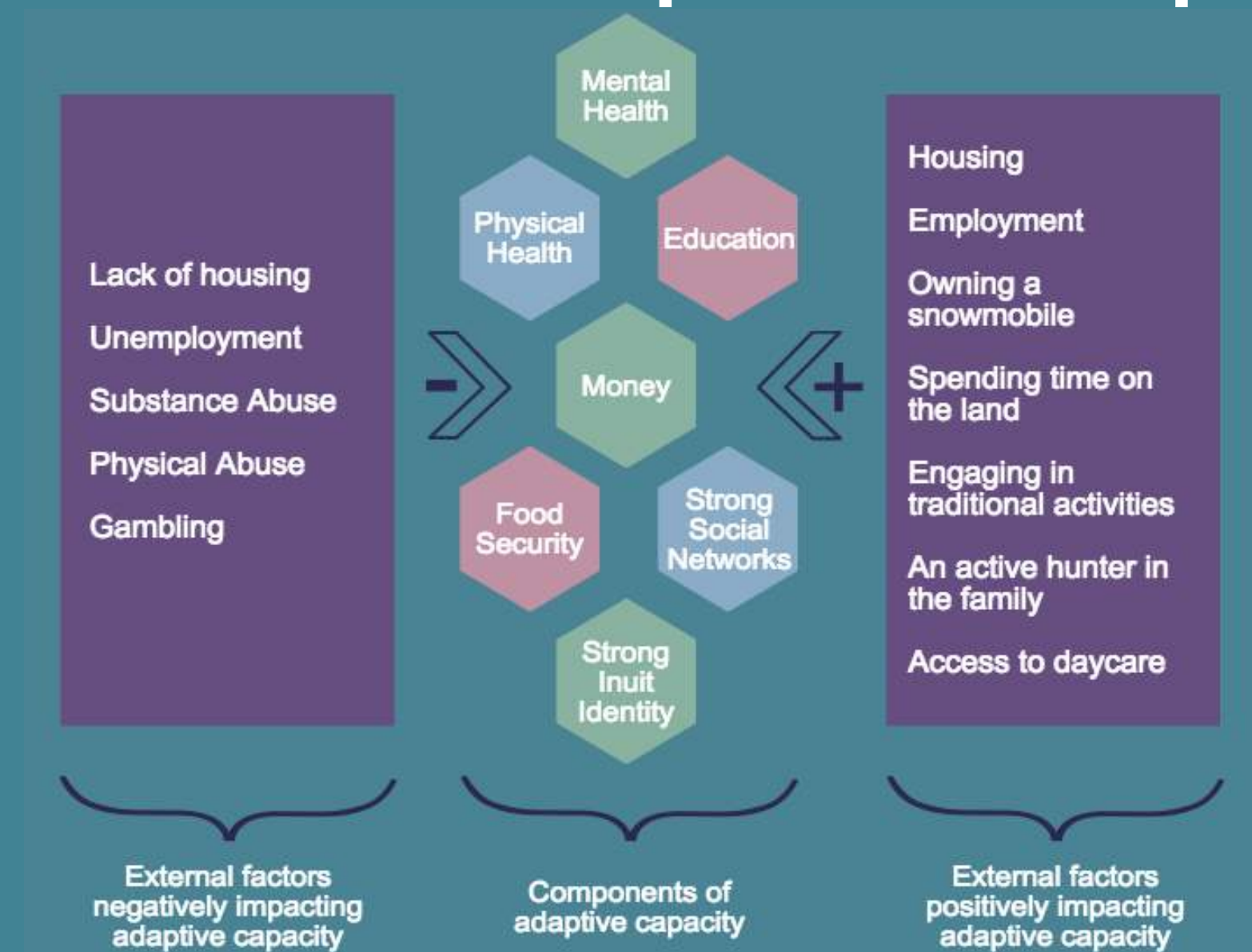
Time on the Land

- Women expressed wanting to spend more time on the land and emphasized the positive impact time on the land has on their mental health.
- Few women are able to spend time on the land regularly
- Barriers to spending time on the land included work hours, weather (such as increasing rain), money, access to equipment, injuries and chronic illness of themselves and/or their partner, and grieving loved ones.

Mental Health and Inuit Identity

- Similar findings have been documented in smaller Inuit communities across the north, although not through a gendered lens.¹⁻⁴
- Berry picking, spending time on the land, and sewing all have a positive impact on women's mental health and help reaffirm Inuit identity
- Interviewees emphasized impact climate change is having on the mental health of men in their lives. Women described men as being increasingly stressed which in turn caused them stress.
- Male stress and frustration were described as being linked to less time on the land, particularly during hunting shoulder seasons, which other research has found to be lengthening.⁵
- Some women said they worry more now when loved ones are out on the land (particularly when they're alone) due to poor ice conditions and unpredictable weather.

Factors of Adaptive Capacity



Conclusion

- Very little research looks at the gendered nature of climate change and that which exists largely focuses on the experiences of women in the global South⁶.
- The global narrative is that women are more vulnerable to climate change than men⁶, however this narrative is based on the experiences of women in developing countries who take on agricultural responsibilities while men migrate to cities for wage work. In Iqaluit we find the reverse to be true; Inuit women tended to earn a regular income, while men were more often engaged with land based activities along with part time or seasonal work.
- Despite the rapid changes in the North, climate change is not the most pressing issue Inuit women face on a daily basis, however climate change exacerbates socio-cultural issues facing Canada's North. Supporting the components which impact women's adaptive capacity to climate change has the potential to help support their capacity to adapt to other socio-cultural changes Inuit women are experiencing.



Citations
¹Wolfe, C. (2013). Climate change and mental health: an exploratory case study from Rigolet, Nunavut, Canada. *Climate Change*, 22(2), 255-270.
²Cunsolo Willox, A., Harper, S. L., Ford, J. D., Landman, K., Houle, K., & Edge, V. L. (2013). From this place and of this place: Climate change, sense of place, and health in Nunavut, Canada. *Social Science & Medicine*, 79(3), 538-547.
³Harper, S. L., Edge, V. L., Ford, J., Cunsolo Willox, A., Wood, M., IHACC Research Team, & McEwen, (2015). Climate-sensitive health priorities in Nunavut, Canada. *BMC Public Health*, 15(605).
⁴Harasak MacDonald, J., Ford, J. D., Cunsolo Willox, A., & Ross, N. A. (2013). A review of protective factors and causal mechanisms that enhance the mental health of Indigenous Circumpolar youth. *International Journal of Circumpolar Health*, 72(0).
⁵Ford, J. D., McDowell, G., Shirley, J., Pire, M., Siewerski, B., Gough, W., Statham, S. (2013). The Dynamic Multiple Nature of Climate Change Vulnerability: An Inuit Harvesting Example. *Annals of the Association of American Geographers*, 103(5), 1193-1211.
⁶Bunce, A., & Ford, J. D. (In press). How is adaptation, resilience, and vulnerability research engaging with gender? *Environmental Research Letters*.

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