Staying Warm in the Cold: Lived experiences of how hunters and fishermen adapt to cold and weather in a changing climate in Kalaallit Nunaat

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The change in weather and climate is significantly impacting the everyday lives of the entire population in Kalaallit Nunaat, including the hunters and fishermen. Historically, their professions have been the foundation of survival in the Arctic, and they hold a wealth of knowledge and lived experience about how to live and cope with the cold and changing weather. These lived experiences provide important insights into the changing lives and adaptation strategies of communities living in a drastically changing Arctic. This study aims to understand hunters' and fishermens' lived experiences of weather and climate focusing on their strategies to endure the cold climate. We draw on two qualitative data sets: four semi-structured interviews with hunters from Avernasuaq in the far Northwest of Kalaallit Nunaat, and a sharing circle with fishermen in Nuuk. Our analysis showed four themes: 'Experience and traditional knowledge', 'Age, health and ability', 'Clothing, equipment and movement' and 'Country food'. The findings stress the importance of lived experience and Indigenous knowledge to understand changing weather and climates through the strategies of Inuit in Kalaallit Nunaat. This contributes to the broader understanding of human adaptation to extreme weather conditions. Furthermore, the findings advocate for lived experience and Indigenous knowledge to be corner stones in understanding changes and adaptation. Ensuring that Inuit communities are ethically involved in research and knowledge production is not only a matter of rights, but also a pathway to fostering health, wellbeing, and climate resilience in Arctic regions.

Introduction

Communities and individuals everywhere are experiencing changes in weather and climate which impact their livelihoods. In Kalaallit Nunaat, fishermen and hunters are no exception, as the

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melting of the ice sheets and the change in weather challenge their traditional practices and ways of living (Nuttall, 2009; Nuttall et al., 2005). Overall, the changing climate and weather affects the Inuit[1] due to rising sea levels, increased coastal erosion, melting permafrost, reduction in sea ice thickness and the warming of coastal waters which all affect hunting practices in different ways, e.g. hunting infrastructure and the change in wildlife species (ACIA, 2005; Drinkwater, 2005; Ford & Goldhar, 2012; Holm, 2010; Hovelsrud et al., 2008; Johannessen & Miles, 2011).

Kalaallit Nunaat covers an enormous area and hence regional differences impact livelihoods and hunting in different ways. For hunters in the Northwest and other places, the melting sea ice disrupts traditional hunting methods and routes. Seal hunting, which relies heavily on stable ice conditions, becomes increasingly difficult. This forces hunters to adapt by changing their hunting techniques or shifting to different species, which can alter long-standing cultural practices and knowledge passed down through generations (Hastrup, 2018, 2021).

The changes in the environment also affect community cohesion, and as traditional practices become harder to sustain, there can be a loss of shared experiences and communal activities that are central to Inuit way of living. For instance, changes in hunting opportunities and access to wildlife, highly challenge the subsistence economy which has traditionally been extremely important in Inuit culture (Ford & Goldhar, 2012). This has implication for social cohesion as sharing of meat between families and relatives has long been a community means of survival (Hastrup, 2021).

In previous studies, hunters from the far Northwest part of Kalaallit Nunaat have shared their perceptions and experiences of how to live in and with a changing climate (Hastrup, 2018). Traditional means of living are being challenged, e.g. when hunting opportunities diminish because of changes to the sea ice or when hunting grounds cannot be reached anymore because of thin ice (Hastrup, 2018). This has a massive impact on communities and their existence. A study in Uummannaq showed how strong community memories of previous adaptation responses to changes in the climate brought confidence in the ability to adapt in the future too (Baztan et al., 2017). Additionally, the authors advocate for local-level needs and perspectives to be included when it comes to research into changes in the climate as only then will the research be relevant for communities on a local level (Baztan et al., 2017). A study from the Eastern part of Kalaallit Nunaat explored how the locals perceived the change in weather, the climate and their local environment including changes to their hunting practices. It showed that it had become necessary to hunt other species and that the hunting profession was becoming an increasingly unstable and uncertain way of making a living (Buijs, 2010). A study from Qeqertarsuaq describes the impacts of climate change on hunting and fishing practices, including experiences of increased hazards related to hunting and fishing, e.g. thin ice, and more winds and storms which are particularly challenging for fishermen with small boats (Ford & Goldhar, 2012). As a result, it has become increasingly difficult for communities to access kalaalimerngit (country food) (Ford & Goldhar, 2012). Studies from Canada similarly reports on how Inuit communities experience the implications of climate change, including compromised food security and traditional hunting practices being challenged (Ford et al., 2010; Pearce et al., 2009).

[1] We acknowledge that there are different Inuit populations in different areas of Kalaallit Nunaat but in this paper we use the broader term Inuit since the empirical material analysed is from both Inughuit and Kalaallit groups.

When it comes to coping with the cold, it is well documented that fat and muscle have insulator capacities (Ocobock, 2023; Steegmann, 2007), but knowledge, practices and resilience found in local Indigenous communities must be considered as important factors to fully understand how to adapt to and cope with the cold in extreme climates (Neufeld et al., 2022; Ocobock, 2023). When changes occur, adaptation is required. This is a fundamental premise for survival among many Indigenous communities (Montgomery-Stinson et al., 2026), and is deeply embedded in Indigenous Knowledge Systems (IKS) (Barnhardt & Kawagley, 2005), and knowledge transmission is a keystone for adapting and surviving. Storytelling and experiences passed on as transmissions of knowledge are essential to Indigenous ways of living as they hold crucial information about how to survive and how to understand traditional practices (Gaski, 2019; Iseke, 2013; Kovach, 2009). In a changing climate, these practices too, might need to be rediscovered and adapted to the new conditions in the Arctic as stories and knowledge that were once relevant to a stable cold climate might not apply any longer, and need to take new forms. These new versions of the stories are crucial to keep the knowledge relevant today and in the future. Consequently, IKS should also be viewed as constantly changing and adapting as a reaction to new conditions happening over time (Barnhardt & Kawagley, 2005) The people living with the change, and holding this real-world knowledge developed through generations of lived experience, are key to developing and keeping these knowledge systems relevant (Montgomery-Stinson et al., 2026).

With this paper, we aim to shed light on adaptation to cold and changing weather, with the focus being on lived experiences and local practices of hunters and fishermen, and how it affects their everyday life, including their strategies to endure the rough and cold climate. This new knowledge will contribute lived experience to the discourse of changing climates, ensuring that the knowledge of those communities and individuals that are impacted are also represented in ethical sound ways. Furthermore, this lived experience and Indigenous Knowledge (IK) will contribute an important dimension of intelligence that we consider crucial for creating resilience and continuity in a changing world.

Study and Methods

This study is a part of the larger project POLAR (The im**P**act of seasonal and secular climate variations and short-term c**OL**d exposure on cardiometabolic risk markers in **AR**tic Inuit) that investigates the relationship between genetics, subcutaneous fat and brown fat and the ability to endure cold (Motzfeldt Jensen, Almasi, Andersen, et al., 2026; Motzfeldt Jensen, Almasi, Kjærgaard, et al., 2026; Motzfeldt Jensen et al., 2025). The project consists of four parts respectively: an epidemiological study, a clinical study, a genetical study, and the present qualitative study. This sub project focuses on experiences of cold and weather, how it affects everyday life, including strategies to adapt to and endure a rough and cold climate.

This paper builds on two qualitative data sets, (a) four semi-structured phone interviews with hunters from Avernasuaq (Northwest of Kalaallit Nunaat), and (b) a sharing circle with fishermen in Nuuk. Although some have now retired, we refer to them as fishermen and hunters, as it continues to remain a big part of their identity.

The hunters from the interviews (a) were between 46 and 81 years old with an average age of 57. While one stated that he had been a hunter for more than 20 years, the others said, they had been hunting all life or since early childhood. They were all men from hunter families, and they were born and raised in Avernasuaq in the town of Qaanaaq and/or the settlements of Haviggivik

(Savissivik) and Hiorapaluk (Siorapaluk). They were recruited through contact with the local fishermen and hunter associations. The local authorities assisted in printing our written information about the project and consent forms for the interviewees who could not receive it personally by email. The interviews were conducted in Kalaallisut adapted to Inuktun over the phone in November 2023. The interviews were carried out by one of the authors of this article, EJ, an experienced interviewer who has conducted interviews in all parts of Kalaallit Nunaat for decades and understands and adapts to the different dialects. Phone interviews were chosen as in-person interviews would not have been feasible or possible due to time and financial resources. We recognise the limitations of phone interviews as you cannot read facial expressions or body language, however we found it important to include the perspectives of the participants of Avernersuaq.

The fishermen from the sharing circle (b) ranged in age from 44 to 75 with the average age being 61. They all lived in Nuuk but had grown up and lived in different parts of Kalaallit Nunaat. Recruitment happened through the local fishermen and hunter association. Participants received written and verbal information in Kalaallisut and signed consent forms at the beginning of the sharing circle. The sharing circle was conducted in Kalaallisut in January 2023.

Both data sets (a) and (b) were recorded, transcribed, and translated into Danish. The interviews took their point of departure in a short interview guide. It is our experience that interviews with people in Kalaallit Nunaat – especially with older people – rarely just follows a Western model of direct answers to the questions asked. The interviewee might answer with a story or whatever they find to be the most appropriate information to give. In this sense, an interview situation might be compared to a learning situation where the true or deep meaning or purpose of a story might not be obvious to the listener in the very situation (Gaski, 2019). Indigenous methodology is in many contexts characterized by the inclusion of story and narrative (Kovach, 2009) and story is often congruent with tribal knowledge (Wilson, 2008) used for sharing knowledge, values, skills, morals (Kovach, 2009). Storytelling is a critical aspect of Inuit way of life and ways of knowing. The interpretation of stories told depends on the individual listener and their personal frames of reference and background. Since stories are not always explained clearly each listener seek their own understanding and meaning of the story (Healey, 2018). This was also the case in these specific interviews where the answers were sometimes stories or advice rather than being direct answers to the questions.

Sharing circles origins from Northern America and Indigenous populations in Canada and Alaska, and are considered culturally relevant modes of communication and investigation (Rothe et al., 2009). In Kalaallit Nunaat, sharing circles have been used for several research projects (Carroll et al., 2026; Olesen et al., 2020; Olesen et al., 2021; Rubin et al., 2024). During a sharing circle, participants sit in a circle using a talking stick to take turns sharing perspectives, feelings, experiences and stories about a given topic or question asked by the facilitator. Whoever holds the talking stick has the right to speak. Once done, you pass on the talking stick to the person next to you who share what they want or pass it on if they do not wish to contribute at the specific moment. This fosters an open and inclusive space for sharing and listening in a supportive and non-confronting way, which makes it culturally suitable as it embraces some core values and traits of Inuit culture, including harmony (Olesen et al., 2021). Historically, harmony was considered a prerequisite for survival in local communities in Kalaallit Nunaat where conflict would make you

vulnerable and a target of isolation (Wistoft, 2012). Furthermore, sharing circles support reflection and deep listening, and the ongoing sharing and interaction means that participants collaboratively evolve the sharing of knowledge in a direction that is meaningful to them. This makes sharing circles more culturally suitable than for example the Western research method of focus groups where the facilitator holds the agency, as opposed to agency being collectively shared between participants.

The use of sharing circles proved to be a culturally appropriate method for eliciting rich narratives (Olesen et al., 2021; Rothe et al., 2009). This method allowed participants to speak freely and reflectively, contributing to a deeper understanding of collective strategies for coping with changing cold and weather. Participatory research is essential to produce this knowledge with local people on a local level where adaptive responses happen (Berkes & Jolly, 2002). Several of the participants expressed their views on the importance of including them in research about their practices and living with in a changing climate. As one put it "*do research at ours, we will help you and ensure we are being understood about how we live"*. The participant articulates so eloquently the essence of ethical research practice with Indigenous people and Inuit as outlined by the United Nations, Inuit Circumpolar Council and the Naalakkersuisut (Inuit Circumpolar Council, 2022; Naalakkersuisut, 2022; United Nations, 2007). From an ethical and research integrity perspective, deep listening must be at the heart of the researcher's obligation when seeking to understand IK and lived experience, as it will foster trust, build collaboration and create mutual learning (Bedford, 2025).

Recruitment of participants and facilitation of the sharing circle were as the interviews carried out by co-author and field assistant EJ. The interviews and sharing circle were directly translated into Danish by EJ during transcription to allow the remaining research team who are non-indigenous to understand the material. The structure and grammar of Kalaallisut and Inuktun is very different from that of Danish and English. For this paper, while the quotes have been edited and reworked to fit better into written English, they are still presented with respect of the way of telling stories and conversing by the interviewees. Thus, quotes from the interviews might not look like quotes from a native English speaker and despite of the editing and rewriting, the quotes reflect specific ways of using the language and communicating in Kalaallisut and Inuktun.

Data was analysed through reflexive thematic analysis (Braun & Clarke, 2019) using the software NVivo (Lumivero, 2025). The transcriptions were coded into themes and subcategories as they emerged and revisited in iterations by members of the research team. The analysis resulted in four main themes considered important when dealing with and adapting to cold and changing weather. In the following sections, we give the word to the participants, to share their lived experiences. We do this to present the material as authentically as possible. Each section will conclude with discussing the material. For easy readability we refer to the hunters and fishermen as just "hunters". Hunter 1-4 refers to participants from the interviews (a) while Hunter 5-9 refers to participants from the sharing circle (b).

Experience and traditional knowledge

The analysis shows that the hunters put great emphasis on the importance of experience and traditional knowledge when it comes to living with and navigating the cold and changing weather.

When asked if they think they handle the cold better because they are hunters and used to it, there was consensus that they might be better prepared than others would be. Hunter 1 explains:

> *"We have gotten used to what to do when we are out hunting and because we have learned it, we are probably better at handling it. I can say that, yes. The body probably gets used to the climate you grow up in no matter where you are. In my opinion one can get used to it like many other things. For example, people coming from the outside (strangers) in the winter – they get used to it. They learn how to stay warm."* (Hunter 1)

Hunter 2 adds his experience about unpredictable weather situations that can occur during hunting trips, and hence the importance of knowing how to deal with it:

> *"People who are not used to go hunting do not have the right equipment and have a tough time. Luckily, you do not see it much. They all know how the trip might turn out and they ask about the expected weather situation and are careful regarding possible dangerous situations. They try to be careful when they are out. Of course this is how it is when you are a hunter. Naturally, lots of unpredictable things can happen and when it happens very fast, it can get very difficult. For instance, if the dogs run away and you are all alone. My son experienced losing 18 dogs. They just went North. We tried to find them the following day with no luck. The ice was also gone. It happens sometimes but, luckily, not often. Everything is very unpredictable when you think about what can happen."* (Hunter 2)

Hunter 1 also explains how he and travel companions dealt with the wind and the cold when they suddenly faced a blizzard on a hunting trip:

> *"The worst cold I experienced was when a storm came while we were traveling on the ice sheet, and we had to sleep next to the sled and just put the tent over it. We had to lie on the snow because we could not turn on the primus. It lasted 6-8 hours and we just had to lie there. Our clothes were warm so it could have been worse, but it did not feel good."* (Hunter 1)

Hunter 2 shares his experience of the change in weather since the beginning of his hunting career:

> *"I have been a hunter for many, many years. It used to be very, very cold. When we went polar bear hunting, we went to the thin edge of the sea ice. We were not able to go any further with our dog sled. So, we set up camp and waited for the light to break through the following day. The ice would already be thick enough for us to continue. One cannot do that anymore. It used to be so cold. Very cold. Maybe it is because of the ocean stream that the ice comes later nowadays.* […] *Once I felt that I was freezing. Of course, we try to stay warm when we are out on the dog sled. We run next to the sled to stay warm.* (Hunter 2)

The findings underline the importance of culturally specific knowledge systems in shaping responses to environmental challenges. Participants did not merely describe the cold as a physical condition but as a lived experience intertwined with identity, tradition, and community. The knowledge shared, include stories with advice and lived experiences aligning with Inuit storytelling traditions where meaning is contextual and interpretive (Healey, 2018; Wilson, 2008). As such lived experience positions 'expertise' within the real world where people are the experts of their life. As lived experience creates knowledge through the realities, actions, experiences and observations experienced either first hand or within communities or families, it is highly relational and consistent with the relational nature of Indigenous worldviews (Bedford, 2025). This makes the knowledge invaluable for understanding ecological systems, especially when it comes to change and adaptation (Ogawa et al., 2025). Locals observe and surround themselves with the changes happening, and their knowledge is key to understanding the full picture (Danielsen et al., 2014), and cover areas

that scientific knowledge cannot provide (Ogawa et al., 2025). This narrative form of knowledge transmission emphasizes the importance of storytelling, deep listening, reflection, and relational understanding. By connecting the past and present and constantly updating the stories and knowledge to be relevant today, this lived experience contributes to how we understand IK, as intelligence evolving over time.

Age, health and ability

As all the hunters have worked in the profession since they were young and can contribute with perspectives from a lifetime, we found it important to include their perspectives on age and health when dealing with the cold.

Hunter 2 does not think that there is a connection between age and the ability to handle the harsh and cold climate. However, he thinks that health is what makes the difference:

> *"The age has no significance with regards to that. It depends on the health of the human being. Willpower and health are what play important roles. I can use myself as an example. I have become older. Some people who are much younger cannot live as hunters because of their bad health even if they have the willpower. It all depends on the health. That is how I feel it."* (Hunter 2)

Hunter 1, on the other hand, is of a different opinion and explains:

> *"It might be [that the age influences the ability to handle the cold and the wind]. Yes, maybe. I think those who are older feel the cold more when the body gets dry."* (Hunter 1)

Hunter 1 is convinced that a person's health is important when it comes to their ability to endure the cold:

> *"The health has great influence. Especially on hands and joints. They get cold – especially when it is windy. If you have cold hands and when your legs have gotten cold, it starts to hurt in the knees and hurt the joints of the hands. It is very noticeable."* (Hunter 1)

Hunter 3 thinks that age might have something to do with how you experience the cold:

> *"If you think about the weather being cold and it is windy, it is sometimes difficult to sit and turn forward because it is cold. When you have been out for a long time, your muscles can start to hurt. It is probably mainly the muscles where you feel it when you have been cold for a long time even if you are not freezing like crazy. Maybe it is because of age. The muscles become stiff and start cramping.*" (Hunter 3)

Hunter 5 agrees that the experience of cold changes as you age, but also points to the notable difference between the type of cold in the past and now:

> *"I mean, now…. of course, the difference when it comes to cold is significant between when I was young and now, where I can feel that the body gets weaker as you get older." (Hunter 5)*

Lastly, Hunter 4 shares how he believes that growing older shifts the interplay between knowledge and ability:

> *"Yes. It is important to stay warm. We are human beings, and we must be careful and not get too cold. That is how I will answer. My knowledge gets greater as I grow older, and my abilities get smaller."* (Hunter 4)

These narratives acknowledge a shift in the interplay between knowledge and abilities as you age, especially in those situations where your body experience the cold more, but your knowledge takes over. Viewing knowledge and abilities from this point of view, positions knowledge creation into a life course perspective, where different elements of your knowledge (either embodied or mental) changes over time. This requires types of abilities to be renegotiated, as oral knowledge can still be passed on, although your physical abilities might be declining. Living in an environment constantly changing teaches you, over time and generations to react and adapt, by using different types of knowledge and behaviours (Pearce et al., 2015; Tejsner & Veldhuis, 2018)

Furthermore, when doing research with indigenous communities, local worldviews should be at the centre, and how we understand health and wellbeing often requires a broader and more holistic approach to health than traditionally viewed in non-Indigenous societies (World Health Organization, 2023).

Clothing, equipment and movement

This section focuses on specific adaptation strategies used by the hunters and fishermen to endure the cold: clothing, equipment and movement.

As explained by Hunter 2 it is crucial to be prepared for any kind of weather when you go hunting:

> *"In this area we live entirely off hunting. We are hunters and we adapt to avoid getting cold. When we are out hunting with the dogsled a bit further away [from home] or anywhere, we always bring our tent and our primus and petroleum. We bring everything. Firstly, to avoid getting cold. When we are out and far away, we put up our tent and, in this way, we are having a cozy time while we are out hunting. We know from our forefathers that we must figure out the weather ourselves and adapt – for example with clothing suitable for winter. Noone is freezing much because we use the warm winter clothes of course. The cold here is very strong in the winter.*"

Hunter 3 adds his strategies for being prepared for the changing weather:

> *"When you are used to it, you might tend to think in this way: I bring my warm clothes. How will the weather be today? In this way, we are prepared. If you are used to it….how you are going to live with it today… how cold it is, then you can figure out how to spend the day in the best possible way. […] I always have something ready. For example, we can get wet when we are out. No matter what. And I have my gloves ready, they are most important. When I am on a longer hunting trip, I also bring extra boots. In the winter when it is really cold, we usually use polar bear trousers and in milder weather, we only use snowpants.*" (Hunter 3)

Hunter 1, as Hunter 3, emphasises different kinds of clothing for different seasons and weather situations:

> *"In wintertime, I usually use trousers made from polar bear skin and a jacket made from fox fur. During summer, I do not dress warmly when I am out on a boat. In the fall, I wear more modern clothes such as a down jacket. If I suddenly begin to freeze, I drink something warm. It also depends on the stomach – when it is empty, one begins to freeze."* (Hunter 1)

Besides boots and clothing made of skin which he used back in the days, Hunter 3 also mentions the importance of physical movement as a mean to fight the cold:

> *"As far as possible I try to move my body when I start to freeze. When possible, I run besides the dog sled. When we sail around here, the weather is not so cold. Around this area it used to be very cold but not in the summer when you sail. I do not recall any specific situation to be the worst cold because I use warm clothes from Avernasuaq. […] The warm clothes are made from seal skin and polar bear skin. Trousers, boots and gloves from polar bear skin. And boots from reindeer skin, but I do not have them now."* (Hunter 3)

Hunter 6 adds to the strategy of movement with a humoristic touch:

> *"Yes, we try to keep warm this way – you can also dance without music"* (Hunter 6)

Hunter 4 shares different strategies for staying warm, although it does not seem to be a general concern for him personally. However, he is aware that he and other Arctic hunters hold knowledge and can advise newcomers to the area:

> *"When we go on trips with dog sled, we run a bit if it begins to get cold, or we drink something warm. When it is windy, it sometimes gets very cold. I do not recall any worst cold. I do not freeze very much. In this area, it is good to adapt to the cold with clothes. We always have food supplies for the winter, and we always adapt to the cold and the wind. I think that we might handle the cold better than people who are not hunters, but of course we teach Danes who come on trips that they should wear warm clothes. We can pass on our knowledge through advice. One always needs to adapt to the cold and the wind".* (Hunter 4)

Hunter 2 adds his perspective on how knowledge on clothing and equipment is also passed on to younger generations when they start their hunting careers:

> *"Of course. If you do not wear good, warm clothes it can turn out very bad. Especially young people who just started hunting and who do not have the right equipment will freeze. They try to fight it as best as they can. They do not just give up. That is how one does in a hunter society where the winter ice is coming around Upernavik, Hiorapaluk (Siorapaluk) and Haviggivik (Savissivik). One must be careful."* (Hunter 2)

On the flipside of dressing for the cold, sweating is another topic that is brought up by several of the hunters as a crucial thing to avoid, especially when sailing. As Hunter 7 explains:

> *"I feel the cold on my hands, I will be honest, but on the body….getting cold on the body… since I was a child, my dad has taught me, that as far as possible you must avoid sweating when you're sailing, not on land, but when you're sailing, this is important to avoid freezing. And I feel my body has gotten used to it, so if I have to explain what it's like to freeze, I can't remember when I was [last] freezing, as I don't freeze. I get cold hands…. and by speeding up my work, my hands start to become warm again."* (Hunter 7)

Lastly, Hunter 5 points out the importance of keeping your head warm, traditionally by having long hair and now by wearing hats.

> *"Why do I have long hair? I had to have long hair to protect myself. I want to protect my head from the cold. You can see in old pictures, that our forefathers had long hair. A person who has adjusted to their country needs to have long hair, because if that person has lost their hat, they will experience frostbite. That means, the ancient Inuk's ancient traditions are not used anymore. Now you can't do without a hat."* (Hunter 5)

As stressed in this section, the participants highlighted the interplay between traditional knowledge and modern and technical opportunities, such as materials and textiles as being highly important for adaptation to cold and weather. Bringing these new aspects of adaptation strategies to the table, underlines how the hunters live in the continuum between traditional knowledge and new opportunities, updating over time, and how both elements deserve a place and position in their stories and in knowledge transfer. Participants described how movement and appropriate gear are essential not only for keeping warm but also for staying safe and surviving. These insights resonate with broader discussions in Arctic research about the role of embodied knowledge and adaptation to the environment (Baztan et al., 2017; Buijs, 2010; Ford & Goldhar, 2012). This also demonstrates why IK is so fundamental for understanding and innovating. IK might best be explained as "a body of understandings that have accumulated over time and been informed by the worldviews of the communities that have generated, practiced, refined and modified them"(Tassell-Matamua, 2025, p. 2) One might look at this knowledge sharing as cultural transmission, where knowledge of the past inform the present and future (Tassell-Matamua, 2025).

Country food

Kalaalimerngit is an overarching topic of importance when understanding lives in Kalaallit Nunaat. This is also clear in this study, where the importance of food and drinks are mentioned by the participants in connection to staying warm. Kalaalimerngit is often perceived as better than Western food when it comes to keeping the body warm.

Hunter 2 shares why kalaalimerngit is essential and how changing conditions makes it challenging to hunt and preserve Kalaalimerngit:

> *"Kalaalimerngit has great significance in regards to keeping warm. Especially when we go on trips outside the settlements to the hunting cabins. We go hunting out there and what we catch during daytime (qaattat, polar bears or narwhales), we eat. We do not freeze. We are happy and full on such trips. When we go hunting that far away, we also bring food that we can eat when we have breaks. Not Western foods. They have no power. Kalaalimerngit are best suited for a cold climate. These are the best that the place can offer: Kalaalimerngit. We are Kalaallit Inuit. Until this day we eat kalaalimerngit which is the food that is best for us. We do not really eat the expensive food from the stores. We live from what we catch and hunt and save for the winter. We eat it and we are happy with it – Kalaalimerngit. But it has become very difficult. We got lots of polar bears and we used to get a lot of dog food in the winter. Back then, there were lots of seals lying in the sun on the ice in the spring. We caught lots of them and saved them for dog food and ate them ourselves as well. Unfortunately, this is history. We cannot do that anymore because a lot of polar bears have come. What we used to hunt is now eaten by polar bears. We also have the problem that what we save for the winter is now being eaten by polar bears. Especially during summer. In the summer, polar bears are more visible here and they are protected by law. We are not allowed to hunt them from June through August."* (Hunter 2)

One thing is to eat specific foods while being out on hunting trips. Another thing is what you eat in general and how it makes you feel. Hunter 1 explains the relationship between the body temperature and Kalaalimerngit:

> *"Freezing or not… it is very noticeable that kalaalimerngit – those we call "the ones with blood" with red blood and red meat – if you eat these things daily, it does not feel that cold. When we eat*

> *meat from walrus or seal, we feel warm afterwards. Our bodies get warm from it. If one compares it to Western foods, it is obvious. One does not get warm from Western foods. One does not feel it after eating it. You can get full (stomach) from it, but you will not get warm by eating it unless you use a lot of seasoning. You feel that it is less powerful than kalaalimerngit. If I do not eat as much kalaalimerngit, I feel it a lot. I freeze easily."* (Hunter 1)

Hunter 3 also stresses the importance of food while out on hunting trips and adds the importance of accommodating the needs of both humans and animals, in this case the sled dogs. He explains:

> *"To me it is important to be able to eat daily and not have an empty stomach. That is how it is. You feel the cold less when you have eaten. When you are on a hunting trip with dog sled, the will of the dogs can sometimes be different from that of the humans. That is what one is most excited or nervous about. One must provide the food and take care of the ones you are with every day on the trip. That is what is most important during the trip. This is how I usually do it. Eating warm food every day."* (Hunter 3)

Hunter 8 agrees and goes as far as prioritizing food as the most essential thing, when out sailing. As opposed to clothing which nowadays can be bought with technical functions and fabric, traditional food cannot be replaced in the same way, according to him:

> *"If we must adapt, if we must live in a suitable way, then our diet is very, very important. When the cold gets milder, we can just buy some lighter clothes in the shop. What is impossible about that? But when you, like us, are sailing in the cold, and if we don't want to freeze to death, then we need our diet. That's why we need to defend this [the diet.]" (Hunter 8)*

Hunter 5 agrees and stresses the importance of preparing for a hunting trip by fuelling up on country food, making this preparation essential for enduring the cold throughout the day:

> *"If we don't eat our own food, it can impact our health. And that's why, if you live in the Arctic, then you need to eat food from the sea and land […] That means that we are so unique, that if we stop eating food from our sea and land, we will get weak, as the others said as well. We already know that. When you leave [the house] in the morning after having eaten seal soup, then you can go on with energy for the rest of the day." (Hunter 5)*

However, preparing for trips by preserving food in the cold as has traditionally been done, is now proving challenging due to the change in the weather over time. As Hunter 9 explains:

> *"These days it's very frustrating trying to dry fish in the frost. In relation to diet, this morning I had to bring the cod back out, as it had defrosted, and it was supposed to dry in the frost. This is just one evidence of climate change, and if it was just as cold as back in the old days, then we would have plenty of good food for winter supply. That is what I would like to mention, yeah, we are feeling the increasingly warm weather." (Hunter 9)*

As explained by the hunters, access to country food is considered essential to the livelihood of Inuit and food and nutrition are perceived not just in terms of caloric intake but as a culturally embedded practice. This is also found in other studies where identity and kalaalimerngit are highly interdependent (Hauptmann, 2024; Sandiford et al., 2026) and equally important contributes to feeling connected to and showing respect to nature and to the animals you rely on for survival (Naalakkersuisut, 2020; Olesen & Larsen, 2025).

Furthermore, kalaalimerngit, often high in fat and protein, were described as essential for maintaining body heat and energy. This aligns with existing literature on the metabolic effects of adaptations of Arctic populations to cold and the potential role of diet in thermoregulation (Ocobock, 2023). As the Arctic is changing with the increasingly unstable weather and a harsher experience of the climate due to wind and humidity, hunting practices will not become easier, and hence, political support is needed to ensure that locals also benefit from what the sea and land has to offer. Not just because it is their right (United Nations, 2007) but also to support and impact the health, wellbeing and livelihoods of Inuit living in cold climates, as stressed by Arctic scholars (Caughey et al., 2024; Ford et al., 2010; Hauptmann, 2024; Olesen & Larsen, 2025).

Conclusion

This study highlights the intricate and culturally embedded ways in which hunters and fishermen in Kalaallit Nunaat experience and adapt to cold and changing weather in their daily lives. Far beyond physiological responses, adaptation emerges as a holistic and cultural process rooted in tradition, community, lived experience and embodied knowledge. Through themes such as clothing and movement, country food, and traditional knowledge and lifetime experience, participants conveyed a nuanced understanding of adaptation to cold and weather as both physical and cultural phenomena. Lived experiences are crucial to understand IK, and we must insist on ongoing inclusion of it in science. The use of sharing circles proved essential in capturing these layered narratives, underscoring the need for culturally responsive methodologies in Arctic research. From a policy perspective, the study calls for greater support for access to country food and sustainable hunting practices, especially as climate change intensifies environmental pressures. Lastly, ensuring that Inuit communities are actively and ethically involved in research and knowledge production is crucial to fostering health, wellbeing, and climate resilience in changing Arctic regions.

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