2004-2019
SOCIAL SCIENCE
RESEARCH TRENDS
IN NUNAVUT

By: Alexis Polidoro
Summary of MA thesis, McMaster University

Supervisor:
Gita Ljubicic, McMaster University

In collaboration with:
Jamal Shirley, Nunavut Research Institute
Thank you  

We wish to acknowledge everyone who has supported and contributed to the analysis of the Nunavut research licensing database.

Nunavut Research Institute
Mary Ellen Thomas, Mosha Cote, Jose Atienza, Amy Clark

Geomagnetic and Cartographic Research Centre (Carleton University)
Amos Hayes, Peter Pulsifer, Robert Oikle
Adam Stone, Brendan Billingsley

Students
Shania Mahendran (Carleton University)
Todd Wong (McMaster University)
Saud Haseeb (McMaster University)
Jared Chestnut (McMaster University)

Supporters
Shari Fox (Ittaq Heritage and Research Centre)
Natalie Carter (University of Ottawa)
Shirley Tagalik (Aqqiumavvik Society)
Gwen Healey Akearok (Qaujigiartiit Health Research Centre)
Jean Allen (Nunavut Tunngavik Incorporated)

We are grateful for generous funding support from:

SSHRC CRSH

For more information visit straightupnorth.ca/research-trends-in-nunavut/
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About

• Introduction

Many Inuit feel they are not sufficiently involved in or benefitting from research activities. Part of this challenge comes from colonial research licensing practices and laws enabling state control over research in the North. In Nunavut, research licensing has been used as a means of increasing community engagement in research. The Nunavut Research Institute (NRI), based in Iqaluit, was established in 1994 to manage research and advise government agencies about research activities. They issue physical/natural (P), health (H), and social science/traditional knowledge (SS/TK) research licenses in the Territory. In partnership with the NRI, we examined the SS/TK research licensed between 2004-2019, to understand the scope of research topics, intensity, leadership, and community engagement over time.

My MA research addressed the question “What are the Social Sciences and Traditional Knowledge research trends in Nunavut?” To address my research question, I had four objectives, including to:

<table>
<thead>
<tr>
<th>IDENTIFY</th>
<th>Identify research leadership, location, and community engagement in social sciences projects</th>
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<tbody>
<tr>
<td>DETERMINE</td>
<td>Determine frequency and diversity of leadership, location, and community engagement according to topics, methods, and reporting</td>
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<tr>
<td>DEVELOP</td>
<td>Develop new metrics to improve tracking of research trends in the future</td>
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<tr>
<td>CONTRIBUTE</td>
<td>Contribute to the development of a Nunavut research portal to make NRI applications and reports publicly accessible</td>
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• Rationale

Inuit organizations, northern governments, and academic literature show that the most successful northern research engages community members and organizations in their research in all stages, from planning to reporting. My Master's research project undertook the first comprehensive review of the Nunavut research licensing database. This work responds to community, academic, and decision-maker calls for knowing what research is happening where in Nunavut. Results of my analysis contribute to NRI goals of:

- improving Inuit engagement in research;
- making research results more accessible to Nunavummiut;
- reducing community research fatigue; and,
- encouraging research that addresses Inuit priorities.
This research project was facilitated through multiple phases of data preparation of the NRI research licensing database, and thematic coding of research topics, location, leadership, and community engagement using NVivo software.
Coding framework

Over 300 codes* were used to capture SS/TK research trends, including:

<table>
<thead>
<tr>
<th>Social Sciences and Traditional Knowledge</th>
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<tr>
<td><strong>Parent (Broad) Codes</strong></td>
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<td>---</td>
</tr>
<tr>
<td>Archaeology</td>
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<tr>
<td>Arts</td>
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<td>Colonization Impacts</td>
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<td>Culture/society</td>
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<td>Economy</td>
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<tr>
<td>Education</td>
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<tr>
<td>Geography</td>
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<tr>
<td>Gender</td>
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<tr>
<td>History</td>
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<tr>
<td>Inuit Qaujimajatuqangit (Inuit knowledge)</td>
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<tr>
<td>Justice/Law</td>
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<tr>
<td>Land use and traditional activities</td>
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<tr>
<td>Policy/governance</td>
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<tr>
<td>Reconciliation</td>
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<tr>
<td>Sovereignty/self-determination</td>
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*Each project coded had at least one broad code associated to it, meaning a project coded with the child code "educational outcomes" was also coded to the parent code of "education"*

Things to consider...

1. **Project summaries only reflect what was proposed in the research.**
2. **Some project summaries were missing details on methods and reporting.**
3. **Consistency is important in thematic coding.**
4. **Licensing data does not represent all SS/TK research in Nunavut.**

Project summaries from license applications were used as the basis of this analysis. So results are based on what was proposed in a project, and not necessarily what happened in practice. Keep this in mind when interpreting results.

Out of the 568 project summaries analyzed, 165 projects did not discuss reporting tools and 14 projects did not discuss research methods. There were also 2 projects where the region could not be identified, and 10 projects that did not specify community location.

I completed all coding for SS/TK project summaries to ensure consistency of interpretations. However, there could be some variations in relation to other disciplines (P & H) with different people involved in coding.

Some scientific activities led by government agencies, Inuit organizations, and individual Nunavummiut do not require licensing under the Scientists Act. For this reason, the number of Nunavut-led research activities is likely under-represented in the results.
Research over time

There is a steady increase of SS/TK projects over time in Nunavut, with notable peaks in 2009 and 2018

Total number of SS/TK projects in Nunavut (2004-2019)

Leadership

SS/TK research is dominated by academics at Canadian universities. The Principal Investigator (PI) affiliation is determined by the affiliation listed in the scientific license application, and documented in the NRI research licensing database

**Topics**

*SS/TK research licensed by the NRI has a strong focus on Inuit cultural studies. It was very common for projects to focus on more than one topic in their research, and as a result, multiple broad codes could be associated with one project. For example, while “Inuit Qaujimajatuqangit (IQ)” was always coded in relation to “Culture and society”, not all "Culture and society" projects were coded to IQ unless they included a specific IQ focus.*

**Methods**

*SS/TK research is mainly being done through interviews, and tools to support interviews (e.g. audio recordings) are also common.*
Journal article is the most common proposed form of reporting in SS/TK projects. The top four out of five reporting tools are academic-focused, which is likely connected to the dominance of academics leading SS/TK projects.

Out of the 568 research projects coded in this research, approximately one-third (37%) of projects explicitly state community involvement in their research license application. This includes 166 community-connected research projects (i.e. projects connected with communities in some capacity, such as hiring local guides, translators, or consulting local organizations) and 45 community-research partnerships (i.e. projects involving a formal research partnership where community members/organizations play an active role in all parts of the research).
Talking Points

• Research Location

One component of my analysis was to characterize research intensity. This was done by looking at communities with the most (Iqaluit, Pond Inlet, Pangnirtung, Arviat, Cambridge Bay), and least (Kugaaruk, Resolute Bay, Sanirajak, Whale Cove, Grise Fiord) research projects. Although the license analysis cannot tell us WHY research is happening in a specific location, it appears that research intensity is connected to community research capacity and infrastructure. For example, Iqaluit has the largest population, most active research organizations, cheapest air travel, and the most affordable accommodations (supported by the NRI), whereas Grise Fiord has the smallest population, no active research organizations, a limited travel season and accommodations, and the most expensive air travel (see Appendix).

• Research Leadership

Another component of the analysis was to characterize research leadership. It appears that research leadership is influenced by previous connections established in a community. For example, some academics worked in Clyde River due to long-term relationships developed by working (and living) in the community over many years (see quote on next page). By having strong community-researcher connections it becomes easier over time to develop research partnerships and address community priorities. We also learned that consultants work mainly in the Kitikmeot region, which appears to be connected to mine development projects in the region. Consultants are hired by mining companies to facilitate land use and IQ studies as part of environmental assessment processes (see Appendix).
Conclusions

This analysis of scientific research licenses has identified some key social science and Inuit knowledge research trends in Nunavut. We learned that:

• SS/TK research has increased over time;
• research projects are mainly led by Canadian academics;
• research focuses on a range of cultural topics;
• Iqaluit has the highest research intensity in the Territory; and,
• community connections in research have increased over time, while community-research partnerships have remained consistent and fairly low.

Understanding the scope of research over the past 16 years is an important first step to inform the development of Nunavut-specific approaches to Inuit self-determination in research.

Undertaking this research trends analysis was a bigger and more complex task than initially anticipated. However, cross-checking the database for accuracy and completeness led to a number of recommendations for improving the licensing database. Recommendations are outlined on the next page, and are meant to help the NRI, researchers, government policy-/decision-makers, as well as license reviewers, to improve the overall licensing process. The long-term goal is for this research to inform the development of a public Nunavut research portal to enhance information accessibility and minimize research overlap/fatigue. We continue to work together to make research work for Nunavummiut.

Clyde River was chosen for this study because of a long relationship with the applying researcher (Gearheard) who lives in that community. The community and Gearheard have worked together to design and carry out several projects related to Inuit knowledge of the environment and combining Inuit knowledge and science; this project builds on those. Also, Clyde River is located in a good region to study weather patterns in Nunavut because of its diverse landscape and topography and because the community is very active on the land.

2008 License Application
(PI: S. Gearheard)
## Recommendations

<table>
<thead>
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<th>Recommendation</th>
<th>Impact</th>
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<tr>
<td><strong>Research License Application</strong></td>
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<tr>
<td>• Refine research application to track key metrics (e.g., research topics, methods, reporting, location, PI, team members, etc.)</td>
<td>• Eases administration burden at NRI if researchers need to include key information in a consistent format</td>
</tr>
<tr>
<td>• Add questions in the application that would help track early relationship-building and community engagement efforts</td>
<td>• Encourages, and provides guidance for researchers in early engagement</td>
</tr>
<tr>
<td>• Add questions (or a checkbox) to identify if the proposed research is addressing a community-identified priority</td>
<td>• Helps to distinguish and track curiosity-driven and community-driven research</td>
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</tbody>
</table>
| • Include all team member names, affiliations, and roles (not just PI) to better track the composition of research teams (i.e. create a more detailed section requesting the name, affiliation, and role of all team members) | • Helps to understand size and composition of research teams  
• Would help to track community engagement  
• Would help to track continuity (e.g., a student later continuing research in a government position) |
| • Request information about funding sources (doesn’t have to be a lot of information, but could include source, amount, and duration of funding) | • Helps to understand the impact of strategic funding initiatives, as well as the impact of investments from particular funders |

| **Research Reporting** | |
| • Add reporting section to the future Nunavut research portal | • A consistent reporting format simplifies tracking of research metrics |
| • Streamline reporting protocol to track annual/final reports (track and contact PIs who do not submit an annual/final report) | • Increases consistency of research communication in Nunavut  
• NRI would have necessary information to better understand reporting strategies |
| • Require at least one reporting tool in plain language (i.e. cannot be just a journal article) | • Helps to make research reporting more accessible and understandable in communities |
| • Add questions in report that help to understand the level of community engagement | • Helps identify how communities were involved in a project, and in what capacity |

| **For Government Officials, Policymakers, and Reviewers** | |
| • Establish functionality in Nunavut research portal to track reviewer commentary and NRI/researcher responses during the application and review process | • Nunavut research portal can help to make research more public and transparent, as well as facilitate internal discussion and administration  
• Increases efficiency in distributing to license reviewers and communicating with PIs |
| • PIs provide commentary of their own (in reporting section of Nunavut research portal) | • Reviewers can understand potential for follow-up studies, or if community priorities were addressed  
• Fosters two-way communication between reviewers and researchers |
| • Ensure that all annual and final reports are accessible to reviewers (and the public) | • Helps to assess research progress and identify if conditions for license approval were met |
Appendix

Consultant/ Industry

40 Projects

Community

Topics

Methods

Reporting