Where are the people? A scoping review on the use of the term "resilience" in Arctic health research and its relevance to community expressions of well-being

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In the field of Arctic health, “resilience” is a concept used to describe the capacity to recover from adversities. The term is widely used in Arctic policy contexts; however, Arctic peoples and communities question whether “resilience” is an appropriate term to describe the human dimensions of health and well-being in the Arctic as it is currently applied. A scoping review of peer-reviewed and gray literature was conducted. We used searchable databases, Google Scholar, and Dartmouth College Library Services, to select studies conducted between 2000 and 2019 and key documents from the Arctic Council and other relevant organization and government entities. A scoping review framework was followed, and consultation among the authors provided initial scope, direction, and verification of findings. Analyses identified over- and underrepresented key thematic areas in the literature on human resilience in Arctic communities. Areas of overrepresentation in the literature included ecosystem, climate change, and environmental sciences. Areas that were underrepresented in the literature included health, medicine, wellness or well-being, and community voices on the topic of human resilience. Results indicated that “resilience” as a concept was applied across a diversity of contexts and subject areas in the Arctic and that this may have repercussions for understanding the human dimension of “resilience” and community expressions of well-being. Alternative terms and concepts with which Northern community members more closely identify could be used to more respectfully and accurately advance research in areas such as epidemiology, community health and well-being, and particularly Indigenous peoples’ health.

Keywords: Scoping review, Arctic, Resilience, Community-based participatory research, Health and well-being

Introduction

A diversity of challenges exist in achieving good health and well-being around the Arctic, driven by differing interacting determinants (Arctic Monitoring and Assessment Program, 2015). For example, Arctic peoples face a number of challenging circumstances when it comes to achieving good health including but not limited to the lack of access to services and culturally appropriate care (Marchildon and Torgerson, 2013; Redvers et al., 2019), understaffed health centers (Ferguson, 2017), a transient workforce of health professionals (Cherba et al., 2019; Abelsen et al., 2020), serious issues related to mental wellness and addictions (Young et al., 2015; Gray et al., 2016; Healey Akearok et al., 2018; Nelson et al., 2018), historical trauma and acculturation (Hämäläinen et al., 2018), and geographically and politically isolated communities (Royal Commission on Aboriginal Peoples, 1996; Cameron, 2012; Sinevaara-Niskanen, 2015; Sakakibara, 2017). That said,
there are tremendous strengths in communities to address local health concerns, such as a willingness to work together, traditions and customs that support healthy lifestyles and activities, and strong cultural pride (Annahatak, 2009; Redvers, 2016; Mearns, 2017; Lys, 2018). Drawing upon existing community strengths and resources, and pathways to well-being, is the key to addressing these challenges now and over the coming years.

There are also challenges with how the information about Arctic health and well-being is presented or shared. As scholars in the 2018–2019 Fulbright Arctic Initiative Cohort II (FAI II), we have repeatedly encountered tension with the term “resilience” in the communities where we live and work and decided to conduct this scoping review to explore the written literature on the history of the term, as well as its use and reactions to it, in the Circumpolar North. In the field of Arctic health, “resilience” is a concept used to describe the capacity to recover from adversities (Carmack et al., 2012; Vlasova and Volkov, 2013; Arctic Council, 2013, 2016; Jeppesen et al., 2018; Sawatzky et al., 2018). While the term is widely used in Arctic policy contexts (Arctic Council, 2013; Sustainable Development Working Group, 2015; Arctic Council, 2016; Hueffer et al., 2019), Circumpolar communities have questioned whether “resilience” is an appropriate term to describe the human dimensions of health and well-being in the Arctic (Healey Akearok et al., 2019).

The term resilience is derived from the Latin word resilio and means “to jump back” (Manyena, 2006). Resilience, as defined in the 2016 Arctic Resilience Report, “is the capacity to buffer and adapt to stress and shocks, and thus navigate and even shape change” (Arctic Council, 2016, p. ix). The term may be applicable to ecosystems and socioecological relationships, where climatic and geopolitical events force sudden change, and resilient systems “jump back” in response. However, the wide adoption of the term “resilience” to explicate the human experience in the Arctic has not resonated well with communities. In a study of perspectives on the term resilience among individuals from seven of the eight Arctic countries, participants shared critiques of the term “resilience” and their perspectives on key components of thriving communities (Healey Akearok et al., 2019).

Interest in the concept of resilience has grown dramatically in recent years. It is featured in the Paris Agreement on climate change (UNFCCC, 2017) and the United Nations’ Sustainable Development Goals (United Nations, 2015). Given the large and rapid changes occurring in the Arctic, the Arctic Resilience Report notes that “resilience is immensely relevant to the people of the Arctic, its ecosystems, and the management and governance of the region’s natural resources” (p. x; 1). The report is silent on the capacity of Indigenous communities, for example, to respond to adversity despite the fact that the Arctic Council is comprised of eight Arctic states and six international Indigenous organizations.

Resilience, when applied to the human condition, is usually used to convey the ability of some people or communities to withstand and recover from severe adversity or stressful life events (Arctic Council, 2009; Amundsen, 2012). Used in that sense, resilience is an interactive concept that is concerned with the combination of serious risk experiences and a relatively positive psychological outcome despite those experiences (Kirmayer et al., 2011). Resilience is characterized as a dynamic process of social and psychological adaptation and transformation (Arctic Council, 2016). As such, resilience can be a characteristic of individuals, families, communities, or larger social systems and is manifested as positive outcomes in the face of historical and current stresses (Kirmayer et al., 2011).

The concept of resilience has been used in developmental psychology and psychiatry to describe individuals’ capacities to achieve well-being and thrive despite significant adversity (Kirmayer et al., 2009). The study of “community resilience” builds on these concepts and seeks to understand positive responses to adversity at the level of families, communities, and larger social systems (Kirmayer et al., 2009; Amundsen, 2012; Healey Akearok et al., 2019).

The literature about human resilience in the Arctic emphasizes the experiences of trauma and hardship (Arctic Council, 2009; Bals et al., 2011; Wexler et al., 2013; Ulltangusaha et al., 2014; Allen, 2015; Anang et al., 2019). While these are crucial elements to acknowledge, particularly in light of both historical and ongoing traumas, this focus often misses that the day-to-day lives of many people in the North is a positive and thriving experience at home in the Arctic. In a recent publication highlighting discussions among individuals from the Circumpolar Region, many individuals rejected the label of “resilience” and felt it did not adequately describe their worldview on life in the Arctic (Healey Akearok et al., 2019). Therefore, there could be a divergence in the scholarship, perhaps a reflection of differing paradigms—one that aligns with the discourse of “resilience” of Arctic peoples, and one that struggles with the concept as being rooted in the concept of harm or trauma. This scoping review adds to this initial exploration of the way the term resilience is used and responded to in the Arctic by investigating how the term resilience is articulated in an Arctic context in both peer-reviewed and gray literature, with a particular focus on community perspectives.

The findings of this scoping review may better inform health research and policy across the Circumpolar North by raising awareness of the term’s current usage and highlighting potential alternatives that may be deemed more appropriate by people living in the North.

Method

Authors’ relationship to study

This scoping review was undertaken by a collective of FAI II Circumpolar scholars. The authors each have life experience in the Arctic and are from Arctic communities and/or have long-term relationships with Arctic communities. This enabled the study to be community-centric, privileging community perspectives on the topic of resilience.

The scoping review method

Specifically designed to identify gaps in the evidence base where no research has been conducted, the scoping review may also summarize and disseminate research findings as
well as identify the potential for a full systematic review in specific areas of inquiry (Arksey and O’Malley, 2005). The Arksey and O’Malley’s iterative six-step approach was followed for this study: (1) identifying the research question; (2) identifying relevant studies; (3) study selection; (4) charting the data; (5) collating, summarizing, and reporting the results; and (6) a deliberation among the authors. “Scoping reviews have historically received less attention as a technique to map relevant literature in a field of interest. A scoping review method was selected for this inquiry due to the breadth of this topic, assumed limited literature, and the lack of preexisting review on the subject. Scoping reviews also tend to address broader topics where many different study designs might be applicable, and therefore, it is not intended to explore very specific research questions nor, consequently, to assess the quality of included studies (Arksey and O’Malley, 2005) but to comment on the overall state of research activity in a particular field.

Our population of focus was collectively referred to as peoples living in the Arctic region. Circumpolar and Arctic are often used interchangeably (Young, 2012), and we incorporated this into our search terms. Arctic peoples include diverse cultures with differing belief systems and languages, who nevertheless share some underlying common values (Redvers et al., 2015). They inhabit a range of geographical and climatic territories, in villages, towns, and cities—which we refer to as “communities” (Table 1).

We define and conceptualize “health” very broadly and, similar to Young and Marchildon (2012), recognize that health researchers, service providers, and policy makers working in the Arctic and for Arctic peoples need a broad and multidisciplinary understanding of northern health.

Our review focused on the human dimension of resilience in the Arctic research literature defined broadly as the human process of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress in all forms. Our population is united in particular circumstances of sociocultural history, where, for example, some communities have experienced upheaval and societal transition and transformation over the last 50 years (Redvers et al., 2015). These transitions have been and continue to be exacerbated by environmental and climate change as well as inequities in health care, education, housing, and employment (Bjerregaard and Young, 1998).

(1) Identifying the research question:

How is the term resilience used, and responded to, by communities as articulated in both peer-reviewed scientific publications and gray literature on human health in an Arctic context?

(2) Identifying relevant studies—article search:

One author (G.H.A.) led the process to search for articles in online library databases, Google Scholar, and Dartmouth College Library Services. The search included peer-reviewed and gray literature. Studies published between 2000 and 2019 were included. Databases were not limited and were searched specifically for studies mentioning human health and resilience in the Arctic. Search terms included “resilience,” “health,” or “well-being” and “Arctic,” “Circumpolar,” or “community” and/or combinations of these terms. The same search terms were utilized for gray literature to identify other relevant publications specific to the Arctic context.

(3) Study selection:

Authors collaborated to establish the following inclusion criteria:

- The study/article included “resilience” in the title or abstract and pertained to the Arctic or a Circumpolar region;
- The study/article included the human dimensions of health and/or well-being in the title or abstract and pertained to the Arctic or a Circumpolar region;
- The study/article was written in English, a criterion imposed due to limited time and resources to fund the cost of translation.
- The study/article included the mention of or described details distinctly related to an impact or perspective of the community.

The authors adopted these limits for practical reasons and acknowledge that potentially relevant papers could have been missed, and future reviews could include a broader scope of articles.

Exclusion criteria:

(a) Removal of duplicates.
(b) Non-English language source.
(c) Population in the study was not from the Arctic region or did not distinguish between the Arctic and non-Arctic population.
(d) Unrelated to human dimension of resilience (e.g., resilience of bacteria in Arctic waters).

**Table 1.** Example search equation including search terms that were utilized to identify studies for the scoping review. DOI: https://doi.org/10.1525/elementa.2019.00077.t1

Search Terms Used

“Resilience”

AND

“Arctic” OR “Circumpolar”

AND

“health” OR “wellbeing” OR “well-being”

AND

“community” OR “community-based” OR “village”
Table 2. Method of studies included in the scoping review. DOI: https://doi.org/10.1525/elementa.2019.00077.t2

<table>
<thead>
<tr>
<th>Topic</th>
<th>Descriptive Framework</th>
<th>Narrative</th>
<th>Review</th>
<th>Case Study</th>
<th>Cross-Sectional</th>
<th>Network Map</th>
<th>Other</th>
<th>Retrospective Population Study</th>
<th>Sharing Circle</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of articles</td>
<td>11</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>42</td>
</tr>
</tbody>
</table>

Table 3. Focus areas/topics of studies included in the scoping review. DOI: https://doi.org/10.1525/elementa.2019.00077.t3

<table>
<thead>
<tr>
<th>Topic</th>
<th>Climate Change + Zoonoses</th>
<th>Ecosystem</th>
<th>Suicide</th>
<th>Animal Health</th>
<th>Mental Health</th>
<th>Resilience as Concept</th>
<th>OneHealth</th>
<th>Wellness/Well-Being</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of articles</td>
<td>17</td>
<td>14</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>42</td>
</tr>
</tbody>
</table>

(e) Did not mention or describe or relate to an impact on or perspective of one or more communities.

Articles meeting the inclusion/exclusion criteria (N = 42) were critically reviewed in their entirety for mentions, descriptions, or evaluations of specific references to human dimensions of resilience.

(4) Charting the data:

Studies were cataloged in a schematic in Microsoft Excel according to year, geography, methods, and topic(s) of study (see Tables 2 and 3). Outcomes were also recorded. Authors collaborated to review and verify the chart and provide insight and/or identify key studies or reports that might have been omitted.

(5) Collating and summarizing the results:

A total of 42 unique manuscripts were examined that met the inclusion/exclusion criteria. First, articles were classified by methodology. Approximately 25% of the studies focused on describing a framework for approaching a topic or method related to articulating or researching human resilience (n = 11). Additionally, 20% (n = 8) utilized unstructured or semistructured narrative collection methods. Eighteen percent (n = 7) were review papers and 13% (n = 5) were formatted as a single or multiple case study. The remainder covered a multitude of cross-sectional study designs, some were population-based and others were on a small-scale as well as historical data, evaluation, commentary, and network mapping (see Table 2).

Second, we categorized each paper into one or more relevant topic areas (see Table 3).

- 64% (27 of 42) of the documents pertained to specific Indigenous populations in the Arctic;
- 40% (17 of 42) pertained to the impact of and/or perspectives on climate change and human health;
- 43% (18 of 42) made some reference to health and community expressions of well-being;
- 24% (10 of 42) were specifically about mental health and/or suicide research;
- 52% (22 of 42) featured an emphasis on a particular community and community resilience; and
- 34% (17 of 42) specifically examined cultural practices related to resilience.

On the topic of resilience and human health, the most studied subject matter was climate change (n = 17) followed by ecosystems (n = 14). Literature on human resiliency as concept (n = 5) and OneHealth (n = 2) in the Arctic human resilience literature was limited. Studies in the mental health/well-being and suicide categories were often mutually inclusive—focusing on the components of both mental health/well-being and suicide. Articles referred to specific Indigenous populations including Inuit (n = 5), Sami (n = 7), Inupiat (n = 1), Alaska Native (n = 3), Dene (n = 1), Nenets (n = 1), and Circumpolar Indigenous peoples in general (n = 6).

Of the studies exploring a community or multiple community perspectives on resilience (n = 22), the role of family and community in supporting human resilience over the life span (childhood, adolescence, adulthood, and elder; n = 15), the importance of building and nurturing relationships as a resilience-promoting factor in Arctic communities (n = 16), and the making of meaningful contributions to the community were the most discussed. Six of the studies focused in some part on the concept of “collective” community resilience, two of which noted the absence of the literature exploring and expounding on...
community-based concepts of collective resilience (Wexler et al., 2009; Teufel-Shone, 2018).

(6) Deliberation and discussion:

Authors reviewed the findings and deliberated on the results and relevance to their specific Arctic context. Returning to the original purpose, to explore how the term “resilience” was used in peer-reviewed scientific publications and gray literature on human health in an Arctic context, we have observed a paucity of peer-reviewed literature that captured local perspectives on resilience in the Circumpolar region over a 20-year period. This is not surprising due to the slow adoption of community-based research methodologies by the mainstream academic community and the issues embedded in the particular historical, cultural, linguistic, and sociopolitical contexts found in Circumpolar regions (Young, 2003; Young and Marchildon, 2012; Jones et al., 2018). Three themes were prominent in our discussion of the review findings: the holistic worldview, local measures and definitions, and the need for community-based methods and collaborations.

Holistic worldview

Findings from this study show that the limited research found to date on the human dimension of resilience in the Arctic lacks both depth and local conceptualizations of the concept; however, the wide range of topics included in research depictions of human resilience well-being begins to (intentionally or unintentionally) articulate a holistic perspective on the factors contributing to human dimensions of resilience in the Arctic. Describing the OneHealth approach to Arctic health and well-being (the intersection of health–animal–environment interactions), Hueffer et al. (2019) acknowledge that a more holistic perspective on health that focuses on living in balance with the natural world has emerged with the potential to improve human health more broadly. The authors noted that such a comprehensive approach may provide mitigating and adaptive strategies to enhance resilience (Hueffer et al., 2019).

Local measures and definitions

The need for locally derived resilience terminology, definitions, and measures was clear in the limited literature exploring the topic. This highlights an important question for public health researchers—can we truly measure or understand resilience if we are asking individuals to conform to someone else’s definition of resilience? The academic community should be working with definitions and concepts provided by the peoples participating in the study. Robards and Alessa (2004) explored resilience through social-cultural-ecological lens over time and identified that maintaining equity and resilience in remote Arctic communities requires incorporating localized cultural values and decision-making processes that fostered prior community existence before the application of Western centralized management systems. Wexler et al. (2009) further highlight the need for both individual and collective expressions and explorations of the human dimensions of resilience, particularly in the case of marginalized or oppressed groups within Arctic communities, to expand.

Need for research collaborations and community-based research methods

One of the studies included in the review, by Ulturgasheva et al. (2014), noted that while their main goal of their study was to reveal processes and factors underlying Indigenous youth resilience, the study highlighted processes and factors contributing to resilience in research collaborations as well. Their findings highlighted that “resilient collaborations” were derived from the use of Indigenous methodologies and had the potential to bring about transformative outcomes for Indigenous community members engaged in research (Ulturgasheva et al., 2014). Communities continue to voice their concern about research that is not collaborative or community-based, as demonstrated in a very recent publication on ethical considerations for community-based research with Sami in North Finland (Eriksen et al., 2021).

Limitations

Scoping reviews have several limitations. Scoping reviews do not formally evaluate the quality of evidence and often gather information from a wide range of study designs and methods. Scoping reviews do not provide a synthesized result or answer to a specific question but rather provide an overview of the available literature for an initial assessment of potential for later systematic review (Arksey and O’Malley, 2005). Scoping reviews are at risk of bias from different sources, which is mitigated with assessment of the risk of bias, the use of broad definitions and multiple search terms, and discussion and validation among the authors (Chatwood et al., 2015; Sucharew and Macaluso, 2019). The pool of Arctic research, while growing, is sufficiently small enough that further research could expand upon the search criteria in order to include a deeper exploration of terminology from other languages (Healey Akearok et al., 2019).

Conclusion

The Arctic Resilience Report (2016, p. xv) states,

Resilience has also been defined as a desirable characteristic, somewhat synonymous with adaptive and transformative capacity. . . . In integrating these two orientations, several scholars have suggested that successfully navigating change is a complex process of identifying the desirable features of a system and strengthening them, while weakening other features to allow for transformational change . . . .

Everyone will experience ups and downs in life—from everyday challenges to traumatic events with more lasting impact, such as the death of a loved one, a life-altering accident, or a serious illness. Each change affects people differently, bringing uncertainty. Yet, people generally adapt well over time to life-changing situations and
stressful situations—in part, thanks to resilience. The research community describes human resilience as the process of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress. As much as resilience involves “bouncing back” from these difficult experiences, it can also involve profound individual and collective growth. Adverse events and chronic exposure to adverse events are like rough ocean water—challenging and difficult. The perspective of many Arctic communities is that resilience is what allows us to navigate rough waters and learn from the experience—and conceptually includes both individual and collective attributes.

Many people throughout the Circumpolar North do well despite severe hardships, trauma, and deprivation. In the early years of transnational Arctic collaboration, the move to a discussion of resilience shifted the focus of mental health research away from a focus on weaknesses and toward an analysis of individual strengths and positive outcomes (Arctic Council, 2009). Since that time, however, in many cases, resilience research has simply meant looking at the inverse of risk factors, without changing the paradigm of what those factors are (Kirmayer et al., 2011). Including protective factors to supplement the focus on risk factors could improve our ability to develop protective and comprehensive strategies that may be more effective at supporting communities. Furthermore, other studies have shown that when those protective factors are rooted in community conceptualizations of well-being, the outcomes are more meaningful (Chandler and Lalonde, 2008; Kral et al., 2011; MacDonald et al., 2013; Spein et al., 2013; Healey et al., 2016; Lys, 2018). Changing the focus to community-defined factors that support individual wellness and thriving communities could shift the paradigm of research in the Arctic and allow attention to be focused on the existing strengths, capacity, and resources. Investigating terms that communities of the Circumpolar North use to describe their own health and well-being may introduce new possibilities to more effectively support communities to thrive.

The scoping review found that the term “resilience” has been applied across a diversity of contexts and subject areas and that this may have repercussions for understanding the human dimension of “resilience” and community expressions of well-being. Integrating community perspectives on well-being and well-being research is critical, but the authors found limited evidence of that in this scoping review. Other recent research has identified that there may be alternative terms and concepts that make more sense for Northern community members, particularly in the case of Indigenous peoples who might identify more strongly with concepts embedded in their own culture and language (Healey Akearok et al., 2019). Exploring such alternative concepts might be a way to more respectfully and accurately drive the field of health and wellness research forward in accordance with community priorities and/or epistemologies such as those of Indigenous peoples of the Arctic in the future. Future research should expand on the perspectives of Arctic community members and allow those voices to guide the priorities and frameworks used to refer to, and investigate, health and well-being in Arctic communities.

**Data accessibility statement**

No publicly accessible databases have been made available through this project.

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**Author contributions**

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Drafted and/or revised the article: JL, CVLL, JPAS, ER, KC, GHA.

Approved the submitted version for publication: JL, CVLL, JPAS, ER, KC, GHA.

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