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Resiliency in Disaster: The Relevance of Indigenous Land-based Practice

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Abstract

The COVID-19 pandemic, as a Natural Disaster, has significantly affected the vulnerable portion of society, particularly Indigenous and visible minority immigrants in Canada. As a color settler immigrant family in Indigenous land in Treaty 6 territory, we explore Indigenous Land-based Education (ILBE) from Indigenous Elders and Knowledge-keeper's land-based stories, traditional knowledge, resiliency, and practice. As a family, we have been learning and practicing ILBE to develop resiliency during natural disasters like the COVID-19 pandemic. This paper used land-based decolonizing autoethnography to understand health and wellness from an ILBE perspective. We discussed why ILBE matters for building resiliency, resistance, and self-determination within a family and community; how can it help others? We have seen how COVID-19 has severely impacted our mental and physical health. During the high climate change era, many pandemics are yet to come, and the ILBE can build resiliency for both humans and non-humans.

Around 25 million people were displaced due to disasters in 2019, often resulting from climate change (Heslin et al., 2019). By 2020, the economic impact of climate change in Canada could reach $21 to 43 billion per year. Natural disasters (such as COVID-19, forest fire, flood, and many more) pose high mental health and socioecological risk to many Indigenous and racialized immigrant communities (Méndez, Flores-Haro, & Zucker, 2020; Whyte, 2018). The Covid-19 pandemic is described as humanity's worst crisis since World War II; it demonstrated the worldwide unpreparedness to face a global mass casualty incident. A Covid-19 pandemic can be seen as a disaster (at least in many situations).

This paper aims to use the Indigenous land-based practice (ILBP) approach that capitalizes on communities' resilience to community-led climate change adaption through land-based knowledge and practice. ILBP refers to Indigenous land-based education, which is vital to building Indigenous self-determination, health well-being, and sustainabilities (Borrows, 2016; Robidoux, & Wade, 2017; Walsh, Danto, & Sommerfeld, 2020; Wildcat, McDonald, Irbacher-Fox, & Coulthard, 2014). As Wildcat and colleagues discuss, "if colonization is fundamentally about dispossessing Indigenous peoples from their land, decolonization must involve forms of education that reconnect Indigenous peoples to land and the social relations, knowledge and languages that arise from the land" (2014, p.1). Thus, ILBP is deeply connected with Indigenous culture, traditional practice, and the well-being of Indigenous people and the environment. We consider ILBP a political term to challenge a colonial learning system that is not connected with land, people, and the history of colonization (Datta, 2018; Hansen, 2018). The ILBP reconnects Indigenous peoples to land and the social relations, knowledge, and languages of the land (Michell, 2018). The critical aspect of ILBP emerges from Indigenous worldviews and perspectives applicable to Indigenous everyday practices.

Following ILBP, in this paper, we describe some of the many health benefits and positive outcomes that can come from spending more time out on the land, especially learning from Indigenous Elders and Knowledge-keepers knowledge on resilience and wellness in response to the natural disaster. This paper explores Indigenous land-based practice opportunities that capitalize on communities' resilience to disaster. As a racialized immigrant in Canada, we consider ILBP as a source of scientific knowledge which developed from Indigenous Elders and Knowledge-keepers' stories, learning and practicing from land (Datta, 2016; Gaudry & Lorenz, 2018; Tuck & Yang, 2012; Smith, 2012; Wildcat et al., 2014). We know the ILBP is not an event

but a lifelong learning, unlearning, and re-learning process (Datta, 2016; Wildcat et al., 2014). Through the decolonial autoethnographic journey, we have seen how the ILBP can create many opportunities to create belongingness for Indigenous and non-Indigenous people, particularly racialized immigrants and refugee communities. We also learned that the ILBP is a useful educational tool to learn how Indigenous people in North America promote health and reclaim their spiritual and cultural identities after enduring centuries of atrocities and genocide. We found that ILBP is a highly effective way of supporting Indigenous and non-Indigenous reconnection with the land, identity, and culture in a rapidly changing world.

We hope this paper proposes a promising direction by transforming our practice, engaging Indigenous land-based knowledge in disaster education, mental health resilience practice, and bridging communities and academics. The complex problem of disaster risk, including the Covid-19 disaster, requires a critical understanding of power and knowledge production (i.e., Indigenous, relational, land-based knowledge, anti-racist, decolonial, and intersectional). As an analytical tool, ILBP sheds light on how power structures emerge and interact and center land-based perspectives in decision-making.

The COVID-19 Pandemic as a Natural Disaster

The Covid-19 pandemic equally or more grossly affected everyday life, particularly Indigenous, racialized immigrants and refugee communities. Like other disasters, people's everyday lives are severely disrupted by the Covid-19 pandemic (Hattar & Geary, 2017). Crises can also be in the form of catastrophes caused by human error (Spector, 2019). Nonetheless, the impacts of crises, disasters and other extreme events are "sudden, inconceivable, damaging, sensitive, and unique," requiring unconventional methodologies and practices (Buchanan & Denyer, 2013, p. 205) such as moving from a relief centric to a proactive approach. Therefore, many studies considered the Covid-19 pandemic one of the worst disasters in human history (Coccolini et al., 2020; Seddighi, 2020; Sakurai & Chughtai, 2020). Many communities, particularly Indigenous communities in rural areas, are already experiencing inadequate access to education, and healthcare, lack of sufficient food, and drinking water, significantly higher rates of communicable and non-communicable diseases, and lack of access to essential services (Méndez, Flores-Haro, & Zucker, 2020; Whyte, 2018; Watt-Cloutier, 2015). Despite the significant threat of disaster to Canada's environmental, social, economic, and health outcomes,

there is not enough academic literature on ILBP for educators, health professionals, and environmental policy-makers to address and respond to Canada's disaster (Hurlbert, 2018; Hurlbert & Rayner, 2018; King, 2017).

The United Nations (2020) identified that the Covid-19 pandemic as a disaster is one of our time's most significant high-risk crises. It created an unprecedented global health crisis with severe economic, health, environmental, and social impacts (Hayes, 2017; Ngo & Astudillo, 2019). The Covid-19 pandemic as a disaster created a serious crisis to vulnerable communities, particularly many Indigenous, immigrants, and refugee communities (Coccolini et al., 2020; Seddighi, 2020; Sakurai & Chughtai, 2020). COVID-19 created a serious public health risk for rural Indigenous communities in Canada and worldwide (Sapara et al., 2021). Marginalized communities (Indigenous, immigrants, and minorities) are the most Covid-19 pandemic victims, face many systematic barriers, and leave behind in disaster decision-making (Ehnley et al., 2015; Hayes et al., 2018; Jackson et al., 2013).

As almost 25 million people were displaced due to disaster in 2019, more than 150,000 people die each year due to disaster (Heslin et al., 2019; Podesta, 2019). In 2019, the World Health Organization estimated that many parts of the world would generate 143 million more disaster migrants by 2050. Researchers, including ecology, geology, and paleontology, have urged decision-makers to confront racism in disaster solutions (Borrow, 2003; Weber, 2015). Significantly, the disaster crisis is a structural, historical, and ongoing high-risk challenge for many Indigenous, new immigrant, and refugee people in Canada). Yet disaster policy in Canada often lacks an Indigenous land-based perspective and fails to respond to Indigenous, immigrant, and refugee populations (Talaga, 2017; Tuck, 2017; Weber, 2015). This systematic barrier can significantly impact Canada's commitments to "implementing the Pan-Canadian Framework on Clean Growth and Climate Change" (Pham, 2020, p. 5). For instance, disasters, including the Covid-19 pandemic, threaten to access clean drinking water, food systems, risking further serious consequences for various Indigenous, immigrants, and refugee communities' livelihoods and health.

Moreover, there is also a high risk of disaster, including Covid-19 pandemic, methodological solutions. Most disaster vulnerability research methods are often divergent, drawing from siloed biophysical risk approaches or social-contextual frameworks, lacking strategies for Indigenous relational ethic, land-based approaches, particularly with Indigenous,

immigrants, and refugee communities in Canada[8-9]. Scientists, policy-makers, and communities have noted this substantial methodological gap, inhibiting decision-makers capacity to implement adaptation policies responsive to both physical risks and social sensitivities[10-11]. The disaster solution requires fundamental transformations in all aspects of society, particularly Indigenous, new immigrant, and refugee communities' active and meaningful participation—how we use ILBP in building disaster solutions focusing on the environment and human health well-being and strong economy (King & Furgal, 2014). For example, Covid-19 as a disaster concern regarding food security has been heightened as COVID-19 related restrictions have placed increased pressure on food supply chains. However, for Indigenous communities across Canada, the pandemic has only exacerbated concerns about their already fragile food systems (Pham, 2020).

Methodology, and Methods

Learning from a relational theoretical framework in the last 20 years, we (first and second Ranjan Datta and Prarthona Datta) have developed an understanding of Indigenist worldviews and Indigenous community-based research (Datta et al., 2015; Datta, 2022). As a color settler in Canada and born and raised in a minority (i.e., religious and ethnic minorities) family in Bangladesh, we are well situated to understand and practice ILBP in our everyday lives.

The relational theoretical framework makes the researcher responsible for community participants' needs, expectations, and worldview (Datta, 2018). The relational framework can benefits both researcher and participants, to decolonize by unpacking issues of power, knowing the colonial history, reclaiming Indigenous voice and possibility when hierarchical ways of being and knowing create and exploit constructed divisions among humans and with the more-than-human (Alexandra et al., 2019; Cajete, 1994; Datta, 2017; Wildcat et al., 2014). In community-led Covid-19 disaster resilience, the ILBP approach is groundbreaking and highly recommends challenging Western practice structures (Datta et al., 2021).

Lighting on a relational theoretical framework, last 12 years, we, as community-based researchers and educators, developed trustful relationships with various Indigenous communities in Treaty 6 and 7 territories, particularly with Indigenous Elders and Knowledge-keepers (Datta, 2015). As a color settler in Treaty 6 and 7 territories, we had many opportunities to learn from various Indigenous Elders and Knowledge-keepers. In our education system in Bangladesh, we

did not have any opportunity to learn land-based stories, land-based science, and land-based practice. We were taught how to justify everyday racism against Indigenous and minority communities in the name of colonial education (Datta, 2018). We had opportunities to live in various countries for our graduate study purpose, including Norway and USA, but we did not have any opportunity to learn land-based education. When we moved as a new immigrant family to Canada in 2009, we did not have the chance to learn about Canada's colonial history, land-based stories, or directly learn from Indigenous Elders and Knowledge-keepers. We have seen many misconceptions and wrong knowledge about Indigenous people and Indigenous traditional knowledge among other immigrants and refugee communities (Datta, 2020). The ILBP provided us with the opportunity not only to learn but also to take responsibility practice in our everyday practice to create our belongingness with the land and people. Therefore, the opportunity to learn ILBP is not only knowledge for us but ceremonies of joy to create belongingness with the land and people.

This paper used decolonial auto-ethnographic (Chawla & Ahmed, 2018) stories as a research methodology for sharing our learning reflection from Indigenous Elders and Knowledge-keepers. The decolonial auto-ethnographic method plays "a crucial role of emotion and position, as a first step toward the transformations that are desired" (Kim, 2020, p. 122).

In this paper, our learning from Indigenous Elders and Knowledge-keepers helped us transform according to our relationships with land, people, and responsibilities (Datta, 2021). In this decolonial auto-ethnographic method, our relationships with land people also helped us become responsible for the land and people and create our belongingness with this land. In our decolonial auto-ethnographic method, we learned from various Elders and Knowledge-keepers by following traditional protocols and respect, including offering traditional Tabaco and small honorarium, respecting and honouring Indigenous land-based knowledge and practice, and taking continuous consent if we can reflect our learning. We as a family had many opportunities to learn (mostly online and during walking in the land) with various Indigenous Elders and Knowledge-keepers individually and collectively and reflect in our everyday journals.

We are deeply grateful to Treaty 6 and 7 territories' Indigenous Elders and Knowledge-keepers for their land-based teaching [1]and having the opportunities to learn and practice in our

[1] We did not disclose Elders' and Knowledge-keepers' names as they said in Indigenous culture, knowledge belongs to the land, and we all are learners. They also noted that the storyteller as an

everyday practice. As we know, knowledge various according to community to community, Elder to Elder, and land to land, we are not generalizing any knowledge in this paper; but sharing our learning reflections so that non-Indigenous people can see benefits of Indigenous land-based learning. As a family, we not only deeply listen to Elders' and Knowledge-keepers' stories, but we also respectfully seek guidance on how we can take responsibility for learning and practice to create our belongingness with land and people. Many times, Elders and Knowledge-keepers referred us as their relatives. Since we become relative to Elders and Knowledge-keepers learning, we become responsible for learning, sharing our learning, and practicing. This paper is an outcome of one of our responsibilities.

We, as a family, had many opportunities directly learn from Indigenous Elders and Knowledge-keepers' land-based stories. We respectfully requested Elders and Knowledge-keepers if we could reflect our learning from our learning. Four family members kept four learning reflecting journals during our learning land-based stories. Right after land-based learning stories from Elders and Knowledge-Keepers, we reflected and discussed what we had learned as a family. We read each of our learning reflections from the land-based stories journal many times and created learning themes. We shared our learning reflections with respected Elders and Knowledge-keepers if our learning was right or needed to change anything. We also asked if we could share our learning with our fellow immigrants and publish them as academic papers so that others could be benefits. All of the Elders and Knowledge-keepers we learned and discussed said that knowledge is for sharing and practicing in our everyday practice. Sharing is also part of our responsibility to reclaim land-based sustainability. Using thematic analysis was very useful for our paper as it helped us learn and be responsible for implementing what we learned in our everyday practice.

individual is less important, and our responsibility as learners is more important. We were told to be responsible for land and land-based learning. Respecting this advice, in some situations, we did not disclose Indigenous Elders' and Knowledge-keepers' names in our quotations wherever they did not want their identity to be disclosed.

COVID-19 Resiliency through Indigenous Land-based Practice

COVID-19 resiliency through ILBP helped us cope with the ND crisis and trauma, how to unstuck for doing things, ask how to help us, and learn who we are to others. The ILBP is an anti-racism environmental practice that is understanding power and privilege and attempts to conceptualize. Indigenous decolonial justice is preoccupied with the contested relationship between immigrant settlement and Indigenous self-determination (Chatterjee, 2019). Following the ILBP research framework, we learned about many Indigenous innovations during the COVID-19 pandemic; however, we are focusing on four main themes: Indigenous Elders and Knowledge-keepers' stories, growing foods, and creative arts and learning from the land.

Land as Indigenous Elders and Knowledge-keepers Stories

Learning ILBP, the Indigenous Elders and knowledge-keepers are a significant source of knowledge. We learned from many Indigenous Elders and knowledge-keepers in Canada that land is science, technology, social science, language, arts, and math. The land-based practice is being used across the many Indigenous communities to describe Indigenous worldviews related to land and water from our health and well-being. It is a significant concept for understanding Indigenous views on mental wellness, which cannot be separated from emotional, physical and spiritual health or the land itself. Land-based practice understandings recognize that *being on the land itself heals*. The land is our body, life, and ways of knowing. Land can teach us who we are, where we came from, and what we need to do. Indigenous Elders and knowledge-keepers taught us that land could teach how we all need to work together and take responsibility to protect both humans and non-humans (Figure 1).

The land is a relationship, the land is I, and the land is we. Land teaches us that we are not separated from each other; we are all relationally connected. The land is a relational responsibility to each other (human and non-human). Land teaches us what our responsibilities are as an immigrant to learn and reclaim Indigenous meanings of land. Indigenous Elders and Knowledge-keepers ' stories taught us that "in white society, a person's home is a structure made of bricks or timber, but to our people, our home was the land that we hunted and gathered on and held ceremony and gatherings" (Learning from a Cree First Nation Elder, personal communication, Oct 2019). We also learned, "We don't own the land; the land owns us. The land is my mother; my mother is the land. The land is the starting point to where it all began. It's like

picking up a piece of dirt and saying this is where I started and where I'll go. The land is our food, culture, spirit and identity" (Personal conversation with climate change Elder and Knowledge-keeper William Singer III from Kainai First Nation, Sept 2022). Another Cree First Nation Elder explains the difference between Western and the land's meaning to Cree people as follows:

> What does land mean to non-Indigenous people and landowners? For them, the land is
> A commodity to be bought and sold,
> An asset to make a profit from,
> A means to make a living off it,
> Only' home'.
> For Aboriginal people, the land is
> Central to knowledge, identity, culture, and practice.
> Relatives, Mother, and my body
> Responsibility to care.

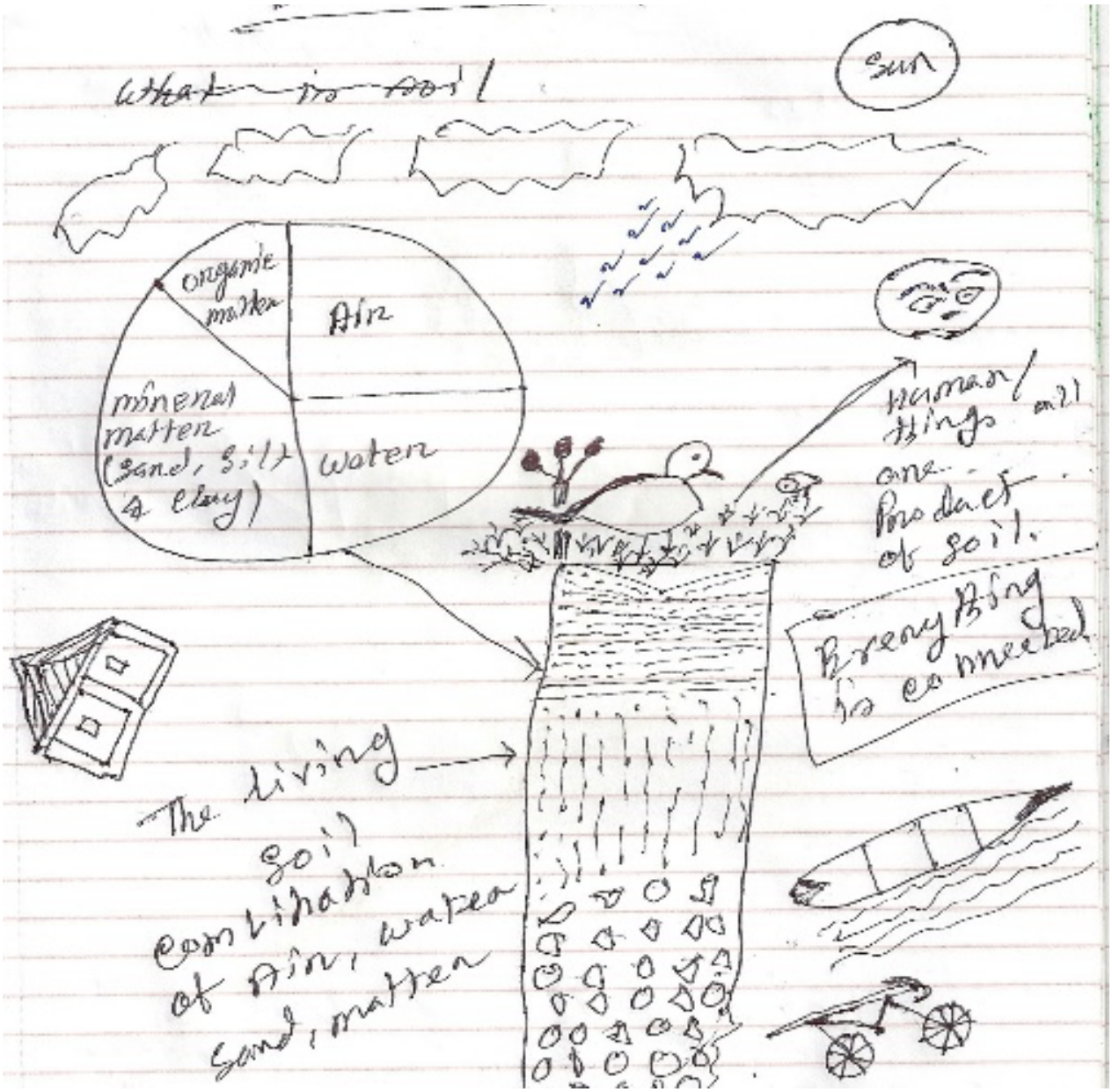

Figure 1: Drawn by Ranjan Datta to explain the meanings of land while reflecting how the meanings of land are interconnected with everything (i.e., air, water, animals, people, insects, sun, moon, and so on). In this drawing, the author wanted to share how learning Indigenous meanings of land can strengthen mental health resiliency during the Covid-19 disaster.

Land as Growing Own Foods

The COVID 19 pandemic shows us the vulnerability of the entire world's food system. Most times, we do not know *where the foods are coming from in the current food system. Who is*

growing foods, and how are they growing? *What are the stories behind the food we are eating every day*? We are increasingly becoming dependent on the monopoly food system[2]. This process makes us more vulnerable and severely impacts our environment, physical and mental health, and economy. In current education and professional health practice, we were not taught how to ask these questions, think critically, and be agents of change. From everyday ILBP conversations in our family and Indigenous Elders, Knowledge-keepers, and communities, we learned how to ask these questions and critically engaged ourselves in making changes. We learned many stories about our food systems and the responsivities to grow our foods and share them with others. Growing foods in a community garden and fishing together are not only for eating; it is also a continuous learning process about the history of the land, people, and culture. It is a process of how to build our food sovereignty and mental health well-being.

Fishing

Figure 2: Prokriti Dtata drew this family fishing artwork during COVID-19. In this artwork, Prokriti wanted to showcase how land-based learnings are interconnected with many stories for

[2] The term monopoly we used to refer to the concentration of power among transnational 'Big Food' companies has contributed to food systems that are unsustainable, unhealthy and inequitable for people and the planet (Desmarais & Wittman, 2013). This system also creates colonial control over Indigenous and local traditional food systems (Datta, 2022). Monopoly food system also affects the quality of our traditional sustainable food and agriculture's environmental footprint, making it a concern for both food producers and consumers in rural and urban areas (Thompson & Pritty, 2020).

building strength during the Covid-19 pandemic situation, including traditional stories, inter-generational stories, and land-based stories. Here Prokriti shows that she was learning many stories (such as fish stories, sun stories, water stories, sky stories and ancestors' stories) from her dad while fishing.

Fishing has been useful to build our resilience ND, such as during the COVID-19 lockdown. We learned many stories about land that we are currently living from fishing, including critical learning on who were in this Indigenous land, what happened to this Indigenous land, who belongs to this land, who colonized this land. Fishing also helps us learn our ancestors' stories, why and how we have been displaced from our land. We, as a family, went fishing many times and tried to connect our learning into practice. In ILBP, we learned that fishing to learn about wind, sun, birds, insects, sands, rocks, trees, dead logs/leaves, lake water, hills and Sky. We have also seen how, as a human, we are interrupting the natural ecosystem by not knowing these stories and acting irresponsibly by throwing garbage here and there.

Fishing in Indigenous land during quarantine also helped us know many stories of foods that we are eating. For instance, fishing is not only catching fish, but it is a learning place to know where all the foods that we eat every day are coming from, how we need to be respectful to all fishes, what and how they are sacrificing their life for us, how we need to take care of them. Therefore, when we eat fish, we need to show respect and not fish for fun or eating. We are connected with fish. We have a responsibility to take care of fish. We learned from Indigenous Elders and Knowledge keepers that we also need to know the history of Native fishes and the importance of Native fishes. Exploring native foods, systems such as fishing to understand foodways and the land changes better.

Fishing also helped us learn other stories from each other, such as wars, droughts, floods, tornadoes, and much more. We learned about all the difficult times in all the wars, droughts, floods, tornadoes, etc. Listening to all these tough stories has helped us realize that we are all in a much better situation than that and building our resiliency during this COVID disaster. Fishing reflects ourselves, the realization of our responsibility why we need to respect other native plants, insects, and animals. It helped us know this land, people, and history and create our belongings.

Land as a Community Garden. In ILBP, we learned that our community garden is an informal learning space, or we can say an informal classroom. Our community garden has many meanings, including relational learning that we, both human and non-humans, are interconnected; networking to connect with cross-cultural communities (i.e., Indigenous, settlers, racialized immigrants, and refugees); creating belongingness with Indigenous land, people, and histories to learn about cross-cultural, sharing cross-cultural stories, growing foods together, learning science and Indigenous world views, and learning importance of native plants and insects ladybugs, bees, plants, and flowers.

Growing our foods, such as fishing and engaging in a community garden, became our mental health resiliency. Now we know that food is not only for consumption. Every food has a story and agency in our survival. The food as land is our parents who take care of us, protect us by sacrificing their lives. We have the responsibility to protect our foods, learning their stories and their agency. We are in a relationship; we are relationally accountable.

Land as a Creative Arts. Land as the creative arts – music, visual arts, dance, spoken word, story writings, among others – are gradually being used to empower, engage and improve the health and well-being of communities (Wildcat et al., 2014). For instance, the COVID- 19 became a disaster for us as artists (songwriters, musicians, singers, dancers, and other performing arts/ artists). We usually do not ask, are we aware that COVID affected artists of racialized immigrants, Indigenous, and refugee communities differently? The land-based traditional music and dance help us to rethink how racialized immigrants and Indigenous artists face challenges in their lives and work. As racialized immigrant artists, we have continuously dealt with our survival/ earnings uncertainty and continued our artistic growth. Most of the performance venues were shut down by theatres, museums, galleries, studios, and opera houses.

However, land-based traditional music and dance (such as Indigenous Powwow) by the riversides and at the community garden during COVID-19 ND became inspiring, therapeutic, connecting, empowering, encouraging, and supporting for us. Land-based traditional music and dance can help us know our histories, people, culture, identities, and traditions. Perhaps we have just realized how disconnected we are from the land when we started to experience a long time staying at home due to COVID. The Land-based traditional music and dance became a re-learning opportunity for our family to connect with land (i.e., river, Grass, Sky, cloud, birds, and

insects) and learn how to support each-others on our journey to realize their connectedness to the land. Land-based traditional music and dance make us smile or cry, relax, thoughtful, responsible, and kind.

Learning from and within Land

Being in walking in the land, looking at the land from an Indigenous lens (i.e., everything surrounding us is relationally connected) reduces stress, tiredness, anxiety, anger, and fear. It gave many hopes. It helped to be inspired, to be healed and to be positive. As we have learned from Indigenous Elders, Knowledge-keepers, and our ancestors, the land has many meanings: animals, Sky, rocks, moon, sun, human, etc. Here we have discussed how Sky as land became a learning space. The land we live in is Indigenous land; it is known as "Land as *Living Skies*". As an immigrant family, ILBP helps us to create our belongingness. We learned that the "Land of Living Skies" is always alive and has an agency that inspires. During this COVID lockdown, we as a family had gone to meet skies almost every day. Jebunnessa Chapola writes the following poem:

Land as Living Skies

The skies are magnificent and full of possibility.

Skies are full of colours and spirit.

Skies embrace all the birds, rainbows, rains, storms, northern lights, stars, comets, moon and sun.

The skies are the beholder of sunrise, sunset and twilight.

Skies are always positive, full of kindness, new and fresh.

The skies are full of strength, inspiration and enthusiasm.

Skies are offering a space to be healed.

The skies are energizing us constantly.

Skies are ready to share it's many-layered of untold stories that are full of wisdom.

Skies are welcoming, comprehensive, open to embrace everyone.

The skies are always ready to listen to me, and skies take time to care for us.

Skies are always ready to offer spiritual care.

Skies pay full attention regardless of language, race, class, religion, gender and sexual orientation.

Skies do not believe in othering, and skies are colour blind.

Skies know how to stand against hate.

Skies are the witness of all anti-racist movements.

Skies are Idle No More's participant; Black Lives Matter, No One Is Illegal, Me too.

Skies see the growing anti-racist movement as a sign of hope.

Skies believe in hope and justice, just like all people of colour.

Skies only know how to love, love and love irrespective of any colour discrimination!!

Do you want to be seen, heard, touched, hugged, loved and supported? Please go and meet the Land of Living Skies of our prairies.

Walking in the Land. Walking in the land with Indigenous people is a process of learning directly from the land. It helps develop a holistic (physical, emotional, mental and spiritual) understanding of Inuit, Métis and First Nations peoples' lives in Canada. For instance, during and before the COVID-19 lockdown, we had many opportunities to walk in the land with Cree and Dene First Nations Elders and Knowledge Keepers. While we were walking in the land with Indigenous Elders, we experienced the locality and relationships that underlie most Indigenous understandings of land. It helped us learn its history — including its histories of colonization and of Indigenous resurgence. We also learned many stories from Indigenous Elders and Knowledge-keepers on the importance of Native animals, plants, and insects on our land. We learned how all living and non-living things in the Native culture are spiritually interconnected, how they (both living and non-living things) co-exist and balance each other. We

also learned how the ILBP could redefine mental and physical health's meanings focusing land in the center of our learning (Figure 3).

Figure 3: Walking in the Land art was drawn by Prokriti Datta. She explained how she was learning why stars and moon stories were important to be strong, resilient, and to develop self-strength during this pandemic.

We have experienced how current mental health practices fail far too many students during ND (such as the COVID-19 pandemic), particularly Indigenous, immigrants, and refugee students (Galea et al., 2020). This paper discussed how we had learned the ILBP is focusing on Indigenous Elders, Knowledge-keepers, land-based knowledge, stories, practice, and resistance[4]. We have seen how ILBP creates many positive impacts in our everyday practice. We learned that the ILBP is deeply intimate, relational, fluid, and spiritually dynamic. Land in ILBP is alive and experiential. The land is a fundamental living being. We experienced how the ILBP approach provides ways to (de)center western colonial learning and (re)center learning with people's everyday needs, practice, and knowledge.

References

Alexandra A., Joseph F. & Stephen A. S. (2019) Pathways to reconciliation: the Kitcisakik Land-Based Education Initiative, *Leisure/Loisir, 43*(3), 389-417. https://doi.org/10.1080/14927713.2019.1629832

Barrow, C.J., (2003). E*nvironmental change and human development: Controlling nature?* Arnold.

Borrows, J. (2016). Outsider education: Indigenous law and land-based learning. *Windsor Yearbook of Access to Justice, 33*(1), 1–27.

Buchanan, D. A., & Denyer, D. (2013). Researching tomorrow's crisis: Methodological innovations and wider implications. *International Journal of Management Reviews*, 15(2), 205–224. https://doi.org/10.1111/ijmr.12002

Cajete, G. (1994). *Look to the Mountain: An Ecology of Indigenous Education*. Skyland, Kivaki Press.

Chatterjee, S., (2019) Immigration, anti-racism, and Indigenous self-determination: towards a comprehensive analysis of the contemporary settler colonial, *Social Identities,* 25(5), 644-661. https://doi.org/10.1080/13504630.2018.1473154

Chawla, Devika, & Ahmed Atay . 2018. "Introduction: Decolonizing Autoethnography." Cultural Studies ↔ Critical Methodologies 18 (1): 3–8. https://doi.org/10.1177/1532708617728955.

Coccolini, F., Sartelli, M., Kluger, Y., Pikoulis, E., Karamagioli, E., Moore, E. E., Biffl, W. L., Peitzman, A., Hecker, A., Chirica, M., Damaskos, D., Ordonez, C., Vega, F., Fraga, G. P., Chiarugi, M., Di Saverio, S., Kirkpatrick, A. W., Abu-Zidan, F., Mefire, A. C., Leppaniemi, A., … Catena, F. (2020). COVID-19 the showdown for mass casualty preparedness and management: the Cassandra Syndrome. *World journal of emergency surgery: WJES*, *15*(1), 26. https://doi.org/10.1186/s13017-020-00304-5

Desmarais, A. A., & Wittman, H. (2014). Farmers, foodies and First Nations: getting to food sovereignty in Canada. *Journal of Peasant Studies*, *41*(6), 1153-1173.

Daigle, M. (2019). The spectacle of reconciliation: On (the) unsettling responsibilities to Indigenous peoples in the academy. *Environment and Planning D: Society and Space*, *37*(4), 703–721. https://doi.org/10.1177/0263775818824342Datta, R. (Ed.), (2020). Reconciliation in Practice: Cross-cultural Perspectives. Fernwood Publishing

Datta, R. (2022). Land-based environmental sustainability: a learning journey from an Indigenist researcher. Polar Geography, 1-15. https://doi.org/10.1080/1088937X.2022.2141905

Datta R. (2018) Decolonizing both researcher and research and its effectiveness in Indigenous research. *Research Ethics,14*(2):1-24. https://doi.org/10.1177/1747016117733296

Datta, R. (2016) Rethinking environmental science education from Indigenous knowledge perspectives: An experience with a Dene First Nation community. *Environmental Education Research*, https://doi.org/10.1080/13504622.2016.1219980.

Datta, R., Khyang, U. N., Khyang, H. P., Kheyang, H. A. P., Khyang, M. C., & Chapola, J., (2015). Participatory action research and researcher's responsibilities: An experience with Indigenous community. *International Journal of Social Research Methodology, 18*(6). https://doi.org/10.1080/13645579.2014.927492.

Datta, R. (2015). A relational theoretical framework and meanings of land, nature, and sustainability for research with Indigenous communities. Local Environment: The International *Journal of Justice and Sustainability*, *20*(1), 102-113. To link to this article: http://dx.doi.org/10.1080/13549839.2013.818957.

Galea S, Merchant RM, & Lurie N. (2020) The mental health consequences of covid-19 and physical distancing: The need for prevention and early intervention. *JAMA Intern Med. 180*(6):817–818.

Gaudry A, & Lorenz D. (2018) Indigenization as inclusion, reconciliation, and decolonization: navigating the different visions for indigenizing the Canadian Academy. *AlterNative: An International Journal of Indigenous Peoples*, *4*(3). 218-227. https://doi.org/ 10.1177/1177180118785382

Greenwood, D, William F. W. & Ira H. (1993). Participatory action research as a process and as a goal. *Human Relations, 46*(2). 175–92.

Hansen, J. G. (2018). Cree Elders' perspectives on land-based education: A case study. *Brock Education: A Journal of Educational Research and Practice, 28*(1), 74–91.

Hattar, M. , & Geary, E. (2017). What happened when the California wildfires engulfed our headquarters. *Harvard Business Review*, 2–5. https://hbr.org/2017/11/what-happened-when-the-california-wildfires-engulfed-our-headquarters

Hayes, J. L. (2017, March). Just the facts: Undocumented immigrants in California. *Public Policy Institute of California*. http://www.ppic.org/content/pubs/jtf/JTF_UndocumentedImmigrantsJTF.pdf

Hayes, K., Blashki, G., Wiseman, J. (2018). Climate change and mental health: risks, impacts and priority actions. *Int J Ment Health Syst, 12*(28). https://doi.org/10.1186/s13033-018-0210-6

Henly-Shepard S., Gray S.A., Cox L.J. (2015). The use of participatory modeling to promote social learning and facilitate community disaster planning. *Environ. Sci. Pol., 45*, 109-122.

Heslin A., Deckard N.D., Oakes R., Montero-Colbert A. (2019) Displacement and Resettlement: Understanding the Role of Climate Change in Contemporary Migration. In Mechler R., Bouwer L., Schinko T., Surminski S., Linnerooth-Bayer J. (eds) *Loss and damage from climate change. Climate risk management, policy and governance*. Springer, Cham. https://doi.org/10.1007/978-3-319-72026-5_10

Hurlbert, M. (Ed.) (2018). *Pursuing justice*. Winnipeg and Halifax: Fernwood Books.

Hurlbert, M & Rayner, J. (2018). Reconciling power, relations, and processes: the role of recognition in the achievement of energy justice for Aboriginal people. *Appl. Energy, 228,* 1320-1327.

IUCN (2020). Ecosystem-based approaches to climate change adaptation. https://www.iucn.org/theme/ecosystem-management/our-work/ecosystem-based-approaches-climate-change-adaptation

Jackson, J., McGibbon, E., & Waldron, I. (2013). Racism and cardiovascular disease: implications for nursing. *Canadian journal of cardiovascular nursing = Journal canadien en soins infirmiers cardio-vasculaires*, *23*(4), 12–18.

King, U.; Furgal, C. (2014) Is hunting still healthy? Understanding the interrelationships between Indigenous participation in land-based practices and human-environmental health. *Int. J. Environ. Res. Public Health11*, 5751-5782.

Kings. AE. (2017). Intersectionality and the changing face of ecofeminism. *Ethics and the Environment, 22*(1), 63-87. https://doi.org/10.2979/ethicsenviro.22.1.04.

Klemetti, E. (2020). What geologic disasters can teach us about the COVID-19 crisis. In *Discover* . https://www.discovermagazine.com/planet-earth/what-geologic-disasters-can-teach-us-about-the-covid-19-crisis

Méndez M, Flores-Haro G, Zucker L. (2020) The (in)visible victims of disaster: Understanding the vulnerability of undocumented Latino/a and indigenous immigrants. *Geoforum 116*, 50–62.

Méndez, M. Flores-Haro, G. & Zucker, L. (2020). The (in)visible victims of disaster: Understanding the vulnerability of undocumented Latino/a and indigenous immigrants, *Geoforum, 116*, https://doi.org/10.1016/j.geoforum.2020.07.007. (http://www.sciencedirect.com/science/article/pii/S0016718520301925).

Michell, H. (2018). *Land-based education: Embracing the rhythms of the earth from an Indigenous perspective*. J Charlton Publishing.

Minjee Kim. (2020) A Post COVID-19 Outlook: Research and Education in Korean Dress Studies : Considering Responses in the United States and the Online Educational Resources. *Journal of the Korean Society of Costume*, *70*(6), pages 120-138.

Ngo, F., & Astudillo, S. (2019). California DREAM: The Impact of Financial Aid for Undocumented Community College Students. *Educational Researcher*, *48*(1), 5–18. https://doi.org/10.3102/0013189X18800047

Page KR, Venkataramani M, Beyrer C, Polk S. (2020) Undocumented US. immigrants and covid-19. *N Engl J Med. 382*(21).

Pham, H. (2020) The questions of who, what, and how in the science - policy dialogue: experiences from the pan - Canadian framework on clean growth and climate change. *Preprints*, 2020090193. https://doi.org/ 10.20944/preprints202009.0193.v1).

Podesta, J. (2019). *The climate crisis, migration, and refugees*, Brookings (July 25), https://www.brookings.edu/research/the-climate-crisis-migration-and-refugees.

Thompson, S., & Pritty, P. (2020). Damming food sovereignty of Indigenous Peoples: A case study of food security at O-Pipon-Na-Piwin Cree Nation. Indigenous food systems: Concepts, cases, and conversations, 195-210.

Robidoux, M. A., & Wade Mason, C. (Eds.). (2017). A land not forgotten: Indigenous food security and land-based practices in Northern Ontario. University of Manitoba Press.

Sakurai, M. & Chughtai H. (2020) Resilience against crises: COVID-19 and lessons from natural disasters, *European Journal of Information Systems*, *29*(5), 585-594, https://doi.org/10.1080/0960085X.2020.1814171

Sapara, A., Shalaby, R., Osiogo, F., Hrabok, M., Gusnowski, A., Vuong. W., Surood, S., Urichuk, L., Greenshaw, A. J., & Agyapong, V. I. O. (2021) COVID-19 pandemic: demographic and clinical correlates of passive death wish and thoughts of self-harm among Canadians, Journal of Mental Health. https://doi.org/10.1080/09638237.2021.1875417

Seddighi, H. (2020). COVID-19 as a Natural Disaster: Focusing on Exposure and Vulnerability for Response. *Disaster Medicine and Public Health Preparedness*, *14*(4), E42-E43. https://doi.org/10.1017/dmp.2020.279

Smith, L. T. (2012) *Decolonizing methodologies: Research and indigenous peoples*. London, Zed Books Ltd.

Spector, B. (2019). There is no such thing as a crisis: A critique of and alterative to the dominant crisis management model. *Journal of Contingencies and Crisis Management*, *27*(3), 274–279. https://doi.org/10.1111/1468-5973.12268

Talaga, T (2017). Seven fallen feathers: racism, death, and hard truths in a northern city. Anansi.
The United Nations (2020) Goal 13: Take urgent action to combat climate change and its impacts. https://www.un.org/sustainabledevelopment/climate-change/
Tuck, E (2017) Can reconciliation take (up) place? In: *Acme lecture*. *Canadian Association of Geographer's Annual Meeting*. York University. https://www.youtube.com/watch?v=Eu-opkwFw0s
Tuck, E., Yang, W. K. (2012). Decolonization is not a metaphor. *Decolonization: Indigeneity, Education & Society, 1*(1), 1–40.
Watt-Cloutier, S (2015). *The right to be cold: One woman's story of protecting her culture, the arctic and the whole planet*. Penguin
Weber, E. U. (2015). what shapes perceptions of climate change? new research since 2010. *WIREs Climate Change, 7*(1), 125-134. https://doi.org/1002/wcc.377]
Whyte, K. (2017). Indigenous Climate Change Studies: Indigenizing futures, decolonizing the anthropocene. *English Language Notes 55*(1), 153-162. https://www.muse.jhu.edu/article/711473.
Whyte, K. P. (2018). Indigenous science (fiction) for the Anthropocene: Ancestral dystopias and fantasies of climate change crises. *Environment and Planning E: Nature and Space*, *1*(1–2), 224–242. https://doi.org/10.1177/2514848618777621
Wildcat, M., McDonald, M., Irbacher-Fox, S., Coulthard, G. (2014). Learning from the land: Indigenous land based pedagogy and decolonization. *Decolonization: Indigeneity, Education & Society*, *3*, I–XV.
World Health Organization. (2019). *Monitoring progress on children's environmental health*. Retrieved on Dec 1, 2020, from https://www.who.int/ceh/risks/ewaste/en/accessed