



The Impacts of the Climate Crisis on 2-Spirit, Indigiqueer, Trans, and Gender Diverse (2SIQT+) Indigenous Young People

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Abstract

Grounded in Indigenous Ways of Knowing and Doing and 2-Spirit Ways of Knowing and Being, this article explores how the climate crisis is hypothesized to impact the mental health of 2-Spirit, Indigiqueer, Trans, and Gender Diverse (2SIQT+) Indigenous young people. Framing the climate crisis as an extension of colonization, land and water theft, and resource extractivism, it critiques how Euro-Western biomedical traditions pathologize the climate crisis-related distress and suicidality experienced by 2SIQT+ Indigenous young people; and instead proposes that this distress is an embodied personal, spiritual, and collective experience. Climate-induced emergencies act as risk-multipliers for existing colonial violence. In response, 2SIQT+ communities cultivate living ecological infrastructures of care built on mutual aid, chosen kinship, harm reduction, and self-determination. This article hypothesizes that addressing 2SIQT+ youth mental health distress requires shifting away from pathologization towards the return of Indigenous sovereignty over land, water and life.

Introduction

Grounded in Indigenous Ways of Knowing and Doing alongside 2-Spirit Ways of Knowing and Being, this article explores how the climate crisis impacts the mental health of 2-Spirit, Indigiqueer, Trans, and Gender Diverse (2SIQT+) First Nations, Inuit, and Métis young people in Tkaronto (Toronto, Ontario, Canada). Two central questions guide this inquiry: How does the climate crisis impact the mental health of 2SIQT+ Indigenous young people in Toronto, and what mental health supports are needed to ensure their well-being?

In 1492, an estimated 44.8 to 78.2 million Indigenous Peoples were living in what is now called the Americas (Koch et al., 2019). Over the next few centuries, the two continents experienced an estimated greater than 90% decline in the Indigenous population resulting from European colonial violence and pandemics, indelibly altering Indigenous societies wherein gender diversity entailed celebrated community roles and spiritual responsibilities (Smithers & Heavy Runner, 2022). European colonists and settlers sought to subjugate, enslave, punish, and criminalize Indigenous Peoples, their

ceremonies, cultures, societies, reproduction, non-heteronormative sexualities, and non-binary gender expressions (Rifkin, 2011; Smithers & Heavy Runner, 2022).

Canada extended this colonial violence through the church-run residential school system, committing cultural genocide by forcibly removing children from their families and communities (Battiste, 2013; Million, 2013). This colonial violence persists today; the National Inquiry into Missing and Murdered Indigenous Women, Girls and 2SLGBTQQIA+ (2019) documented how state-sanctioned human rights violations result in ongoing race-based genocide against Indigenous women, girls, and 2SLGBTQQIA+ people in Canada. Indigenous Peoples continue to be exposed to conditions of violence and ongoing genocide; the National Inquiry into Missing and Murdered Indigenous Women and Girls (2019) concluded:

The violence the National Inquiry heard amounts to a race-based genocide of Indigenous Peoples, including First Nations, Inuit and Métis, which especially targets women, girls, and 2SLGBTQQIA people. This genocide has been empowered by colonial structures evidenced notably by the Indian Act, the Sixties Scoop, residential schools and breaches of human and Indigenous rights, leading directly to the current increased rates of violence, death, and suicide in Indigenous populations. (Vol. 1a, p. 1)

The climate crisis is a direct extension of colonization, driven by the same systems of land and water theft, resource extraction, and exploitation. Environmental degradation targets the lands, waters, bodies, and traditional leadership roles of Indigenous women and 2-Spirit People (National Inquiry into Missing and Murdered Indigenous Women and Girls, 2019).

Globally, air pollution is the primary environmental risk factor for non-communicable diseases driven by fine particulate matter (PM_{2.5}) and carbon emissions from fossil fuel combustion that accelerate climate feedback loops of intense climate destabilization, resulting in both localized and planetary catastrophes (Health Canada, 2021; Intergovernmental Panel on Climate Change, 2023; World Health Organization, 2025). Alongside atmospheric pollution, radionuclide deposition from mid-twentieth-century nuclear testing marks the entry

into the Anthropocene, signalling the irreversible human alteration of the planet (Svarva et al., 2025).

The climate crisis acts as a risk multiplier for 2SIQT+ young people who already experience severe health disparities, including heightened risks of anxiety, depression, Post-Traumatic Stress Disorder (PTSD), Non-Suicidal Self-Injury (NSSI), violence, trafficking, substance abuse, Sexually Transmitted and Blood-Borne Infections (STBBIs), and increased mortality from suicide, homicide, acute/chronic conditions, drug overdose, and environmental exposure (Hunt, 2016; Smithers & Heavy Runner, 2022). 2SIQT+ young people face compounding mental health stressors—settler-colonialism, racism, displacement, violence, and housing insecurity—heightening vulnerability to mental health distress and suicidality (Gabriel et al., 2022; Hunt, 2016; Smithers & Heavy Runner, 2022).

Euro-Western biomedical traditions routinely ignore or pathologize Indigenous Peoples by focusing on individualized psychiatric pathologies, decoupling mental health from ongoing settler-colonial violence (Gone, 2013; Linklater, 2014). FNMI are methodologically excluded from population counts like the national Census, which undercounts Toronto’s FNMI population by 2 to 4 times (Rotondi et al., 2017). An Our Health Counts Toronto (OHCT) study used Respondent-Driven Sampling (RDS) to estimate the true FNMI population of Toronto to be approximately 88,397 as of 2021 (Rotondi et al., 2017). The data reveals a youthful demographic: approximately 31% are under age 25, and approximately 23% identify as 2-Spirit (with 41.8% of those between ages 14 and 34; Rotondi et al., 2017). For 2SIQT+ young people, population undercounts function as a settler-colonial mechanism of erasure that renders this population statistically invisible, effectively excluding them from equitable public health planning and funding (Rotondi et al., 2017). Indigenous Ways of Knowing and Doing include an understanding that Indigenous Peoples have mathematical practices and protocols for population counting, which are essential to survival.

The 2SIQT+ population between the ages of 15 and 24 is within a critically high-risk developmental window (Hunt, 2016). Suicide risk factors for 2-Spirit adults in Toronto are

staggeringly high, with 56% reporting a lifetime suicide attempt, a majority of which trace back to their adolescence (Rotondi et al., 2017). These acute mental health impacts frequently manifest in disproportionate emergency department usage and a reliance on psychotropic medications, which manage acute distress symptoms without addressing the underlying colonial and environmental drivers of the distress (Linklater, 2014). Furthermore, 79% of 2-Spirit Peoples in Toronto report that gender-based discrimination in healthcare settings has led them to delay or avoid seeking necessary care, which has major implications for suicide risk, diagnosis, treatment, and prevention (Hunt, 2016; Well Living House & Seventh Generation Midwives, 2018).

Indigenous Ways of Knowing and Doing

Euro-Western sciences are neither neutral nor objective; they function as a direct tool of colonial governance and forced assimilation (Greenwood et al., 2018; Smith, 2021). Indigenous Ways of Knowing and Doing have survived systematic attempts at erasure, despite colonial institutions intentionally dismissing them to maintain an illusion of absolute power over what counts as truth (Battiste, 2013; Battiste & Henderson, 2000). There are vast domains and multiple ways of Indigenous Knowing and Doing that are rooted in lived experiences.

Indigenous Ways of Knowing and Doing in the Twentieth Century

The genealogy of Indigenous Ways of Knowing and Doing does not stem from Euro-Western academic traditions, but from relationships that span thousands of years of intergenerational observation, oral histories complemented by art, symbols, languages, and sacred relationships with the land and waters (Cajete & Little Bear, 2000; Deloria, 2006; Deloria et al., 1999). Indigenous Ways of Knowing and Doing have evolved through intellectual phases of resistance and reclamation. Assertions in academia began with Indigenous scholars challenging the Euro-Western monopoly of history, religion, and science, exposing how Eurocentric disciplines pathologized Indigenous minds and stripped knowledge from its sacred context (Deloria, 2006; Deloria et al., 1999). It is Eurocentric to refer to Indigenous Ways of Knowing and Doing as theoretical frameworks.

Indigenous Ways of Knowing and Doing are intrinsically rooted in local Indigenous contexts

(relationships with land, water, between people and their ancestors) and are collections of specific sacred cultural knowledges with distinct criteria for validity, cultural safety, and ethics (Greenwood et al., 2018; Smith, 2021). Collective resistance has occurred since the very beginning of colonial intrusion, and notably throughout the twentieth century. Under the *Indian Act* (1876), mechanisms such as compulsory enfranchisement for professionals and gender-discriminatory marriage provisions (Section 12(1)(b)) legally stripped Indigenous women and university-educated individuals of their Indigenous identity, treaty rights, and community belonging to assimilate them into Canadian society and enforce a patriarchal nuclear family structure (Battiste, 2013; Jamieson, 1978). Following the return of veterans from two World Wars, the founding of the United Nations, the Nuremberg Trials, and intensive Indigenous grassroots social organizing, Canada gained a consciousness of human rights and made policy concessions (Deloria, 2006; Deloria et al., 1999). However, these concessions did not happen without a fight; FNMI women mobilized a front against state-imposed patriarchy. Foundational legal challenges, notably those brought forward by a Mohawk & Oneida rights activist Mary Two-Axe Earley and Anishinaabe community worker Jeannette Corbiere Lavell, directly exposed and challenged the racism and sexism entrenched in the *Indian Act* (Painter, 2025).

Indigenous social movements successfully moved the federal government to repeal bans on Indigenous spiritual ceremonies and political organizing in 1951, grant the federal vote in 1960 to First Nations, and withdraw the assimilationist 1969 *White Paper* (Painter, 2025). First-generation FNMI lawyers, professionals, and grassroots organizers forced Canada to make legal concessions regarding sovereignty, culminating in two of the most significant legislative victories of the late twentieth century: the constitutional entrenchment of treaty rights under Section 35 in 1982, and the subsequent passage of *Bill C-31* in 1985 to restore women's rights under the *Indian Act* (Battiste, 2013; Painter, 2025).

Indigenous Ways of Knowing and Doing within Academia: A 21st Century Trans-Systemic Nexus

Today Indigenous ceremonies and expressions of culture, gender, and sexuality are nominally protected under Canadian law, however violence

persists via social and carceral systems (Million, 2013; Sinclair et al., 2015). FNMI young people remain vastly overrepresented in carceral systems, experiencing rates of institutionalization and violence higher than at the height of the residential schooling era (Sinclair et al., 2015). These experiences have a profoundly negative impact on the mental health of 2SIQT+ young people, particularly the racist and sexist mechanisms of the Indian Act. Organized religion, particularly, is a tool that has been used to indoctrinate Indigenous Peoples into Eurocentric patriarchal systems that are violent both towards women and 2SIQT+ Peoples.

The contemporary revitalization of Indigenous Ways of Knowing and Doing within academia relies on what Mi'kmaw (Potlotek First Nation) scholar Dr. Marie Battiste and Chickasaw/Cheyenne Nation lawyer James (Sákéj) Youngblood Henderson (2021) describe as a trans-systemic nexus: the intersection of reaffirmed human rights with the first generations of FNMI scholars trained within Euro-Western institutions. This nexus provides the necessary intellectual space for scholars to assert Indigenous Ways of Knowing and Doing as distinct knowledge systems with their own unique languages, protocols, ethics, ontologies, epistemologies, methodologies, and methods, and apply these to scientific inquiry (Battiste & Henderson, 2021). However, it must be acknowledged that the practice of Indigenous Ways of Knowing and Doing within colonial institutions is not decolonization.

Indigenous scholars have transitioned from defending the validity of Indigenous Ways of Knowing and Doing to actively applying Indigenous knowledges for human and planetary survival; again, decolonization is not merely academic (Wildcat, 2009). Indigenous scholars and community members are actively exercising Indigenous Ways of Knowing and Doing as valid approaches to addressing the greatest threats to humanity and the planet, such as the climate crisis (Greenwood et al., 2018; Redvers, 2019). Despite Canada's legal adoption of the *United Nations Declaration on the Rights of Indigenous Peoples Act* (2021), racism and stigma block Indigenous knowledge systems from being fully realized and implemented—a sign there is still much work to be done.

Indigenous Ways of Knowing and Doing in Practice

Practicing Indigenous Ways of Knowing and Doing at the intersection of the climate crisis and the mental health of 2SIQT+ young people in Toronto challenges the fragmented, deficit-based paradigms of Euro-Western mental health theories. Within Euro-Western biomedical traditions, mental health distress experienced by Indigenous young people is routinely diagnosed as individual pathology requiring clinical, pharmaceutical, or cognitive-behavioural interventions (Gone, 2013; Linklater, 2014). For example, lacking a specific category for ecological grief, the DSM-5-TR funnels the psychological impacts of climate disasters and environmental crises into individualized criteria like Post-Traumatic Stress Disorder (PTSD) or Adjustment Disorders (Van Susteren & Pollack, 2019). When Indigenous Ways of Knowing and Doing are applied, the mental health distress and suicidality experienced by 2SIQT+ young people is understood not as a psychiatric pathology, but as collectively existential and life-threatening.

The climate crisis represents an ongoing assault on the body of Mother Earth and is a direct cause of extractive settler-colonialism (Redvers, 2019; Wildcat, 2009). Dr. Daniel R. Wildcat (2009) of the Muscogee Nation states that the term climate crisis is too soft, and terms *global burning* to refer to the consequences of resource extractivism, the burning of fossil fuels, and the massive release of carbon that is directly causing global temperatures to rise.

While community-led approaches challenge traditional academic-community power imbalances, community leadership alone does not automatically guarantee respect, reciprocity, or responsibility. Upholding the values of respect, reciprocity, and responsibility requires centering diverse representatives from across 2SIQT+ communities (S. Wilson, 2008). The ethical integrity of these approaches depends heavily on the specific cultural, governance, and relational practices of the partners involved. For that reason, ethical Indigenous health research demands that scholars socially locate their positioning within community, and explicitly ground research practices, thinking, and actions within local Indigenous paradigms while learning from trusted Elders and Knowledge Keepers. Relational community accountability functions as an active heart-centred practice (S. Wilson, 2008).

Operationalizing "Nothing About Us Without Us" requires building partnerships across 2SIQT+ community organizations, broader FNMI networks, and 2SIQT+ young people, to ensure full inclusivity beyond any single institutional framework (Marsden et al., 2020). Applying this framework entails meeting 2SIQT+ young people where they are at, while working alongside Elders, Knowledge Keepers, and community partners (Hardy et al., 2020). To uphold cultural continuity and integrity, Elders and Knowledge Keepers guide knowledge work in specific, territory-rooted Indigenous protocols—ensuring that community engagement is guided by relational ethics rather than convenience.

Indigenous Ways of Knowing and Doing include sophisticated epidemiological practices and mathematical protocols for population counting, which historically and contemporaneously serve as essential tools for collective survival (Anderson, 2025; Smylie et al., 2024). Rather than viewing quantitative research as inherently colonial, Indigenous mathematics and statistical practices recognize that complex mathematical systems, counting, and data traditions were developed by Indigenous Peoples across Turtle Island long before European contact (Andersen, 2025; Rotondi et al., 2017; Smylie et al., 2024). For 2SIQT+ young people, population undercounts function as a settler-colonial mechanism of erasure that renders them statistically invisible, effectively excluding them from equitable municipal, provincial, and federal public health planning (The 519, 2024).

When the Medicine Wheel is operationalized as a quantitative methodological tool, the four directions offer a conceptual structure for public health inquiry:

East (Spirit): Health variables are defined through community dialogue and Ceremony. 2SIQT+ identity is dynamic rather than fixed, and conceptualization and variable definition must be fluid, ensuring variables accurately represent holistic, relational constructs (such as land, water, culture, and spirit) rather than Euro-Western constructs.

South (Relationality): Informs sampling frameworks. Relational and community-driven sampling methods (such as respondent-driven or

community-nominated sampling) honour interconnected kinship networks.

West (Action): Governs data collection and modelling. Indigenous quantitative methods account for complex, non-linear relationships and Indigenous Ways of Knowing and Doing, and ensure data sovereignty.

North (Axiology): Directs data interpretation, translation, and governance, ensuring empirical findings are interpreted by Elders and Knowledge Keepers, follow community-led ethics, returned as a gift to the community, and do not pathologize Indigenous Peoples.

Conducting Indigenous public health inquiries within Euro-Western academic institutions carries an immense ethical and moral responsibility. Calls to Action #22 and #23 of the Truth and Reconciliation Commission (TRC) call on academic and healthcare systems to formally recognize traditional healing practices, increase Indigenous healthcare professionals, eliminate anti-Indigenous racism, and implement cultural safety training (Sinclair et al., 2015).

According to the University of Toronto Truth and Reconciliation Commission Steering Committee (Answering the Call: Wecheehetowin, 2017), higher education institutions, such as the University of Toronto, remain bound to legacies of paternalism and epistemicide wherein university faculty legitimized the Indian Residential Schooling system and provided laboratories for human biomedical extraction, experimentation, and storage without Indigenous community consent (Mosby, 2013). The Steering Committee's Calls to Action demand the integration of Indigenous health curricula, the expansion of Indigenous spaces, and the systemic recruitment of Indigenous faculty across all divisions (University of Toronto Truth and Reconciliation Commission Steering Committee, 2017). Creating culturally safe institutional spaces cannot be achieved in isolation, particularly while Indigenous scholars face institutional oppression and Indigenous Ways of Knowing and Doing remain marginalized. Reconciliation requires sustained institutional change, the mobilization of TRC initiatives, and the celebration of Indigenous intellect.

The Origins of Euro-Western Queer Theory

Queer theory operates within a post-structuralist paradigm. *The History of Sexuality* by Michel Foucault (1976/1978) functions as a foundational text that challenged Euro-Western conceptualizations of sex by arguing against the repressive hypothesis, demonstrating instead that the state actively produces sexuality through public discourse. Through these institutional discourses, the state exercises what Foucault terms *biopower*—a distinctively modern form of regulatory control that shifts away from sovereign displays of physical punishment toward the systematic management, classification, and optimization of human bodies and populations (Foucault, 1976/1978). Nineteenth-century medical and legal discourses institutionalized what Foucault referred to as an "incitement to discourse," creating a regulatory apparatus that classified non-normative behaviours into rigid, pathologized identities, such as the homosexual.

Human Immunodeficiency Virus (HIV) & Acquired Immune Deficiency Syndrome (AIDS)

The HIV/AIDS pandemic exemplified state biopower, as Western nations weaponized medical neglect, delayed drug trials, and leveraged public health discourse to justify the selective abandonment and resulting in the overwhelmingly disproportionate deaths of millions of Black, Indigenous, People of Colour (BIPOC), particularly BIPOC gay, bisexual and trans people (Barré-Sinoussi et al., 1983; Shilts, 2007). The HIV/AIDS crisis and resulting social movements directly catalyzed the formalization of queer theory in Euro-Western academia by the early 1990s.

Early Queer Theory in Euro-Western Academia

Early mainstream queer activism and emerging academic theory were heavily dominated by White, middle-class cisgender perspectives, frequently reproducing racism and sexism while oppressing the distinct realities of Black Women, Women of Colour, and Indigenous 2-Spirit People. In response to this epistemological violence, Black feminist, Women of Colour, Indigenous 2-Spirit and queer intellectuals forged foundational counter-epistemologies, most notably the Combahee River Collective's (1977) formulation of interlocking systems of

oppression, Lorde's (1984) metaphor of the Master's House, Anzaldúa's (1987) Chicana-lesbian mapping of transnational borders, Crenshaw's (1989) theory of intersectionality, and Cohen's (1997) challenge to the homogenization of identity, arguing that truly radical queer politics must analyze how heteronormativity and patriarchy intersect with race and class to create colonial systems of oppression.

2SIQT+ & Decolonial Critiques of Euro-Western Queer Theory

2SIQT+ perspectives emerged not as a subgenre of Euro-Western queer and feminist theories, but as a critique and reimagining of Indigenous gender and sexual diversity. This distinction was articulated at the Third Annual Inter-Tribal Native American, First Nations, Gay and Lesbian American Conference held near Winnipeg in 1990, where the Anishinaabemowin term *niizh manidoowag* (2-Spirit) was popularized as a deliberate act of linguistic and political reclamation (Jacobs et al., 1997; Smithers & Heavy Runner, 2022). "2-Spirit" was intentionally chosen to replace the derogatory term *berdache*—a racist colonial etymon imposed on Indigenous Peoples by Western anthropologists for centuries (W. Williams, 1986). Indigenous activists seized power from academics who had exoticized and pathologized them, redefining their identities on their own terms.

While Euro-Western queer theory relies on post-structuralist deconstruction to argue that all identity categories are inherently unstable, shifting, and socially manufactured, 2SIQT+ theorists diverge significantly on the ontology of the self. For 2SIQT+ scholars, Indigenous gender and sexual diversities predate the settler-colony (A. Wilson, 2015). 2SIQT+ political and academic organizing seeks to reclaim and restore specific identities and traditional kinship systems that were violently disrupted by ongoing processes of colonization (Rifkin, 2011).

2-Spirit scholars—such as Nēhiyaw Dr. Alex Wilson (2015), Billy-Ray Belcourt (2020) and Kwagu'l Dr. Sarah Hunt (2016) actively challenge the imposition of colonial binary gender systems and the limitations of queer theory altogether. They argue that Euro-Western queer theory operates as a tool of settler colonialism when it ignores Indigenous sovereignty and relationality, reducing 2-Spirit realities to Euro-Western racial, sexual, and gender constructs. It was this

contested dialogue—forced by feminists of colour and Indigenous intellectuals against an exclusionary Euro-Western queer theory—that shaped contemporary 2-Spirit scholarship. 2SIQT+ critiques of queer theory have shaped contemporary 2-Spirit Ways of Knowing and Being and are inextricably intertwined with transnational decolonization (Jacobs et al., 1997).

2-Spirit Ways of Knowing and Being

2-Spirit Ways of Knowing and Being center land, water, spirituality, ancestral continuity, and relationality. Envisioned in a dream by Nēhiyaw elder Dr. Myra Laramée (Fisher River Cree Nation) and formalized at the 1990 Winnipeg gathering, *niizh manidoowag* (2-Spirit) is an Anishinaabemowin term reflecting the embodiment of both masculine and feminine spirits within one person (Jacobs et al., 1997). 2-Spirit identity is an ontological position that predates the settler-colony; it does not seek to deconstruct the self into linguistic discourse, but to restore a sacred social, relational, and spiritual balance disrupted by colonial heteropatriarchy (A. Wilson, 2015). Grounded in Nēhiyaw and Anishinaabe philosophies, 2-Spirit ways are understood not as an isolated individual positionality, but as a living practice of interconnected social-ecological relational networks (Simpson, 2025; A. Wilson, 2015).

Relatedly, Indigiqueer—coined by Nēhiyaw (Little Pine First Nation) filmmaker Thirza Cuthand (2017) and popularized by Oji-Nēhiyaw (Peguis First Nation) 2-Spirit author Joshua Whitehead (2017)—functions as a contemporary branch of 2-Spirit Ways of Knowing and Being that embraces modern Indigenous artistic self-expression, and bodily sovereignty.

Deconstructing Euro-Western Colonial Binaries

2-Spirit Ways of Knowing and Being utilize anti-essentialist critiques specifically to dismantle Euro-Western colonial gender binaries and demonstrate that rigid male/female and heterosexual/homosexual dichotomies are historically contingent social fictions enforced through settler-colonial institutions, medical pathologization, and language to disrupt traditional Indigenous governance, sever community kinship systems, to justify the theft of land and water, ongoing colonization and the subjugation of Indigenous Peoples (Arvin et al., 2013).

Simultaneously, there is a necessity for strategic essentialism (Guha & Spivak, 1988). In public health research, data collection, and policy advocacy, marginalized communities adopt unified, essentialized labels, such as 2SIQT+/2SLGBTQQIA+ as a political necessity to demand resources, secure legal rights, and contest erasure (Guha & Spivak, 1988). The expanding acronyms (2SLGBTQQIA+ / 2SIQT+) embody this tension: the deliberate placement of 2-Spirit (2S) at the forefront asserts historical precedence and Indigenous sovereignty while the plus sign (+) keeps borders open to evolving identities (Jacobs et al., 1997; Smithers & Heavy Runner, 2022).

Embodied Indigenous Self-Determination

This framework integrates embodied Indigenous self-determination to address the specific realities of gender and sexual variance. Indigenous trans ontologies demand self-determination and critique both Euro-Western gender binaries and social constructionism by asserting a deeply felt, embodied truth regarding gender and sexual identity that cannot be entirely deconstructed (Russell et al., 2023). 2-Spirit Ways of Knowing and Being are the living embodiment of self-determination and sovereignty of one's own body, mind, life and spirit.

Climate Disasters as Risk-Multipliers

Standard emergency management and public health response frameworks rely heavily on heteronormative binary assumptions (e.g., nuclear family housing units, gender-segregated emergency shelters, state policing and emergency responses) (Mann et al., 2024; The 519, 2024). During climate emergencies—such as severe flooding, wildfires, and extreme weather events—these colonial frameworks fail 2SIQT+ populations (Mann et al., 2024; The 519, 2024). Environmental emergencies cause severe disruptions to essential healthcare services, including STBBI testing, Human Papillomavirus (HPV) and Mpox vaccinations, Pre-Exposure Prophylaxis (PrEP), continuous Antiretroviral Therapy (ART) distribution, and gender-affirming care (Gaspar et al., 2022; Logie & MacNeil, 2025; L. Williams et al., 2025). All of which have profound implications for health, mental well-being and suicidality.

2-Spirit Ways of Knowing and Being demonstrate that these healthcare disruptions are

not logistical accidents, but structural consequences of a colonial state that profoundly and intentionally pathologizes and discriminates against Indigenous non-heteronormative peoples. Furthermore, they contextualize why 2SIQT+ Indigenous populations avoid state emergency channels (such as calling 9-1-1 or following state-mandated evacuation orders), as historical and ongoing state violence make interaction with emergency services dangerous and life-threatening (Dominey-Howes et al., 2014; Goldsmith et al., 2022; National Inquiry into Missing and Murdered Indigenous Women and Girls, 2019). The climate crisis is thus analyzed as a risk-multiplier for long-standing institutionalized colonial violence (Wölflé Hazard, 2022).

Conceptualizing 2SIQT+ Mutual Aid and Living Ecosystems of Care

2-Spirit Ways of Knowing and Being conceptualize community-led 2SIQT+ initiatives as living ecological infrastructures of care. When formal public health and state emergency systems fail during a climate crisis event or emergency, 2-Spirit networks pivot to function as frontline emergency response systems—providing housing assistance, food, harm-reduction supplies, healthcare, and emergency crisis support (2-Spirited People of the 1st Nation, 2026). These ecosystems of care are built on chosen families, alloparenting, and gender-affirming support networks, and are active expressions of 2-Spirit self-determination, adaptation and an unquestionable will to survive (Collins, 1989; Jackson Levin et al., 2020; Keovorabouth, 2025; Tallbear & Willey, 2019).

Comparative Synthesis and Theoretical Justification

When Indigenous Ways of Knowing and Doing and 2-Spirit Ways of Knowing and Being are brought into conversation, both frameworks share core commitments to love, truth, and justice. Despite their analytical depth, colonial institutions routinely relegate both to the margins of positivist Euro-Western health science, mischaracterizing them as subjective perspectives (Morgensen, 2011).

Beyond academic abstraction, urban 2SIQT+ and BIPOC communities continuously negotiate spaces and cultivate cultures of mutual support, advocacy, and care (Hardy et al., 2020). However,

this integration is neither automatic nor frictionless; as Kainai scholar Dr. Leroy Little Bear (2000) articulates in *Jagged Worldviews Colliding*, power dynamics, racial hierarchies, and settler entitlement do not vanish simply because of well-intentioned aspirations to liberatory values. True relationality requires hard, intentional labour and education to address the tensions where mainstream, settler-dominated academic spaces reproduce colonial erasure, or where displaced 2SIQT+ young people navigate lateral violence within BIPOC communities.

2-Spirit Ways of Knowing and Being offer essential medicine to address a major gap in public health literature regarding the climate crisis and the health of 2SIQT+ young people. Where Euro-Western psychology pathologizes individuals in isolation, emerging literature demonstrates that climate disasters compound risks of mental health distress and suicidality for 2SIQT+ young people as a collective (Ansloos & Cooper, 2023; Logie & MacNeil, 2025; Rotondi et al., 2017; The 519, 2024). Applying the medicine of 2-Spirit Ways of Knowing and Being within community seeks to restore sacred social, ecological, and spiritual balances disrupted by the imposition of colonial heteropatriarchy (Simpson, 2025). This framework is theoretically necessary because it bridges three critical dimensions that no Euro-Western framework could ever address. First, it operationalizes health and mental well-being not as isolated psychological states, but as living practices embedded within interconnected social-ecological networks that are ancestral (Ansloos & Cooper, 2023; A. Wilson, 2015). Second, it conceptualizes ongoing climate and public health disasters not as acute, accidental logistical failures, but as risk-multipliers of continuous intentional state-endorsed colonial violence (Wölflé Hazard, 2022). Third, it honours contemporary Indigenous young people’s self-determination and lived realities, validating their ancestral knowledge of sex and gender as a part of their Indigenous identity that cannot be reduced to Euro-Western categories (Cuthand, 2017; Keovorabouth, 2025; Russell et al., 2023; Whitehead, 2017).

Conclusion

This paper brings Indigenous Ways of Knowing and Doing into conversation with 2-Spirit Ways of Knowing and Being to assert the validity of 2SIQT+ approaches—not only to empirical

research, but to living a good life. Further, it explores the impacts of the climate crisis on the health of 2SIQT+ young people in Toronto. The lived experiences, culture, and knowledge of this community are central to evidencing how climate disasters impacts Indigenous mental health locally and globally. This inquiry carries urgent public health significance, establishing the climate crisis as a risk multiplier for 2SIQT+ mental health distress and suicidality. Ultimately, this work illuminates a vision for community-led supports that promote Indigenous self-determination and life promotion, while demanding decolonization and the return of Indigenous sovereignty over land, water, and life, as the true antithesis to the settler-colonial destruction causing the climate crisis.

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