

Summary Report

Atlantic Indigenous Mentorship Network Kausattumi Grants Program, 2021-2022

JOCELYN MARIE PAUL, PHD IN CLINICAL PSYCHOLOGY

Quantitative and qualitative investigations among First Nations adult cancer survivors in Canada: Fear of cancer recurrence, racism, and cultural identity links

Description of Research

High rates of health issues among First Nations (FNs) in Canada have been linked to historical and ongoing racism. For example, FNs Adult Cancer Survivors (ACSs) may be more likely to experience more significant chronic anxiety than non-FNs ACSs. However, it remains unclear how particular forms of anxiety, such as "Fear of Cancer Recurrence" (FCR), manifest amongst FNs ACSs; and the consequences of anxiety (e.g., presence/severity/chronicity of other secondary physical or mental health, cognitive functioning and relational issues). As lower rates of cancer survival exist amongst FNs compared to non-FNs, and FNs are at a heightened risk of experiencing racism within health-care settings, it is possible that FCR is elevated/has unique impacts/consequences amongst FNs ACSs, yet this remains uninvestigated. In addition, as certain facets of FNs' cultural identity have shown to protect against some negative social and health factors, it remains unclear whether/which cultural identity facets buffer or exacerbate levels of FCR for FNs ACSs. The purpose of this work is to address these gaps. To address these gaps, we will collect quantitative (survey) and qualitative (focus group) data among FNs ACSs to explore:

1. Direct links between FCR symptom severity/chronicity, (1) time recovered from cancer (e.g., months, years), (2) cancer type/stage, and (3) presence/severity/chronicity of several potential secondary physical/mental health, cognitive functioning and relational issues often identified as consequences of other manifestations of anxiety (e.g., generalized anxiety, phobic anxiety)
2. If/how particular forms: racism (e.g., systemic, interpersonal) moderate direct links; and
3. If/how particular facets: cultural identity (e.g., community cultural belonging, traditional land engagement) moderate direct links.

The objectives of Phase 1¹ (using quantitative² survey methods) and Phase 2 (using qualitative methods) are to delineate if, statistically and or experientially, there are likely links between:

1. *FCR symptom severity/chronicity*,
 - a. the amount of time recovered from cancer,
 - b. type/stage of cancer,
 - c. presence/severity/chronicity of other potential secondary consequences/outcomes of this form of anxiety (e.g., health, cognitive, relational),
 - d. presence/severity of particular forms of racism among FNs ACSs, and between distinct FNs cultural identity facets among FNs ACSs,
2. *Moderating (protective) influence of particular FNs' cultural identity facets*,
 - a. on FCR symptom severity/chronicity, which might have been exacerbated by the presence/severity of particular forms of racism among FNs ACSs, and
 - b. related to the potential direct relationships between more significant FCR symptom severity/chronicity and presence/severity/chronicity of other possible secondary consequences/outcomes of this form of anxiety (e.g., health, cognitive, relational) among FNs ACSs.

Phase 2 will use qualitative data from facilitated 60-minute in-person focus group sessions comprising 5-10 FNs ACS participants per session. Sessions will consist of discussions on whether/in what ways FNs ACSs believe that, from their experiences, FCR symptom

¹ For only Phase 1, some questionnaires in the battery used for FNs ACSs have been compiled to form a brief non-FNs (Caucasian/White) ACS version of the survey; that will gauge whether there are links for non-FNs ACSs (living in Atlantic Canada) related to FCR symptom severity/chronicity, and (1) time recovered, (2) cancer type/stage, and (3) presence/severity/chronicity of other potential secondary consequences/outcomes of this form of anxiety (e.g., health, cognitive, relational). In addition, exploratory analyses will distinguish whether there are noticeable and meaningful statistical differences between FNs and non-FNs ACSs.

² Quantitative data collection consists of recruiting FNs ACSs (as well as for exploratory analyses, non-FNs ACSs) will be tasked to complete a battery of confidential questionnaires (either online, mailed pencil-paper, or in-person pencil-paper). Our team is keen to pass this knowledge to all generations/ages of FNs so that all can be aware of these patterns/findings and pathways to improved life and well-being for loved ones who have survived cancer.

severity/chronicity is associated with the various factors/variables under discussion/in question.^{3,4}

Regarding the next steps for my dissertation work, once all relevant ethics amendments are approved (hopefully in summer/fall 2022), our team will start quantitative (e.g., surveys) data collection during the winter 2023 term. Once statistical power is reached, we will perform analyses/present findings to our CP (Membertou) (spring 2023 term). We will collect qualitative data from the summer of 2023 to the winter 2024 term (e.g., focus groups). After the qualitative data collection ceases and information power/data saturation is achieved/met, we will perform a thematic analysis in the winter 2024 term (at least two coders to ensure inter-coder reliability). After finalizing and presenting the qualitative findings to CP, we will invite FNs ACS participants to come back and join one of several sharing sessions (spring 2024 term) in which our team will share results from Phase 1 and 2/ask for structured, confidential feedback after that (through confidential online surveys). All feedback will then be considered, and findings of both phases and feedback from FNs ACSs will be shared with our CP.^{5,6}

Knowledge Sharing

Completed Project Deliverables

- Paul, J (2022-Present). Ongoing knowledge sharing and transfer meetings with Membertou First Nation partner representatives Sharon Paul-Rudderham, Philipa Pictou, and Trent Lynds.

³ Accommodations will be provided if needed (e.g., option to join an in-person focus group virtually/online format; option to participate in a 60-minute interview [in-person or virtual]). In addition, during all Phase 2 data collection sessions, participants will be invited to openly discuss the stated after a traditional opening prayer and a food offering.

⁴ For example, I have completed other data collection approved prior to Mi'kmaw Ethics Watch administrative change-overs, completed over 69-course credits, completed various practicum placements, and continued to have high levels of engagement in my usual and new research/professional activities (e.g., presentations, media relations, committee). I am proud to express that I met/and or exceeded all research, professional training, and service milestones associated with my program over both years. I have also completed directed dissertation work/on the cusp of completing my extensive literature review for my dissertation.

⁵ Upon CP approval (spring 2024 term), Knowledge Translation (KT) and Knowledge Mobilization (KM) strategies will be decided upon and finalized (e.g., infographics shared with/how/to what other FNs communities and health/general organizations [e.g., Mi'kmaw Native Friendship Centre]; to who/how/what information will be formed into a report for lay peoples and policy-makers; what/how/when findings will be shared to FNs and non-FNs health research practitioners in Atlantic Canada; if/what findings/whether our team and CP want to publish some work as a manuscript after my dissertation is defended). In addition, all the knowledge gained from this extensive project will be recounted in community events in Atlantic Canada in collaboration with the communities (e.g., talking circles held at the community's main centre/space).

⁶ Our CP is also keen to provide personnel with training in communications/media to join our team at that time (i.e., help us with enhancement, clarity, and transmission of the findings to our target audiences). At this time, our team will also connect with other folks close to me and many CP members who have extensive knowledge in communications (e.g., Danielle Hartley, Fiona Kirkpatrick Parsons) and ask for their input/help. Finally, as with my MSc in Psychiatry Research thesis work, findings will be shared with several FNs-created and -led conferences/meetings, as well as with Halifax municipal government in my volunteer role; and to relevant policy-makers in Cape Breton (via particular members of our CP and through their roles on government platforms).

- Paul, J (2022). Feelings of anxiety and depression among first nations peoples in Canada: cultural mechanisms of well-being. *24th IUHPE World Conference on Health Promotion 2022*.
- Paul, J (2022). Indigenous peoples in Canada: participation in community cultural events and impacts on well-being. *National Indigenous Physical Activity & Wellness Virtual Conference*.
- Paul, J (2022). Invited Keynote Address titled: “Fall Forward”: Staying True to Yourself and Finding Your Path. Oral Keynote Presentation. *34th Annual Psychology Student Research Conference at Mount Saint Vincent University*.
- Paul, J (2022). Mechanisms of culture and First Nations mental health. *7th Generation Tribal Public Health Conference*.
- Paul, J (2022). First Nations adult populations in Canada: cultural mechanisms and impacts on health & wellbeing. *The Canadian Association for Health Services and Policy Research (CAHSPR) Annual Conference*.
- Paul, J (2022). Indigenous adults: mental health & cultural mechanisms of change. *International Society for Developmental Origins of Health and Disease World Congress*.
- Paul, J (2022). First Nations in Canada: cultural mechanisms and mental health. *8th International Conference on Public Health*.
- Paul, J (2022). Culture and health among First Nations in Canada. *19th Annual National Indigenous Graduate Student Symposium (IGSS)*.
- Paul, J (2021). Indigenous Health and my dissertation in three minutes. *AIMN Graduate Student Seminar Series*.
- Paul, J (2021). A Judge for the *National Gathering of Graduate Students (NGGS) Oral 3-Minute Thesis Presentations*.
- Paul, J (2021). Delineating culture and stressors: preliminary analyses of the 2015/2016 First Nation's Regional Health Survey. *AHEAD Collaborative Health Research Conference*.
- Paul, J (2021). Delineating culture and stressors: preliminary analyses of the 2015/2016 First Nation's Regional Health Survey. *Professional Research & Education Program (PREP) Graduate Research Conference*.
- Zolopa, C., Paul, J., Bomfim, E., Larney, S., & Wendt, D. C. (2021). Youth mental health and substance use during the COVID-19 pandemic [invited address; remote]. *CIHR Institute Of Indigenous Peoples' Health Knowledge Mobilization Forum: Indigenous Peoples & COVID-19*.

Forthcoming Project Deliverables

- Paul, J., McQuaid, R., Anisman, H., Matheson, K., & Bombay, A. (2023). First Nations adults living on-reserve in Canada: lateral violence and the impacts of culture-related variables. *International Journal of Mental Health and Addiction Research*. Manuscript in progress.
- Paul, J. (2022). My culture made me do it: the influence of cultural factors on the expression of psychological health outcomes related to anxious and depressive symptomatology. *Undergraduate Journal of Psychology at Berkley*. Submitted.

- Paul, J., St. James, R., Schwartz, F., Gaspar, C., Bombay, A. (2023). A scoping review: cultural factors and links with health and wellness outcomes among Indigenous youth and adults. *Journal of Cultural Diversity and Ethnic Minority Psychology*. Manuscript in progress.
- Lynds, T., McQuaid, R., Bombay, A., Paul, J., & Stewart, S.H. (2023). Effects of bullying victimization on alcohol use and binge drinking in First Nation youth: is cultural connectedness a protective factor? *Journal of Cultural Diversity and Ethnic Minority Psychology*. Project and manuscript in progress.
- Paul, J., Illie, A., Corkum, P., & Martin, D. (2023). Sleep health, sleep disorders, and sleep interventions among Indigenous populations living in colonial contexts: a scoping review. *It will potentially be submitted to the Journal of Cultural Diversity and Ethnic Minority Psychology—project and manuscript in progress.*

Activities Outside of Your Research

Peer-reviewed publications (non-exhaustive)

- St. James, R., & Paul, J. (2023). Developmental pathways to wellness for Indigenous populations living in colonial contexts: The impact of the Indian Residential School system. *Special Issue on Health Inequity: Healthy Populations Journal*. 3(1). To be submitted manuscript on December 1st, 2022.
- Pride, T., Lam, A., Swansburg, J., Seno, M., Lowe, M. B., Bomfim, E., ... & Wendt, D. C. (2021). Trauma-informed approaches to substance use interventions with indigenous peoples: A scoping review. *Journal of Psychoactive Drugs*, 53(5), 460-473.
- Paul, J., McQuaid, R. J., Hopkins, C., Perri, A., Stewart, S., Matheson, K., ... & Bombay, A. (2022). Relations between bullying and distress among youth living in First Nations communities: Assessing direct and moderating effects of culture-related variables. *Transcultural Psychiatry*, 13634615221109359.
- Stevens, L., Paul, J., & Stamp, J. (2021-2023). Chapters 6, 9, and 10 of "Introduction to psychology and neuroscience. *Create Commons Attribution*. 1st Edition. *Digital Libraries. Open Education Project*.

Presentations

- Paul, J. (2023; presentation tentative), Canadian Psychological Association Annual Gathering/Conference
- Paul, J. (2023; presentation tentative), Pacific Region Indigenous Doctors Congress (PRIDoC)
- Paul, J. (2023; presentation tentative), McMaster Indigenous Community Health and Research Conference

Media

- Paul, J (2022). Interview. *Voices in STEM*. November 2022.
- Paul, J (2022). Interview. CBC® 22-Minute Radio. Winter 2022.

- Paul, J (2021). Interview. The Chronicle Herald® Newspaper. Frontpage article.
- http://saltwire.pressreader.com/@Reader21326652/csb_BufLPBgkMLjBf1qvsdObRMTM7gFk8pquldmgHok46Zp9SQjbJyn1uLb-sbDROFB9
- Paul, J (2021). Interview. CBC® Diversity in Health Care Bursary and Indigenous Racism Research <https://vimeo.com/697477281>
- Paul, J (2021). Interview. CBC® Diversity in Health Care Bursary Article
- <https://www.cbc.ca/news/canada/nova-scotia/diversity-bursaries-health-care-students-1.5955190>
- Paul, J (2021). Interview. Queen Elizabeth II Hospital Foundation Article
- <https://qe2foundation.ca/our-impact/news/phd-student-focused-combining-mikmaq-cultural-aspects-cognitive-behavioural-therapy>

Roles

- **2019/2 - present:** Appointed Member of Youth Advisory Committee, Halifax Regional Municipal Government
- **2020/10 - present:** Youth Digital and Social Media Subcommittee Member of Appointed Youth Advisory Committee, Halifax Regional Municipal Government
- **2020/9 - 2021/09:** Lead of Departmental Climate Subcommittee (Equality, Diversity, and Inclusion Committee of the Department of Psychology at Dalhousie)
- **2021/9 - present:** Lead of Recruitment and Retention Subcommittee (Equality, Diversity and Inclusion Committee of the Department of Psychology at Dalhousie)
- **2020/09 - present:** Member of the Equality, Diversity, and Inclusion Committee of the Department of Psychology at Dalhousie University
- **2019/1 - present:** Student Research Scholar, Healthy Populations Institute
- **2018/9 - present:** General Member (and previous Research Committee member), Indigenous Health Interest Group, Dalhousie
- **2018/2 - present:** Student Mentor Member, Atlantic Indigenous Mentorship Network (AIMN)
- **2019/9 - present:** Dalhousie Indigenous Student Centre Casual Volunteer, Dalhousie University

Supervisory volunteer roles

- **2020/2-ongoing:** Scoping Review Supervisor, Dalhousie University, *Rebecca St. James*
- **2021/6-2022/9:** Honours Thesis Indigenous Health Research Mentor, Dalhousie University, *Rachel McMillan*
- **2022/6-2023/6:** Indigenous Research Methodologies Mentor, Dalhousie University, *Alzena Illie*

Other engagements

- **2021/6:** NSHA Training with Dr. Brad MacNeil: "Assessment and Evidence-based Treatment of Post-Traumatic Stress Disorder (PTSD)"
- **2022:** Adult Assessment Practicum (off-campus in association with NSHA)

- **2020-2022:** Dalhousie Course Facilitator-Faculty of Nursing/Medicine/Dentistry-Cultural Safety for Indigenous Peoples Course
- **2020 - present** FNIGC project colleague, Dr. Bombay, A.
- **2020 - present** Indigenous relations liaison, CRISM.
- **2021 - present** Indigenous relations liaison, Better Nights Better Days of Corkum Labs at Dalhousie University.
- **2021:** Child Assessment-Practicum (e.g., client observations, case review, teacher interviews, parent interviews, administration of tests (e.g., WISC-V, VMI-6, WRAML-2, WIAT-III), scoring, case report writeup, teacher/parent feedback session).
- **2021 - present:** Clinical Foundations-Practicum (e.g., client case review, semi-structured interviewing (*SCID-V* and suicide assessments/case report writeup).
- **2021 to 2022:** Teaching Assistant for experimental research methods
- **2021 - present** Exam Proctor for the psychology department (e.g., courses including statistical methods and animal behaviour).
- **2022:** Adult Assessment-Practicum (e.g., observations, case review, interviews, administration of tests (e.g., WAIS-V), scoring, case report writeup/feedback).
- **2022:** A Nova Scotia Health Authority (NSHA) Borderline Personality disorder Treatment Program (BPDTP) Assessment Practicum (e.g., case file review, collateral interviewing, diagnostic assessment, scoring, case report writeup/feedback).
- **2022:** Teaching assistant for a course in developmental research in psychology (PSYO 3609) at Dalhousie University.
- **2023:** Adult Anxiety and Depressive Disorders Group Therapy Intervention Practicum (e.g., diagnostic assessment, case notes, following unified treatment protocol in group therapy setting).
- **2023:** Canadian Armed Forces Mental Health & Occupational Health & Injury Department Practicum (e.g., working with clients who have difficulties with general mental health, addictions, trauma, anxiety, and PTSD, client case file review, collateral interviewing, diagnostic assessment, scoring, case report writeup/feedback).

Future Plans

From living on reserve in BC to NS, I have witnessed several accounts of community members' poor mental health/social treatment from non-FN individuals outside the community. Distress was often related to fears of contracting an illness or becoming ill after a bout or scare of disease. Many were also worried about the lack of reliable/available federal health services and racial profiling at clinics or hospitals. While I maintain an extensive closeness to community members/staff within Membertou FN and Corporate Division, high rates of cancer and fluctuating mental health and social stress threaten the community's continued cohesiveness and cultural and economic prosperity continued. Over the upcoming months, I will continue to reach out to other FNS in Canada (e.g., health directors); strengthen

connections with the broader Membertou and other FNs communities (e.g., Cousin Sharon Paul-Rudderham, the former Health Director of Eskasoni FN, Uncle John G. Paul, the Executive Director of the Atlantic Policy Congress of FN Chiefs Secretariat). I will also continue my committee/group work (e.g., Justice Equity Diversity and Inclusion at Dalhousie University) advocacy work and research with folks such as Dr. Amy Bombay with the Canadian Research Institute for Substance Misuse (CRISM) and Dr. Penny Corkum (sleep health in FNs contexts). I hope to graduate in 2025 and, post-internship, begin to work in the community with a specialty in psychotherapy treatment of anxiety disorders, mood disorders, trauma-based disorders, and substance use disorders in Indigenous contexts (i.e., a combination of Indigenous-based mindfulness methods and culturally-modified Cognitive-Behavioural Therapy (CBT) protocols).