

## Exploring the approaches of non-Indigenous researchers to Indigenous research: a qualitative study

Alexandra Kilian BHSc, Tye Kenneth Fellows MSc, Ryan Giroux MD BA, Jason Pennington MD MSc, Ayelet Kuper MD DPhil, Cynthia R. Whitehead MD PhD, Lisa Richardson MD MA

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### Abstract

**Background:** Given the history of unethical research in Indigenous communities, there is often apprehension among Indigenous communities toward research carried out by non-Indigenous researchers. We examined the approaches, experiences and motivations among non-Indigenous researchers at a research-intensive Canadian university conducting research with Indigenous communities to understand approaches to ethical research with Indigenous peoples.

**Methods:** We performed a critical constructivist qualitative study incorporating decolonizing methodologies. We conducted semi-structured interviews with 8 non-Indigenous University of Toronto researchers with a research focus/interest related to Indigenous health between August and October 2017. The interviews were transcribed and thematically analyzed through an iterative process. Shared experiences among the researchers were arranged into primary themes.

**Results:** We identified 4 primary themes related to the conduct of Indigenous research by non-Indigenous researchers: 1) relationships with communities are foundational to the research process, 2) non-Indigenous researchers experience a personal self-reflective journey grounded in reconciliation, allyship and privilege, 3) accepted knowledge frameworks in Indigenous research are familiar to most but are inconsistently applied and 4) institutions act as barriers to and facilitators of ethical conduct of Indigenous research. Four core principles — relationships, trust, humility and accountability — unified the primary themes.

**Interpretation:** We identified strengths and areas for improvement of current policies and practices in Indigenous research by non-Indigenous researchers. Although non-Indigenous researchers value relationships, and their research is informed by Indigenous knowledge, institutional barriers to implementing recommended elements exist, and certain policy statements such as the Tri-Council Policy Statement 2 lack applicability to secondary data analysis for some non-Indigenous researchers.

Historically, non-Indigenous researchers carried out the majority of research in Indigenous (First Nations, Inuit and Métis Peoples) communities in Canada.<sup>1</sup> In this context, research rarely had direct benefits for the communities being studied and sometimes resulted in harms.<sup>1-6</sup> As a result, there is commonly a sense of apprehension and mistrust among Indigenous communities toward research by non-Indigenous researchers.<sup>1</sup>

There are several Canadian policy documents with similar themes that guide research in Indigenous communities. These include *Ownership, Control, Access and Possession (OCAP™): the Path to First Nations Information Governance* (OCAP is a registered trademark of the First Nations Information Governance Centre [[www.FNIGC.ca/OCAP](http://www.FNIGC.ca/OCAP)]),<sup>7,8</sup> *Principles of Ethical Métis Research*,<sup>9</sup> the *National Inuit Strategy on Research*,<sup>10</sup> developed by Inuit Tapiriit Kanatami, and the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans 2 (TCPS2)*.<sup>1,2</sup> These documents are compared and contrasted in Appendix 1 (available at [www.](http://www.cmajopen.ca/content/7/3/E504/suppl/DC1)

[cmajopen.ca/content/7/3/E504/suppl/DC1](http://www.cmajopen.ca/content/7/3/E504/suppl/DC1)). Conducting research in accordance with the TCPS2 guidelines is a requirement for receiving funding through any Canadian federal research agency and for research ethics board approval at many academic institutions.<sup>1,2</sup> The TCPS2 emphasizes relationship-based research that is reflective of community priorities and benefits the communities through capacity-building initiatives such as training, local hiring, recognition of contributors and the return of results. Community engagement is encouraged to ensure contextual and culturally appropriate data analysis.<sup>1</sup> Although frameworks for

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**Correspondence to:** Alexandra Kilian, [alexandra.kilian@mail.utoronto.ca](mailto:alexandra.kilian@mail.utoronto.ca)

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community engagement are widely used, the literature describes challenges with collaborative data analysis, particularly in the case of opposing interpretations.<sup>4,11–15</sup> Given the description of logistical and ethical challenges, as well minimal evidence regarding congruence of current practices at Canadian universities, we designed a study to understand the motivations and levels of relevant knowledge of non-Indigenous researchers at the University of Toronto whose research scope includes Indigenous health.

## Methods

### Study design

To meet our objective, we performed a critical constructivist qualitative study, incorporating decolonizing methodologies. Critical constructivism argues that knowledge is socially constructed and influenced by culture, institutions and historical contexts.<sup>16–18</sup> As such, a semistructured interview approach, which allows for the understanding of context and negotiation of meaning, is an appropriate data-collection tool.<sup>17</sup> Decolonizing methodologies centre on recognizing the impact of colonization, empowering Indigenous communities, and appreciating the central role of Indigenous culture and ways of knowing.<sup>19,20</sup> Constructivist paradigms have been acknowledged as decolonizing methods if conducted in collaboration with Indigenous leadership.<sup>20</sup> Although the current study was not designed with the use of Indigenous research methods, our team was composed of Indigenous and non-Indigenous medical students, an Indigenous resident physician, and Indigenous and non-Indigenous physician-researchers. At each stage, our approach incorporated the perspectives of Indigenous and non-Indigenous team members. By embracing our team's diversity, we incorporated common guiding principles of Indigenous research: collaboration, relationships, interconnectedness, connection to community, and respect for diverse forms of knowledge and lived experience.<sup>11,13,19,21,22</sup> Our approach also valued reflexivity, the process of situating oneself in order to mitigate bias.<sup>23</sup>

### Study sampling

The inclusion criteria for potential interviewees were 1) academic affiliation with the University of Toronto, 2) research focus/interest related to Indigenous health and 3) non-Indigenous identity. We identified potential participants through the University of Toronto faculty and departmental websites and academic websites related to Indigenous health (Appendix 2, available at [www.cmajopen.ca/content/7/3/E504/suppl/DC1](http://www.cmajopen.ca/content/7/3/E504/suppl/DC1)). Where possible, we used the search filters “Indigenous” and/or “Aboriginal.” We also identified additional potential participants by searching the author lists of publications by faculty members identified through our original search of faculty websites and databases.

We contacted all potential participants who met our inclusion criteria by email to schedule a semistructured interview at a location chosen by the participant. Interviews were conducted between August and October 2017.

### Data collection

Four members of the research team (A. Kilian, A. Kuper, C.R.W. and L.R.) developed a semistructured interview guide (Appendix 3, available at [www.cmajopen.ca/content/7/3/E504/suppl/DC1](http://www.cmajopen.ca/content/7/3/E504/suppl/DC1)).<sup>24</sup> We translated our study objective — understanding researchers' general level of knowledge of current guidelines related to Indigenous health research and the ways in which they operationalize this knowledge — into open-ended questions informed by the approach outlined by Kvale.<sup>24</sup> Although the interview guide was not formally piloted before the first interview, the nature of an iterative interview process means that it was refined over the course of the interviews that we conducted. No major modifications to the interview guide were required as the study progressed. The primary investigator (A. Kilian) conducted, recorded, transcribed verbatim and anonymized the semistructured interviews. All participants answered all interview questions. There were no repeat interviews. There were no nonparticipants present at the interviews, and no field notes were made during the interviews.

### Data analysis

In the spirit of collaboration and relationship building, all authors met in person to manually code the transcripts using a bottom-up approach. This allowed us to derive themes directly using an iterative process within a critical constructivist framework.<sup>25</sup> We refined the identified themes through discussions that included all authors.<sup>19</sup> These discussions aimed to mitigate assumptions that might have gone unquestioned by an individual investigator or a homogeneous group of investigators. No themes were identified a priori. Transcripts were read and thematically analyzed by each author. The group collaboratively agreed on appropriate labels for each theme. Manuscripts were reread and relevant quotes were labelled accordingly. The themes were hierarchically categorized and grouped into primary themes, sub-themes and core principles. No software was used in the analysis.

### Ethics approval

The study protocol for this study was approved Office of Research Ethics at the University of Toronto.

## Results

Of 32 potential participants, 8 declined and 14 did not respond. Although 10 people agreed to participate, adequate information power was achieved with 8 completed interviews. Information power indicates that fewer participants are required in settings where the sample holds more relevant information.<sup>26</sup> Elements such as a narrow study aim, a specific participant selection, strong interview dialogue, analysis supported by accepted theory and a nuanced exploration of details increase the information power contained within a sample, thus decreasing the number of participants required.<sup>26</sup> Our sample size of 8 participants is supported by several characteristics of our data. First, the nuanced and deeply descriptive

nature of the participants' responses resulted in a rich data set. This was complemented by a narrow study aim, as well as the use of established critical constructivist theory to guide our analysis.

No participants dropped out or withdrew consent. The mean interview length was 29 (range 15–58) minutes. Our sample included participants from 6 different disciplines across health professions, and primary research disciplines. These and other participant characteristics are presented in Table 1.

From our data, we identified 4 primary themes related to conducting Indigenous research as a non-Indigenous researcher: 1) relationships with Indigenous communities are foundational to the conduct of Indigenous research, 2) non-Indigenous researchers experience a personal journey related to reconciliation, allyship and privilege, 3) accepted knowledge frameworks in Indigenous research are familiar to most researchers but are inconsistently applied and 4) institutional structures can act as both barriers to and facilitators of the ethical conduct of Indigenous research (Table 2). We also identified 4 core principles discussed by all the interviewees that linked the primary themes: relationships, trust, humility and accountability (Table 3).

Characteristic	No. of participants <i>n</i> = 8
<b>Level of researcher</b>	
Lecturer	1
Assistant professor	2
Associate professor	3
Professor	2
<b>Affiliation</b>	
Dalla Lana School of Public Health	3
Factor-Inwentash Faculty of Social Work	1
Institute for Health Policy, Management and Evaluation	2
Department of Physical Therapy	1
ICES	1
<b>Gender</b>	
Female	6
Male	2

Theme; subtheme	Representative quote
<b>1. Relationships with Indigenous communities are foundational to the research process</b>	
Partnership and Indigenous leadership	"[We] involved input from the community right from day 1, both in terms of what are the research questions that we should be asking, what are the focuses we should be looking at, and also when we've got the results, how do we interpret the data, what do we do with these data, what's the context that these data should be interpreted in." (P03)
Mutual respect	"Don't rush into things with assumptions. Be respectful and pay attention to group norms." (P07)
Reciprocal exchange	"I have the research background and ... I bring a certain skill set, but I recognize that my skill set is not [enough]. ... I was not trained as an Indigenous researcher or a researcher of Indigenous health. So I've tried to partner with people who have that expertise and bring my expertise and learn, but I don't want to assume things." (P08)
<b>2. Indigenous research is a personal journey for non-Indigenous researchers</b>	
Allyship and privilege	"You're going to have people that are uncomfortable with a non-Indigenous person ... and you have to just go with it. People have varying levels of comfort about having an ally." (P05)
Reconciliation	"I do Indigenous health research cautiously and I do it in the spirit of reconciliation." (P02)
Resilience and burnout	"There are not a lot of Indigenous researchers ... it's always the same people, everyone is burnt out." (P02)
<b>3. Accepted knowledge frameworks in Indigenous research are familiar to most but are inconsistently applied</b>	
Historical and current context	"If anything, [community engagement has] provided some context [or] validation of what we thought would be the context." (P03)
Indigenous knowledge	"You always have to have an elder involved from the beginning and at every meeting preferably. They ground the project. They ground the people. Ceremony is important, as much as possible." (P02)
<b>4. Institutional structures as barriers to and facilitators of the ethical conduct of Indigenous research</b>	
Institutional identity	"We have signed relationship protocols with a promise to work with [communities] and continue to engage with them to try our best to answer their research questions. The director here has really formalized that process." (P07)
Institutional barriers	"I went to my research institute and said that we want a partnering agreement and [they] said, 'we don't do that.'" (P02)

Principle	Representative quote
Trust	“It requires 2 years of a kind of process for people to be comfortable that you are going to analyze [the] data in a very respectful way.” (P05)
Accountability	“To keep [our organization] and our team liable, we have items in the ... scorecard to ensure that we are doing our work.” (P07)
Relationships	“[The research] is relational and it’s about navigating the process through long-term relationships, built on trust.” (P05) “It is important to do research that is relevant to the community, so it is important to have that relationship in the beginning and come up with the priority areas together.” (P07)
Humility	“I see myself as almost like a guest that has been invited in. ... I’ve been invited in because I have some skills that those folks think would be useful, and so I try to be really careful in understanding what might be some expertise I have to offer and humble about the fact that I don’t have much else and just try to be really cautious.” (P06)

**Primary themes**

**1. Relationships with Indigenous communities are foundational to the research process**

Study participants described a “bottom-up” approach, which ensured that the research question was relevant to and generated by the community. In some projects, community input was sought through the creation of an official advisory council. Other projects leveraged partnerships and relationships with community members to seek input on the project, data and/or methodology. Mutual respect was considered an essential foundation for building relationships with communities. The reciprocal exchange of knowledge, skills and resources also helped to strengthen the relationship between the researcher and the community.

**2. Indigenous research is a personal journey for non-Indigenous researchers**

Participants expressed 3 main motivators for pursuing Indigenous health research: relevance, health equity and necessity. Most participants felt that there were elements of their research scope with direct relevance for Indigenous health. This included a higher burden of various diagnoses in Indigenous communities and/or specific needs with regard to social service delivery. Second, many participants were motivated by their interest in health equity. Finally, several participants referred to the concept of “happenstance:” their involvement was unintentional, but a series of circumstances prompted engagement in Indigenous research. For example, some researchers were approached directly by communities or were invited onto an existing project by a colleague, with permission from Indigenous stakeholders.

Regardless of motivating factors, all participants, either implicitly or explicitly, alluded to a personal journey of growth and reconciliation. This included learning the meaning of allyship and recognizing the privilege associated with a non-Indigenous identity. Participants recognized that historical context and past historical injustices have strained the relationship between Indigenous communities and researchers. In response, some participants reframed their role through the lens of reconciliation. For some, the personal journey also included an element of emotional burden, burn-out and resilience. Burnout was more common among those doing community-based research rather than secondary data analysis.

**3. Accepted knowledge frameworks in Indigenous research are familiar to most but are inconsistently applied**

Indigenous knowledge-keepers and community members facilitate the incorporation of historical and current contexts and Indigenous knowledge into the analysis. In our data set, collaborative and respectful data analysis included the incorporation of ceremony into research meetings, respect for the land, the “adoption” of an Indigenous world view and the involvement of elders. Although all participants were familiar with the OCAP principles and the TCPS2, OCAP was the tool more commonly applied in practice. In addition, several participants identified the Truth and Reconciliation Commission report,<sup>27</sup> the United Nations Universal Declaration of Human Rights<sup>28</sup> and the United Nations Declaration on the Rights of Indigenous Peoples<sup>29</sup> as guiding documents.

**4. Institutional structures as barriers to and facilitators of the ethical conduct of Indigenous research**

Institutional facilitators of ethical Indigenous research included the integration of Indigenous research principles into institutional mandates and mission statements, as well as precedents for advisory groups, partnership agreements and Indigenous affairs units. Institutional mandates and mission statements are structures that shape institutional identity, values and culture, thus ensuring continuity and sustainability of ethical research practices. Our participants identified institutions that had no precedent for partnership agreements or memoranda of understanding, as required by the TCPS2. This created barriers and institutional resistance for researchers conducting their research in accordance with accepted principles.

**Core principles**

Every participant spoke about the importance of building relationships and establishing trust with the community and individuals (Table 3). Our data support the understanding that trust must be mutual. Trust is both the foundation for and a facilitator of relationship building. As such, it often requires a substantial time investment. Trust was further facilitated by formal structures such as partnership agreements, strategy documents and memoranda of understanding. These elements were also a tool to maintain accountability. Humility

facilitates relationship building by decreasing the influence of power imbalances. Moreover, the personal journeys experienced by researchers often included acknowledging one's limitations and learning that one's role includes contributing a specific knowledge and skill set.

## Interpretation

The TCPS2 and OCAP principles were familiar to all participants and were regarded as the minimum standard for research. However, our results reveal a gap with regard to the implementation of research-related policy statements at the institutional level. Some institutions did not have precedents for and/or opposed the implementation of accepted elements, such as partnership agreements. In these settings, it was the researchers' responsibility to advocate for and create systems in which they could carry out their research in an ethical manner. This represented an additional burden that predisposed participants to burn out. Moreover, for many participants, entering Indigenous communities was the first time they had had to prove that they were trustworthy. Although this is challenging, the ensuing discomfort may promote reflexivity, thus mitigating unconscious bias in relationships, the research process and/or analysis. Experiencing resistance from the community may also promote humility and encourage non-Indigenous researchers to think critically about their methodologies, invest more effort into the relationship-building process and/or seek out help from Indigenous community members. In addition, participants involved in the analysis of secondary data felt that the TCPS2 was less applicable to their work as the focus of the latter was community-based research and direct community engagement.

There are several noteworthy similarities and differences between our study and the existing literature on this topic. First, the literature on Indigenous research methodology almost universally acknowledges the importance of relationship building and community engagement in the research process.<sup>1,4,21</sup> However, in a similarly designed study, Castleden and colleagues<sup>4</sup> showed that, although research should be community initiated, it was often researcher initiated. In our data set, the majority of research projects were community initiated and our non-Indigenous participants were asked or invited to participate. This is congruent with the recommendation and understanding for community-based research<sup>1,8,21</sup> and a hopeful step forward from historical research evidence on this topic. Previous evidence has also identified time as one of the challenges to conducting Indigenous research, given that the time required for relationship building is often not incentivized or accounted for in academic settings or by funding structures.<sup>4,7,11–13,27</sup> Although increased time was a theme that was evident in our data set, participants did not see it as an important challenge. It was viewed as a challenge common to all types of research rather than unique to Indigenous research. Moreover, it was felt that the increased time requirement was a “part of the process,” “reassuring” and “necessary,” given the past historical contexts. However, our participants did report institutional barriers, which are similar

to those in other works.<sup>4,12,14,15,27</sup> Another challenge reported in the literature is the complexity of interpersonal relationships associated with Indigenous research.<sup>4,12,27</sup> This was discussed only peripherally by 1 of our participants and thus did not become part of our broader themes. However, Wilson and colleagues<sup>30</sup> explored the challenges of allyship, which were reflected in our analysis. In addition, whereas Indigenous capacity building is seen in the literature,<sup>4,11,27</sup> the minority of the projects in our sample involved Indigenous community members, despite the fact that our participants did consider Indigenous capacity building to be valuable and important. Mutual respect diminished the tendency to make assumptions, encouraged active learning and induced an appreciation for Indigenous knowledge among our participants. There may be tension during the data analysis stage of a collaborative research project owing to disagreement regarding interpretation of results.<sup>4,7,14</sup> However, this was not a concern expressed by participants in our sample. Although the community-based analysis rarely differed from that of the non-Indigenous research teams to which participants in our study belonged, our participants and their research teams deferred to community-driven interpretations in cases of incongruence. Finally, trust and memoranda of understanding were identified as important facilitators of Indigenous research by Ball and Janyst.<sup>13</sup>

## Limitations

Although all of our participants were affiliated with the University of Toronto, much of the research was conducted at affiliated institutions, which resulted in a diversity of institutional experiences. However, the generalizability of our findings is still limited given a narrow geographic scope. In addition, our sampling strategy selected for participants with a publicly identified interest. This may favour participants who were currently involved in Indigenous health work in accordance with accepted principles. Our study is also limited by respondent bias and participant recall bias, and our small sample. Moreover, our interview guide was not validated or piloted. Finally, the flexibility of the critical constructivist approach and analysis allows for subjectivity in the interpretation.

## Conclusion

Under the mandate of reconciliation, Canadian institutions have a responsibility to better understand the factors unique to Indigenous research and to implement structures to facilitate this work. Our work shows that, although knowledge and implementation of the accepted knowledge frameworks, including OCAP and the TCPS2, are prevalent among non-Indigenous researchers, institutional barriers and resistance can inhibit the operationalization of relevant principles. Thus, there is a need for institutions to evaluate the congruence of their processes with accepted knowledge frameworks. In addition, work to increase the applicability and relevance of accepted principles for researchers engaged in secondary data analysis is required. This may come in the form of community-developed guidelines, new policy statements and/

or amendments to existing documents. Our findings also show a need for programs to support non-Indigenous researchers to prevent burnout. This may include Indigenous research networks to promote resource sharing and capacity building, as well as dedicated staff members on institutional ethics boards. Practical training regarding the implementation of accepted principles, regardless of research type, may be beneficial. This study characterizes the role of relevant institutional structures and their roles in the research process in order to strengthen future research partnerships between non-Indigenous researchers and Indigenous communities.

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**Affiliations:** Faculty of Medicine (Kilian, Fellows), University of Toronto; Wilson Centre (Kilian, Kuper, Whitehead, Richardson); Office of Indigenous Medical Education (Fellows, Pennington, Richardson), Department of Pediatrics (Giroux) and Division of General Surgery (Pennington), University of Toronto; Division of General Internal Medicine (Kuper), Sunnybrook Health Sciences Centre; Department of Family and Community Medicine (Whitehead), Women's College Hospital; Department of Medicine (Richardson), University of Toronto, Toronto, Ont.

**Contributors:** Alexandra Kilian, Ayelet Kuper, Cynthia Whitehead and Lisa Richardson were involved in the conception of the project, including the development of the research question and methodological approach. Alexandra Kilian was primarily involved in data collection, participant recruitment, and conducting and transcribing interviews. This process was reviewed by Ayelet Kuper, Cynthia Whitehead and Lisa Richardson. Alexandra Kilian drafted the manuscript, and Tye Fellows, Ryan Giroux, Jason Pennington, Ayelet Kuper, Cynthia Whitehead and Lisa Richardson critically revised it for important intellectual content. All of the authors were involved in data analysis, conducted a thematic analysis of themes in the interview transcripts, interpreted the emerging themes, approved the version to be published and agreed to be accountable for all aspects of the work.

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