

**MINING THE GAP:
ABORIGINAL WOMEN AND THE MINING INDUSTRY**

Raywat Deonandan, University of Ottawa
Kalowatie Deonandan, University of Saskatchewan
Brennan Field, University of Saskatchewan

Principal Investigator:

Raywat Deonandan, PhD
Assistant Professor
Interdisciplinary School of Health Sciences
University of Ottawa
rdeonand@uottawa.ca
613-563-5800 ext 8377

© 2016

This research was funded by a Knowledge Synthesis grant from the Social Sciences and Humanities Research Council (SSHRC)

KEY MESSAGES

Based upon a synthesis of views and perspectives extracted from published studies on the matter, Canadian Aboriginal women were found to have the following views on the role and effects of extractive industries in their communities:

- Aboriginal women are sensitive to the social ills presented by the wage labour relationship between Aboriginal workers and extractive industries. Specifically, they are concerned about the extent to which this economic activity can contribute to substance abuse and domestic stress, and how wage labour reduces the time and motivation for community members to engage in cultural practices and shared family experiences.
- Aboriginal women are concerned about the effects of extractive industry activities on the environment and therefore on traditional practices that rely on maintaining the integrity of the environment.
- Aboriginal women wish to have a formal role in partnerships between industry, government and communities for the purposes of establishing legally binding protections of their rights.

EXECUTIVE SUMMARY

We conducted a systematic review of the published, peer-reviewed literature to seek answers to two research questions: (A) What are Canadian Aboriginal women's perceptions of the impacts of commercial resource development? And (B) What are Canadian Aboriginal women's views on the formal processes related to mining? Using qualitative theme and content analysis, themes were extracted from the selected studies, which lead to the following key findings:

A. Aboriginal Women's Perceptions of the Impacts of Resource Development

- Environmental contamination is a major concern among Aboriginal women, as they see themselves as having an important role as protectors of their communities' access to key resources, such as water.
- Related, a further concern is the extent to which extractive industries are deleteriously affecting environmental resources important for economic activity. The possible denuding of traditional hunting and fishing groups is a matter of some concern.
- The erosion of traditional culture, particularly practices related to spirituality, is also of concern. The linkages between land and history, identity and religion are expressed by several women, as is a concern that denudement of the land prevents the transmission of culture to future generations.
- This is such a concern, that some women suggest legal protection of key natural resources, such as berry patches, explicitly for the purpose of transgenerational communication.
- A gender dynamic is most certainly at play, as women are sensitive to the fact that jobs created by mining for men are not equivalent to those created for women, with the latter functioning mostly in a culinary or housekeeping role, thus making them lesser economic partners.
- The influence of wage labour on personal behaviour and traditional livelihood forms was also a point of concern. Increased income, segregated living, and concentrations of men away from their families are factors perceived to increase substance abuse and other social problems.
- Wage labour, being time intensive, reduces the time available to engage in cultural practices and family bonding, driving many to expend their limited free time on socially problematic behaviours.

B. Aboriginal Women's Views on Formal Processes Related to Mining

- The mining industry is perceived as having great potential to be a positive force in communities, by injecting resources and providing training.
- However, formal agreements between mining interests and Aboriginal communities are recommended, especially as they pertain to environmental protection. Doubt was expressed about the sincerity of mining companies to follow through on promises to invest in community development, perhaps indicating a stronger force of law to compel such action.
- The inclusion of women specifically in forging partnerships with mining interests was a strong recommendation.
- Concern was expressed that Aboriginal peoples and commercial mining interests might have divergent world views that prevent a shared vision for proper land management and conflict resolution.

MINING THE GAP: ABORIGINAL WOMEN AND THE MINING INDUSTRY

TABLE OF CONTENTS

Context	7
Implications	8
Approach	10
Results	11
Further research	22
Knowledge mobilization	23
Conclusion	24
References	25
Appendices	26
1. Data Extraction Table	26
2. Guidelines for Assessing study quality	27
3. Research Questions Tabulated	28
4. Summary of Study Qualities	29

CONTEXT

Canada's mining industry is an acknowledged leader in the nation's growth and prosperity with the sector contributing between 3.5% to 4.5% of Canada's GDP, and providing employment to at least 2% of the nation's labour force (17). The industry is also "the largest private sector employer of Aboriginal peoples in Canada on a proportional basis," (18) and is thus crucial to their prosperity.

However, aside from the employment, jobs training and prosperity that mining brings to Aboriginal communities, it can also bring significant dislocations, upheavals, tensions and conflicts. These deleterious impacts have the potential to increase dramatically given that the global drive to secure minerals will lead to an even larger expansion of the sector, and that much of this expansion will occur on territories occupied by Canada's indigenous populations. As such, creative strategies are needed to mitigate current as well as impending problems, and to ensure that the industry has a social license to operate. Such strategies must be based on a sound understanding of the impacts of mining on Aboriginal peoples, and in particular Aboriginal women, if these peoples are to prosper alongside the industry, and even become productive participants in it.

This project synthesizes the knowledge of, and provide critical insights into, Canadian Aboriginal women's concerns with the mining industry. Our intent was to explore the following general ideas:

- What effects might the global quest for valuable natural resources have on Canada's rural and remote, resource-based communities, such as in the North and the Arctic?
- How can Canadian natural resources be developed in such a way as to respect the rights, experiences and aspirations of Aboriginal Peoples; create sustainable benefits for Aboriginal communities, entrepreneurs and businesses; and encourage reconciliation and positive engagement between Aboriginal and non-Aboriginal Canadians?

IMPLICATIONS

At least one analysis indicates that the mining industry will require 145,000 new workers in the next decade (15). For Aboriginal peoples, and particularly Aboriginal women, to take advantage of this demand, they must be adequately equipped in terms of education and training. They must believe that an effort has been made to address their concerns about the industry's more deleterious impacts.

One of the research findings is that in a great many instances indigenous women are excluded from negotiations (over Impact Benefit Agreements for example), between mining companies and Aboriginal leaders based on the stereotypical beliefs that such activities are men's domain, this despite the fact that these negotiations involve lands and territories belonging to the women. Therefore, in order to ensure that women share equally in the benefits of the industry, strategies must be devised to ensure that they have a greater role in such negotiations. Formal agreements need to ensure that economic opportunities are equally shared between Aboriginal men and women (4, 10). The continued exclusion can only erode the legitimacy of projects and undermine the latter's social license to operate. From our findings, even when the concerns of Aboriginal women are included explicitly in either formal negotiating agreements or within workplaces, Aboriginal women often feel as if such inclusion is merely window dressing (13) or to fulfill stipulations of impact benefit agreements (4). Aboriginal women and their concerns must be not only included within negotiations, but effective structures must be in place to ensure that the economic benefits and employment opportunities of resource development are equally shared between genders.

Not only do women not share in the benefits, their concerns are frequently not addressed in the negotiations. As some researchers have pointed out (16), within Aboriginal communities, male-dominated band councils have relegated women's voices to the margins in negotiations with extractive companies, and as a result, women's interests are not always represented, nor their needs addressed.

The findings also indicate that Aboriginal women are very concerned about the multifaceted negative impacts that accompany resource extraction. Consequently, for them to be willing to support the industry, not only must they be convinced that they can benefit tangibly from it, but they must also see evidence that substantive actions are being taken to address the deleterious impacts—in areas such as the environment and health. While resource extraction can provide economic benefits to Aboriginal communities, these benefits themselves are perceived to have potential unintended negative impacts. For instance, the availability of waged labour for community members provided by resource development brings opportunities for more money. Yet this money is viewed as a potential source of social disruption, worsening or causing addictions issues. The time spent seeking waged employment reduces opportunities to engage in traditional forms of gathering. For certain remote mines, the nature of these jobs involves fly-in/fly-out weekly shift work that is perceived to have negative impacts for family stability. In addition to this, the jobs available from resource development are not seen to be equally available to both genders, as Aboriginal women find themselves relegated to support staff involved with cleaning or food preparation. It stands to reason that in order to gain the support of Aboriginal women for resource development, the myriad of social impacts from, as well as unequal access to waged

labour need to be addressed in formal agreements. Impact Benefit Agreements that acknowledge these potential negative social impacts from changing economic conditions and offer counselling or mental health services to ameliorate the impact could likely be an important step, something explicitly identified by Aboriginal women in one study (12).

Recommendations

Social

- In order to address domestic violence in mining communities, mining companies, as part of their corporate social responsibility strategies, should consult with community elders about effective policies that can be implemented—such as the “return to the bush” strategy, and facilitate the implementation of these for workers in crisis.
- Professional counselling services need to be made available to families in crisis to prevent problems such as marriage breakdowns as a result of workers being absent for long periods of time from home, due to their shift work at the mine.
- Compensation strategies should be developed by mining companies, in consultation with the communities, to address the loss of traditional hunting and fishing grounds for aboriginal communities due to mine development.
- For those communities that must travel farther due to mine development, to practice traditional hunting and fishing, arrangements should be made for regular transportation to the new sites to ensure continuation of traditional dietary practices.
- Overall, greater effort must be made for the promotion and protection of aboriginal culture as mining development could undermine these.

Economic

- Mining companies should explore ways of creating non-traditional employment for women and also to enhance training for women at the mine site so they can be more competitive with men for the jobs.
- Training in gender issues at mine sites is also important so that women who are in non-traditional mining work do not face discrimination or barriers to promotion.
- More investments in capacity building is required

APPROACH

This study is the product of a systematic review of published literature with a qualitative knowledge synthesis. The peer-reviewed published literature was explored for relevance to our primary, Canada-centric research questions, while a parallel investigation of grey (i.e., non-peer reviewed) literature was conducted in a non-systematic fashion to elucidate wider perspectives on relevant matters, mostly global in scope.

With respect to the peer-reviewed literature, we employed a systematic approach to search for and select articles to be analyzed. Initial scoping searches were used to develop and test the search terms that would be applied to the final search. In January of 2016, we searched ProQuest and, using EBSCOhost, Academic Search Complete, Anthropology Plus, Arctic & Antarctic Regions, Bibliography of Native North Americans, CINAHL Plus with Full Text, Gender Studies Database, Political Science Complete, and Public Administration Abstracts. Less restrictive search terms were used for EBSCOhost searches than for ProQuest in order to narrow the number of references imported. Search findings were sorted and checked to ensure that doing so did not remove highly relevant articles. Appropriate Boolean operators were applied to optimize our search for relevance.

The EBSCOhost search terms employed were: (women or female or gender) AND (indigenous or aboriginal or “first nations” or inuit or metis) AND (mining or mine or mines or resource or development) and Canada. Similarly, the ProQuest search terms employed were: (women OR female OR gender) AND (indigenous OR aboriginal OR "first nations" OR inuit OR innu OR metis) AND (mining OR mine OR mines OR resource OR development) AND (interview OR interviews OR "focus group" OR "focus groups" or "case study" or "case studies") AND Canada AND ("impact benefit agreement" OR IBA OR "environmental assessment" OR EA OR "corporate social responsibility" OR CSR OR "social license" OR "social impact assessment" OR SIA).

We limited our search to articles that were published between 2000 and 2015 in English in peer-reviewed journals. In total, 404 references were identified. Of those, 388 were imported (16 were duplicates) from combined EBSCO databases, while 963 references, 947 (16 duplicates) were from ProQuest. In total, we had 1335 articles for initial title and abstract screening.

In this stage, articles were included if it seemed likely they would include empirical qualitative data (interviews, focus groups) on the views of Aboriginal people in Canada. After our initial screening process was conducted, 114 studies were moved to full-text screening. In the full-text screening phase, articles were included if they had direct qualitative empirical data with an either explicit focus on or sufficient inclusion of the perspectives of Aboriginal women in Canada. Articles were included if these perspectives were deemed likely to be relevant to the research questions, even if there was not an explicit focus on resource extraction. At the end of full-text screening, the research team discussed the relevance and appropriateness of articles included. After conducting full-text screening, 14 studies were moved to the final, data extraction phase.

Data extraction was carried out in a maximally inclusive manner, in which we extracted all identified relevant themes or empirical qualitative data deemed relevant to the research

questions. Both direct quotations and author interpretations were extracted, as long as those interpretations were supported either by a direct quotation or by an implicit support from qualitative data gathered from the study. This approach to data extraction was chosen to ensure that the themes extracted emerged from primary data that was overtly present in the articles, rather than from ‘armchair theorizing’ by researchers (Noyes & Lewin, 2011).

Data extraction was performed by the researcher who conducted initial and full-text screening, using an *a priori* defined data extraction table. Data were extracted on the context of the study, the participants, the study design and methods utilized, as well as the findings relevant to our research questions. Raw extracted text was organized using NVivo version 11.

Content and thematic analysis were employed. Codes were established based upon an initial examination of the data text. Themes arose from the data as codes were applied, via second and third level analyses.

In parallel, a grey literature search was conducted using the same keywords as those used in the EBSCOhost search, applied to Google. Articles arising from the grey literature search were not analyzed thematically, but rather were consulted for contextualization purposes.

RESULTS

The included studies varied in terms of their methodology, suggesting a high degree of heterogeneity. However, qualitative knowledge syntheses are robust to heterogeneity in study design, subject type and sample size. The included studies employed open ended, semi structured, and structured interviews, as well as focus groups and ethnographic appraisals. With one notable exception, the studies tended to be context specific and focused on a particular Aboriginal group in their analysis. Given this, the studies were limited in terms of the generalizability/transferability of their findings. Generally, participants were from northern Canada and more remote communities. While participants came from many different Aboriginal groups, Cree, Dene, and Inuit were the most frequent Aboriginal groups sampled.

In the results below, we present an overview of the ways in which Aboriginal women perceive themselves to be affected by resource development, as reported in the extant literature; and the strategies that have been advanced for ensuring that Aboriginal populations, specifically women, can benefit from the industry.

A. Aboriginal Women’s Perceptions of the Impacts of Resource Development

I: Environmental and Social Impacts

a) Water Contamination

Concern about the impact of resource development on the natural environment was a key finding in the literature. For women, prominent were their fears about water contamination (1, 14). This is an issue of great cultural significance to indigenous women as they see themselves as having a strong role to play when it comes to protecting their access to water. As one woman reported:

Women are the traditional protectors of water. A couple times in my career, I was able to feel the significance of water and my role as a woman and how it relates to mining. Once, I was underground, in this very male-dominated industry, which is run with overwhelming male values. And I could see water coming in all around me through the crevices. And the water was clean, pure, and crystal clear. To me, that showed me how much this industry is begging for the female. It's crying for it. (14)

b) Destruction of Traditional Forms of Livelihoods

Closely related to water safety, were fears about environmental degradation (1, 2, 7, 8, 9) as this has life-altering implications for human and also for animal health. For aboriginal communities, the two (human and animal well-being) are closely interlinked as many of these communities depend on the natural environment for their livelihood and survival. One respondent noted that she was concerned about "...contaminants from the mine, and from those big trucks that are going back and forth to the mines. I imagine all the fumes and gas that's going into the lake when they drive by the ice road. Our animals eat it, that live around it." Another stated "I worry about where the ducks have flown, where caribou are eating and if they ate anything near or on Giant Mine property or other mines around Yellowknife and mines in the North" (2). Not only are these individuals expressing concern about animal life, but, implicitly, they are revealing their concerns for their own health and wellbeing which are dependent, in part, on the health of the animals that is their food source.

Relatedly, also with respect to livelihoods, forty-two percent of all respondents (21 people) in one study stated there are traditional fishing and hunting grounds that they have stopped going to because of worries that mining has contaminated these areas. As the authors of the study note: "Traditional hunting grounds are very important to northern indigenous people, yet respondents have chosen to harvest away from these areas to decrease the risk of food contamination." (2) However, accessing these more distant locations is very challenging. Not only does it take longer to get there, but many of these communities lack adequate transportation, as was reported: "Another barrier to harvesting activities mentioned by respondents was a lack of transportation. A small number of respondents (13% or 4 people) state that they did not have access to cars or vehicles that would take them to harvesting areas." (2)

d) Erosion of Traditional Spirituality and Culture

Environmental protection in indigenous communities is also strongly tied to the protection and preservation of spiritual and cultural values. Harms to the environment, then, are seen as having a direct and negative impact on Aboriginal spiritual values (1, 2, 7, 8, 9). As one Aboriginal woman reported "Anything that I learned about water or heard about water as a child was always associated with the realm of matasawin (spirit). So when you think of the tar sands [development] or you see places where people are polluting water, it is pretty overwhelming. And you really think about what is going to happen to us." (1) This lament was recurring in the literature (1, 2, 7, 8, 9).

As with water, land too holds a great deal of spiritual and cultural significance, in addition to material value, for Aboriginal communities. Thus, for example, when as a result of resource development, land is rendered inaccessible or is damaged or altered, this has immense implications for the spiritual, cultural and material existence of aboriginal peoples. Spiritually, the land is intimately connected to indigenous peoples in a way that involves reciprocal

relationships of care (1, 9, 11, 14). Many indigenous, land-based societies believe their relationship to the land is sacred, that the resources from the environment are to be respected as they are a gift from the Creator “As described by elder Caroline Kay, berries and traditional medicine are recognized as among the Creator’s gifts. “All the plants and berries that grow on the land must be respected. It grows there for us to use; this is what they (our grandmothers) taught us... everything that we live on from the land—God put it there for us. We will never go hungry as long as we live.” (11)

Culturally, land is strongly linked to crucial rituals, ceremonies, and family and community well-being (1, 2, 3, 9, 11). The harmful effects of resource extraction on lands, therefore, has serious consequences for these cultural practices. One method strongly advocated to address family violence, for example, is a ceremonial return to nature, to the “bush”, which plays a leading role in the healing process (3). The belief is that by returning to their roots, specifically to the land, and by being physically far from the demands of “modern” society, participants in these nature ceremonies are better able to communicate and connect, and to address their problems.

As one study explained:

I know some couples that went in the bush, and by going in the bush it finally helped them. It’s more . . . peaceful out there and you find peace, you have time to think (S–police).” Return to the land, or the “bush” is tantamount to going to a “treatment centre for the whole family . . . where they can come together, out on the land. I find that for kids, they feel at peace when they’re out on the land . . . our elders tell us that’s where we came from, that’s our way of life and to go back . . . they’re so proud of it. (E)” “Most of the time when I meet with my clients they say, “when we’re out on the land, there’s no arguing, there’s no screaming, there’s no violence,” you know, just family togetherness there, helping families together. If I had a lot of money I would send the whole family in the bush. (C) (3)

When Aboriginal communities ties to the land are severed, this harms their culture. For example, when local lands are no longer useable as a food source due to contamination for example, from resource extraction, this leads to a “loss of social and cultural capital,” more specifically, to “an erosion of traditional ways” (2). Cultural knowledge about how to interact sustainably with the land and how to engage in traditional activities such as fishing and hunting are all lost (2)

Land also has great material value for aboriginal communities. It is a source of livelihood—hunting, fishing and harvesting (2, 6, 8, 9, 11). In one study dealing with concerns over pipeline development, one Aboriginal subject noted that, “Sixty per cent of our claim deals with wildlife and environmental issues. Therefore, it is important to limit the impact as much as possible [. . .] This is a big pipeline. It goes through a very sensitive area. It’s a geese hunting area and a caribou hunting area. The majority of our people still extensively use this area for hunting food.”(8)

Another dimension of resource development that has implications for livelihood activities are the legal regimes for land use that are implemented. New bylaws and restrictions constrain customary behavior on nearby lands, restricting the kinds of sustenance activities previously practiced. Not only does this deleteriously affect livelihoods, but it also harms traditional knowledge(2), as noted above, as it severs the long-standing relationship between the

communities and the surrounding lands, and thus contributes to the whittling away of cultural knowledge.

e) Losses to Future Generations

Interwoven with the preceding themes, is the need to protect the environment from the harms caused by resource development, not only for present use, but also for future generations to use. In a study by Minkin et al. (11), Gwich'in women drew attention to the need for environmental preservation for generational purposes by pointing to the health use and sacred significance of their berry patches. A few of the women suggested that their berry patches should be protected under the Gwich'in land use plan or other Gwich'in laws to ensure that their children and future generations would be able to harvest berries in those places. These berries have particular significance because of the sustenance they provide and for the healing powers that they possess. As one elder noted: "All the plants and berries that grow on the land must be respected. It grows there for us to use; this is what they (our grandmothers) taught us... everything that we live on from the land—God put it there for us. We will never go hungry as long as we live." (Caroline Kay, June 2003)(11)

II: Economic Impacts

a) Unequal gender distribution of Benefits

In terms of economic impacts of resource development, one of the major themes in the studies was that access to the jobs created by mines is not equal for men and women (4, 5, 6, 12, 14). Women complain that they are typically relegated to gendered work as cooks, cleaners or clerical staff. "However, both at Voisey's Bay and nationally, women mine employees were working largely in culinary, housekeeping, administration, and corporate services jobs (Nunatsiavut Government representative, P42)." (4) While working at the mine, most men are freed from domestic chores (cooking, cleaning, etc.) as these are done by mine service staff, who are predominately women mine workers. As stated by an Elder in Davinson & Hawe, "Men won't even make their own beds; there is housekeeping, and there is cooking and cleaning." (5) The implication here is that societal gender stereotype is strengthened by nature of the work men and women are being hired to perform in at mine sites. This gendered nature of mine employment in the region is particularly discriminatory especially as women in the area have "higher rates of high school completion, education, and labour market participation than men. This higher level of qualification, however, is not reflected in the type of employment they get." (5)

In cases where women were in non-traditional mining jobs, such as in the Voisey's Bay mine in Labrador, the women described facing a number of barriers to advancement, including difficulty in gaining acceptance in the workforce, racial discrimination, treatment as token hires and being overlooked for promotion. Also, both men and women criticized training practices as being inadequate for the needs of Inuit people. While both Inuit and Innu men experienced discrimination in regard to training and promotion, women's experiences were distinct in that they faced additional barriers—for example regarding perceptions about their abilities and that they are mere token hires. (4)

b) Wage Labour and the aggravation of Social Ills

Many participants expressed fears that wage labour at the mine, the regular income this form of employment provides and the shift work it entails, could potentially cause, or exacerbate, pre-existing problems such as drug and alcohol addictions, mental health afflictions and family violence (5, 6, 9, 12). In one study, “Three interview respondents brought up negative impacts associated with the wage economy. There were fears expressed that sudden increases in income for individuals in the community could contribute to social problems by making drugs and alcohol more financially accessible.”(9) Similarly, another participant in another study linked addictions problems with the increased income from mine work, stating: “I know somebody personally who does not go home right away anymore. He comes out, has a big party, you know because now he has money.... Sometimes people if they have those kinds of addictions their family may not even be a priority.”(6)

Aside from the resultant substance abuse, the access to steady income also affects the care given to children, and this in turn aggravate the social ills. One elder reported how money had negatively affecting parenting, stating “the kids really run the show. I think that there is more money in town, because of the mine, but now parents are hardly ever at home. ... They have replaced parenting and guidance and caring with money.”(5) A member of school staff in one community stated that “There is a lack of guidance. Some of the kids are really raising themselves.” (3) In a context where children are already at risk due to addictions and family violence, this neglect adds another disturbing layer and further rents the social fabric of these communities.

b) Wage Labour and the Challenges to Traditional Livelihood forms (2, 6)

Concern was also expressed that employment as a wage labourer in the resource sector would also affect local diet and health. The form of employment was seen as reducing the time available to participate in traditional hunting and gathering activities. The implication is that this may lead to a greater consumption of processed rather than wild food. (2, 6). As one aboriginal woman explained: “A big part of my diet is still traditional foods. And I know that's true of other people, so if you don't have your husband going to get what you need for the year, of course that can have a huge impact on the family, on their stock of wild game for the year.”(6). The impacts of this dietary shift has been raised by the Assembly of First Nations , an organization representing Aboriginal peoples. The group expressed the fear that the change in diet could have negative implications for efforts to control diabetes in the community, a disease from which many aboriginals suffer (AFN 2006). Some members of the study, did express cautious optimism, though, stating that agreements negotiated between aboriginal peoples and communities, and through the jobs created, would help diabetes as healthy food would become more affordable,

In one study, (2) thirty-two respondents provided reasons why they had stopped participating in some traditional activities or completely stopped going out on the land. Of these, the largest percentage (38% or 12 people) stated that a lack of time was the biggest barrier to harvesting, primarily because of their commitments to wage earning employment. As one worker noted: “...because to have a job now, you have to pay the rent, buy food. You need to have a good education and you stop the rest.” (2)

d) Shift Work and Family Breakdowns

The schedule of work at the mine emerged as a source of concern also. The particular work shift style of flying into remote mines to work for a week or more, then having a week or more off was reported as having detrimental impacts on families (5, 6, 12). Absences of spouses as a result of this form of shift work undermined domestic stability. Key informants in one study indicated, "'There's marriage breakdowns because they're not used to being away from their families. As Native peoples we're close-knit peoples.'"(6) One grandmother interviewed illustrated the impact of this schedule on her son and grandchildren: "It kind of affected him doing that, going in and out for two weeks because then he didn't have enough time with his kids.'"(6) In another study (12), the wives of mine workers spoke of the difficulty of keeping a unified front vis a vis their children because of the work rotation schedule at the mine. In addition, the frequent absences of the men due to shift work meant that there was difficulty in maintaining family cohesion, both in terms of the relationship between spouses, and also the relationship between parents and their children (12).

e) Alterations in Gender Roles Due to Shift Work and Women's Increasing Burdens

Aside from relationship changes, there were also changes in gender roles as a result of shift work and more burdens were falling on the women (5, 6, 12). As Dylan, Smallboy and Lightman explained, because of the absence of the men, "The women are required to fill roles commonly associated with men such as home maintenance and repairs and the men are sometimes expected to take on primary parenting roles when at home.'"(6)

It must be stated, however, that these fears were also mixed with some optimism as one participant hopefully suggested that the disruption may be temporary, saying "Well, now that there's an increased income, people are spending it more. It's like a kid in a candy store. First time you get a good job like that your pockets are lined with money.... You're just spending, spending, spending. You're not really thinking, but it's starting to calm down. I think they're realizing what they're doing. Some have settled.'"(6) The importance of managing these risks was emphasized, "Two respondents were adamant that any influx of money to the community should be carefully planned for, in order to promote good management of money by individuals and the band council.'"(9)

e) Loss of community Cohesion

Another dimension of employment at mine sites is the loss of community cohesion. In one study, a grandmother observed population shifting and linked it to the mine, stating that many were leaving her community: "because they're flown in every two weeks and then flown out, because they have more privileges outside of the community than inside because they can travel more and they're not as isolated. ...For us, we lose. I'm looking at Moosonee. We lose more of the Aboriginal population while the non-Native population moves in. That's what I see. We lose the Aboriginal population as they move out." (6)

Even if members do not fully leave the community once they begin working for the mine, other developments such as the construction of access roads can also undermine community cohesion (3, 6, 9). On the one hand, permanent ice roads to formerly isolate communities, could improve safety, allow for a wider selection, more reliable and cheaper food stuffs, as well as other types of supplies (9). On the other hand, it has been shown to increase alcohol and drug use and to

aggravate ongoing social ills. As one community member explained with reference to moving and to the building of access roads:

[W]hen we were moved from our community, from the Island, and from residential schools . . . another trauma that you have to go through . . . we just saw the social problems growing bigger and bigger. (E)” “I think it [family violence] went up once we moved from the island. After we moved there was an increase in breaking and entering . . . in mischief, all that, damage to property . . . a lot of youth were into that. In fact, I had a call every night, almost every night at one point. I don’t know why, but one of the reasons might be the alcohol. (S–police)” “In the move from the island, I guess everything now is changed, having road access to the community, a little community is now big. Alcohol is accessible and a fair amount of drugs are accessible. I think a lot of that, in fact, stems from the relocation of the community. (R) (3)

B. Aboriginal women’s views on formal processes such as environmental assessments, impact benefit agreements, etc.

a) Capacity Building

Formal processes such as Impact Benefit Agreements (IBAs) are viewed by women as a way to gain benefits from resource extraction (5, 6, 8, 9, 14). One of the areas in which a need was identified was capacity building. One participant in a study (14) explained that capacity building,

“ is one area where I think we lag, not only as First Nation communities, but in general and in general population. We have so many miners that will be retiring in the near future. Yet, there are still many mining projects coming up. So, who is going to take over those mining jobs, especially in our own territory? We are still building capacity. We are still training people to go into the mining industry, training people in milling and processing, training people in blasting. So, that is the key right there, in terms of preparing for capacity. Build your capacity in advance. Let’s say, the Ring of Fire in Northern Ontario... they know there is a huge mine there and the potential is great. For me, if I were a leader in that area, I would be looking at ensuring the people are trained to take the jobs that are out there. And that people are ready not only for set aside contracts, but that people are employed and that they benefit from the extraction of the resources of their own land.””

Ameliorating Social Ills

Aside from capacity building women also suggested that the formal agreements need to set up programs to ameliorate the negative social impacts of resource development (6, 12, 14). In one study (12), the spouses of mine workers offered many suggestions, which they believed could help their families overcome the challenges that mine work has entailed for their lives. To overcome challenges relating to relationships, mental health and wellness, and parenting challenges, the women thought that better counseling services could offer the necessary healing. Counselling services for the women themselves, the men at the site, for the children, and for the family as a whole were discussed as a primary support need. The women also discussed the need

for better awareness of existing programs and services. The extent of services offered by the mining companies to the employees and their families was not known. While government offered programs and services seemed to be well used, they were described as having important deficiencies such as Social Services not responding to inquiries for help. Having a space to share experiences with other mine spouses was a desire from all and having the “outlet” was appreciated. The women want more opportunities to connect with Elders and other women so they can share experiences, stories and advice.

This section is organized into two main parts: environmental and economic. Each section is then linked to the specific social impacts coming from environmental or economic change from resource development.

b) Economic/Social issues

A small percentage of individuals in N’Dilo and Dettah actually reported an increased level of participation in trapping, hunting and fishing activities. This could be the result of higher incomes related to mine employment, which facilitates individuals being able to purchase and maintain hunting equipment and supplies and vehicles for transportation to remote sites. The average income in all areas of the Northwest Territories has increased substantially since 1997. This increase is especially present in small local communities where growth in income has been almost twice the Canadian average. Others may have increased their harvesting activities in relation to their rotational work schedule (two weeks in camp and two weeks off) which may have decreased disruption to their traditional lifestyle. (9)

Three interview respondents brought up negative impacts associated with the wage economy. There were fears expressed that sudden increases in income for individuals in the community could contribute to social problems by making drugs and alcohol more financially accessible. Two respondents were adamant that any influx of money to the community should be carefully planned for, in order to promote good management of money by individuals and the band council. (6)

Interestingly, one study involving economic development among the Mikisew Cree First Nation, Syncrude is reported as supporting a "fly-in/fly out" operation to promote community cohesion and the transfer of skills and dollars back to the community. In the MCFN study, however, key informants indicated (5).

Although not all positive, the diamond mines exist as significant resources for communities in the region. The mines provide financial resources for school activities by way of transfers from IBA negotiated benefits and through direct funding in response to proposals and applications (third-party funding): “We also get [money] from the Band through the[IBA] money that the community is given from the mine.” (School Staff, interview) “The proposal [money] is all bonus –that is all extra. Yes, it helps to pay for [the instructor's] salary, it helps to pay for equipment. Like two years ago, ...we got brand new skidoos...we were able to buy gear for the students. (School Administrator, interview) In addition to financial resources, the mine also provides non-financial resources, or makes them available. For example, mining representatives

visit schools to teach students about the industry, mining companies offer mine tours for local people, and the mine provides educational resources about the industry for use in the community: Sometimes the mine, and other companies, they come and they have meetings... they come to our school to sometimes explain to studentswhat their job is and what they do. (School Staff, interview) The school has a small greenhouse funded by a diamond mine company. One of them mines provided minerals ample sand geological maps for teaching purposes.” (6)

Not all Aboriginal communities are overwhelmed by calamitous suicide rates, and discussions of Aboriginal suicide statistics from a national perspective can conceal the significant differences across communities. Unfortunately, however, the communities in this case study were experiencing a crisis: "We've had a number of suicides here, a few. I'm not even sure any more how many, seven maybe in 12 months ... more. We had one just two weeks ago. [Some tears.] Somebody's got to do something about it. Hello? We've got to try to stop this. It's got to get better than it is now. I believe that children are the best thing for the future." Many key informants look to economic development as one important factor in the reduction of youth suicides. One key informant explained, "I talk to the youth there and I tell them there's hope, there's a lot of opportunities [through De Beers." Another key informant expressed how the decision to negotiate agreements with De Beers and Ontario Power Generation was largely motivated by concern for the youth; "This is our chance to stay in the community and get jobs.... It's just you know times are changing, we've got to look out for the youth. [We] figure for the youth, [we'll] go with it." (6)

Formal agreements need to minimize the risks to environment. “Through the hearings we hope to minimize the impact [. . .] because everyone has had a chance to speak about their concerns. We helped finance some of the organizations so the people would be prepared and make their concerns known. People will have a chance to speak in Inuvik and Aklavik and the outlying communities. This is ongoing until the hearings are concluded. All the people who say they are against the pipeline say it is based on some conditions. Even those who say they are for the pipeline say there are some conditions that must be met. We may object to some parts of the project. The company will have to do something about it if they want to be good corporate citizens. Imperial Oil would have to evaluate the required conditions and calculate the cost and the return on their investment.” (8, 14)

In examining women’s work experiences at Voisey’s Bay alongside the contributions of women’s groups to the Voisey’s Bay EA process, this paper speaks to both the importance of undertaking a gendered analysis of environmental policy and of understanding how participation in EAs is integrated with other institutional processes, such as IBAs. Our findings suggest that ensuring broad participation in EA processes is not sufficient to ensure that the needs of different community constituencies are addressed. Attention needs to be paid to the translation of participation into institutions beyond the EA itself. Our findings also point to the additional difficulties that negotiators face when trying to secure employment benefits for women. These findings challenge the assumption in the EA literature that increasing the breadth and quality of public participation will result in more desirable social and environmental outcomes. Though we agree that EA processes should facilitate public participation, we also suggest that the ways in which EA recommendations are translated into IBAs and further into project development outcomes warrant greater attention. Clarifying and facilitating the translation of participation into

development outcomes has the potential to provide Indigenous women with greater influence over resource development policy. (4)

A full assessment of the role of women in negotiations with resource developers must also focus on the operation of these structures and on the bargaining that occurs as agreements are implemented. Many of the implementation issues mentioned above are handled by joint company indigenous community implementation committees and women often play a key role in these committees. This has certainly been the case with the Argyle and Comalco agreements, with both committees having substantial numbers of women members and having been chaired by Aboriginal women. In addition to implementation committees, the Voisey's Bay agreements provide for the appointment of full-time implementation coordinators. A number of these have been indigenous women, including the current implementation coordinator for both the Innu and Inuit agreements. The implementation coordinator for the mining company is also an indigenous woman. The interactions and initiatives of these women have been critical, for instance, to the success of this project's indigenous employment initiatives; four years after production commenced, the project has one of the highest indigenous employment levels of any major mine in Australia or Canada, at more than 50 per cent of the total workforce. (10, 13)

Reversing the formula of cultural inclusion yielding workplace empowerment, several women described power as integral to the incorporation of Aboriginal culture. Thus, several women suggested that in order to ensure appropriate inclusion and accommodation of Aboriginal culture in the workplace, companies need to give aboriginal workers greater voice:

“Interviewer: ‘Can you think of any other ways that the firm could take Aboriginal interests into consideration when making decisions?’ Response: ‘Maybe they should have some Aboriginals sitting in on their meetings so they understand because I think that’s a big problem too that the don’t understand the Aboriginal culture. Well you know, just. And there are a few fellows there that are very cultural and the lack of knowledge, it’s never asked, any information or time or to share anything.’” (8, 14). This woman presented a scenario where there was problem of translation between the managers who were non-Aboriginal and Aboriginal workers.

There were concerns about the sincerity of efforts for some companies to hire or create more hospitable workplaces for Aboriginal workers, viewed as window dressing or their presence as only there for IBA reasons that were even more challenging for Aboriginal women given intersecting racism and sexism (4, 13).

Because it was common knowledge that the IBA played a role in the hiring of Indigenous workers, these workers, both male and female, were at times seen as token hires. Since women comprised a much smaller percentage of the workforce, they were more susceptible to tokenism. One Inuit woman working in a non-traditional occupation spoke of an Inuit female friend who was told that she was only there to fill a quota:

I have a friend who is a mechanic in there and she was told that the only reason she was there, this was from a human resources manager, ... was to fill a special quota. Not for her skills She was first hired as a heavy equipment mechanic apprentice, but she switched her trade because they wouldn't let her work on heavy equipment. She was only

allowed to work on pickup trucks, so she said, “I might as well just switch my heavy equipment to light duty.” (4)

There were also views expressed that development was a foregone conclusion, and that these processes were a way that Aboriginal people could have some control over the process (6, 14).

All participants that work at the community governance level indicated that their motivations to be involved with mining came from the fear that not participating in mining development meant that mining would still take place, only without their involvement. Being involved meant that they could shape the outcomes and mitigate the impacts on their communities. (4)

“Participants A and C also discussed choosing participation over exclusion. Together, they had negotiated two IBAs for mining that were already taking place near their community, without having previously sought their involvement and consent, and they had signed a third IBA for a developing project. For them, involvement in mining meant they could shape relationships and benefits for their community: Mining was already happening, and had happened, and we wanted to take part in the benefits. [Mining] is not perfect, but we wanted to be a part of it. [...] Mining has to be about relationships and partnerships. Community benefits need to be tangible, we have to see them” (4)

“[...] job-sharing, transferable skills, IBAs, MOUs, partnerships, joint ventures. This statement reiterated Participant D’s motivations for involvement in mining, while enumerating what they consider to be benefits. Participant E also built upon on the motivations of Participants A, C and D: I think about the tailings, the lake that will disappear, 1,200 men that will be up the street, drugs and the money. [But] [t]his project will bring tens of millions for my community, and what that can mean for us. The mine goes against our beliefs, but I know of the dangers of sitting along the sidelines watching the development of the mine. If it’s going to happen, we need to be involved and part of the process. [...] It’s about measuring the costs and what it will mean for the youth and their future. Must have meaningful work and management jobs.” (4)

Beyond the economic benefits, the process also has problems of divergent worldviews that make these formal risk assessments and compensation for negative impacts difficult, which had gendered implications given how women had unique relationships with the land (1, 11, 14).

“Participants A and C discussed the importance of focusing on value versus dollar and how decisions impact communities. They explained the importance of maintaining an ethics code guiding all decisions and relationships. Furthermore, maintaining these ethics are valuable, and more important than any dollar amount. These values should in no way be compromised for any potential benefits. For them, it was important to look towards the future and stay focused on the youth by keeping in mind what the situation will be like in 15, 20, or 30 years.” (14) In this sense, reclamation would be important for future generations and would continue to create and provide opportunities for them.

The issue of divergent worldviews was also present within Parlee and Berkes: “Conspicuously absent in the values identified by women as important is the commercial economic value of berries. Although women value berries as the preferred alternative to store-bought fruit and will share and trade berries for other subsistence resources such as caribou, fish, and fresh water, they say they would “never” sell their berries for money. This disinterest in berries as a commercial resource suggests that the relationship between the health of the land and the health of the people in the Gwich’in region has little or nothing to do with market economics, a reality which runs contrary to much of the previous socioeconomic literature on forest ecosystems in Canada” (11).

FURTHER RESEARCH

Further research is indicated in a number of disciplines. The exploration of new employment models for Aboriginal women, and opportunities to enhance the marketable skills of such women, in relevant communities would render useful results for long term community development. Additionally, the proposal of management and finance strategies for the promotion of household savings among affected Aboriginal families would be useful for providing a financial buffer against costly health effects of downstream social ills resulting from extractive industries.

Related, opportunities for investment in physical infrastructure and in human capital should be sought. And, overall, a greater effort should be made to devise strategies for protecting traditional Aboriginal culture, perhaps through work restructuring to allow time for individuals to engage in family and cultural practices.

KNOWLEDGE MOBILIZATION

Our Knowledge Mobilization (KM) is multifaceted and comprises the following steps:

- We are in the process of converting this report to a format suitable for submission to a peer-reviewed journal.
- We are submitting abstracts arising from this work to selected academic conferences (the Canadian Political Science Association and Canadian Public Health Conference)
- This report and any publications arising from it will be made freely available on the researchers' websites, and in the permanent open research repository of the University of Ottawa.
- We are preparing a summary of these findings in PowerPoint format, to be made freely available on the researchers' websites.
- The findings of this report will be discussed on the public, free podcast hosted by Dr Raywat Deonandan, called "*Science Monkey*" (www.sciencemonkey.ca)
- The findings of this report will be written up as a lay article for Dr Raywat Deonandan's regular column in *The Huffington Post Canada*

CONCLUSION

The published evidence suggests that Canadian Aboriginal women have deeply felt concerns about the effects of extractive industries on their lives and communities. Beyond the well explored issues relating to environmental damage, gender wage gap, and traditional life, women expressed concerns about the effects of wage labour on time management, the effects of commercial mining on the acceleration of social ills, and the challenges posed by differing world views that might prevent commercial ventures from properly respecting Aboriginal values and priorities. Importantly, Aboriginal women indicate a desire to be formally part of the negotiation process between government, industry, and community.

REFERENCES

- 1 #1059 Kim Anderson, Barbara Clow, Margaret Haworth-Brockman, Carriers of water: aboriginal women's experiences, relationships, and reflections, *Journal of Cleaner Production*, Volume 60, 1 December 2013, Pages 11-17, ISSN 0959-6526, <http://dx.doi.org/10.1016/j.jclepro.2011.10.023>.
- 2 #523 - Boyd, Amanda D; Jardine, Cynthia G; Furgal, Christopher M. A Social And Cultural Capital Approach To Understanding Traditional Activities On The Land In Two Northern Dene Communities. *The Canadian Journal of Native Studies* 2010;30(2):267-287
- 3 #1167 - Campbell, Kathryn M. "What Was It They Lost?" The Impact of Resource Development on Family Violence in a Northern Aboriginal Community. *Journal of Ethnicity in Criminal Justice* 04// 2007;5(1):57-80 2007
- 4 #968 - Cox, David; Mills, Suzanne. Gendering Environmental Assessment: Women's Participation and Employment Outcomes at Voisey's Bay. *Arctic* 06// 2015;68(2):246-26
- 5 #359 - Davison, Colleen M; Hawe, Penelope. All That Glitters: Diamond Mining and Tâîchô Youth in Behchokö, Northwest Territories. *Arctic* 2012;65(2):214-228
- 6 #292 - Dylan, Arielle; Smallboy, Bartholemew; Lightman, Ernie. "Saying No to Resource Development is Not an Option": Economic Development in Moose Cree First Nation. *Journal of Canadian Studies* Winter2013 2013;47(1):59-90
- 7 #1080 - Jardine, Cynthia G.; Boyd, Amanda D.; Furgal, Christopher M. Gender and place influences on health risk perspectives in northern Canadian Aboriginal communities. *Gender, Place & Culture: A Journal of Feminist Geography* 04// 2009;16(2):201-223
- 8 #1310 - Meis Mason, Aldene; Anderson, Robert Brent; Dana, Leo Paul. Oil and gas and the Inuvialuit people of the western Arctic. *Journal Of Enterprising Communities: People & Places In The Global Economy* // 2008;():151-167
- 9 #172 - Minkin, Daniel; Whitelaw, Graham S; McCarthy, Daniel D P; Tsuji, Leonard J S. Cultural Protection, Empowerment And Land Use Planning: Identification Of Values In Support Of Fort Albany First Nation, Ontario, Canada, Community Based Land Use Planning. *The Canadian Journal of Native Studies* 2014;34(1):129-150
- 10 #1031 - O'Faircheallaigh, Ciaran. Women's absence, women's power: indigenous women and negotiations with mining companies in Australia and Canada. *Ethnic & Racial Studies* 11// 2013;36(11):1789-1807
- 11 #1149 - Parlee, Brenda; Berkes, Fikret. Health of the Land, Health of the People: A Case Study on Gwich'in Berry Harvesting in Northern Canada. *EcoHealth* 06// 2005;2(2):127-137

- 12 #61 - Scott-Enns, Itoah. Elexeta Edets'eeda "We Work Together": Strengthening Social Cohesion. *The Canadian Journal of Native Studies* 2015;35(1):101-119
- 13 #1254 - Mills, Suzanne; McCreary, Tyler. Culture And Power In The Workplace. *Journal of Aboriginal Economic Development //Fall2006* 2006;5(1):40-50
- 14 #964 - LaBelle, Stephanie. Aboriginal Women, Mining Negotiations and Project Development. *Journal of Aboriginal Economic Development //Fall2015* 2015;9(2):9-15
- 15 MiHR (Mining Industry Human Resources Council). 2013. Canadian Mining Industry Employment, Hiring Requirements and Available Talent 10-year. Accessed August 25, 2015 http://www.mihr.ca/en/resources/MiHR_10_Year_Outlook_2013.pdf
- 16 Hipwell, William, Katy Mamen, Viviane Weitzner and and Gail Whiteman. 2002. Aboriginal Peoples and Mining in Canada: Consultation, Participation and Prospects for Change. Working Discussion Paper. January. Ottawa: North-South Institute. Accessed August 28, 2015 <http://caid.ca/MiningCons2002.pdf>
- 17 WIM (Women in Mining Canada). 2010. Final Report, February. Accessed September 1, 2015 http://0101.nccdn.net/1_5/1f2/13b/0cb/RAMP-UP-Report.pdf.
- 18 The Mining Association of Canada Mining Facts. 2015. Accessed August 31, 2015 <http://mining.ca/resources/mining-facts>
- 19 Noyes J & Lewin S. Chapter 5: Extracting qualitative evidence. In: Noyes J, Booth A, Hannes K, Harden A, Harris J, Lewin S, Lockwood C (editors), *Supplementary Guidance for Inclusion of Qualitative Research in Cochrane Systematic Reviews of Interventions*. Version 1 (updated August 2011). Cochrane Collaboration Qualitative Methods Group, 2011.

APPENDICES

I. Data Extraction Table

Data extraction field	Information extracted
<i>Context and participants</i>	Detailed information is extracted on the study setting, participants, the intervention delivered etc. This may aid later interpretation and synthesis by helping to retain the context in which the data are embedded. For example, it may be important to know whether a particular issue emerged from data collection with nurses or doctors or whether there was variation in views across settings, such as respondents interviewed in care homes and those interviewed at home. If context is lost during the synthesis process, the findings of the primary studies may be misinterpreted. To avoid this, referral back to the original papers may be used alongside extracted data during the analysis process.
<i>Study design and methods used</i>	This includes the methodological approach taken by the study; the specific data collection and analysis methods utilized; and any theoretical models used to interpret or contextualize the findings. The data extraction approach, and therefore the data extraction template, may need to be flexible so as to accommodate data collected within different qualitative methodologies (ethnography, phenomenology etc.) and using different methods (interview, focus groups, observations, document analysis etc.).
<i>Findings</i> <i>Question 1</i>	This covers the key themes or concepts identified in the primary studies. In extracting these findings, some review authors attempt to distinguish between first and second order interpretations. In other words, take all text labelled as "findings" or "results" and put verbatim into NVivo
<i>Quality of the study</i>	See below. Should be coded as “HIGH” or “LOW”

II. Guidelines for Assessing study quality

There are a variety of evaluation techniques that authors might have included in their original reports, that facilitate assessment by a reviewer and that are applicable to a broad range of different approaches in qualitative research. However, it should be stated that some of the techniques listed only apply for a specified set of qualitative research designs.

- **Assessing Credibility**: *Credibility* evaluates whether or not the representation of data fits the views of the participants studied, whether the findings hold true.
Evaluation techniques include: having outside auditors or participants validate findings (member checks), peer debriefing, attention to negative cases, independent analysis of data by more than one researcher, verbatim quotes, persistent observation etc.
- **Assessing Transferability**: *Transferability* evaluates whether research findings are transferable to other specific settings.
Evaluation techniques include: providing details of the study participants to enable readers to evaluate for which target groups the study provides valuable information, providing contextual background information, demographics, the provision of thick description about both the sending and the receiving context etc.
- **Assessing Dependability**: *Dependability* evaluates whether the process of research is logical, traceable and clearly documented, particularly on the methods chosen and the decisions made by the researchers.
Evaluation techniques include: peer review, debriefing, audit trails, triangulation in the context of the use of different methodological approaches to look at the topic of research, reflexivity to keep a self-critical account of the research process, calculation of inter-rater agreements etc.
- **Assessing Confirmability**: *Confirmability* evaluates the extent to which findings are qualitatively confirmable through the analysis being grounded in the data and through examination of the audit trail.
Evaluation techniques include: assessing the effects of the researcher during all steps of the research process, reflexivity, providing background information on the researcher's background, education, perspective, school of thought etc.

III. Research Questions Tabulated

Review Question	What are the concerns of Aboriginal women with respect to resource extraction?
Population	Aboriginal women
Interest	Perceptions on resource extraction
Context	Canada

Review Question	To what extent do the corporate social responsibility (CSR) programs of companies or formal processes (EA, SIA etc) in the mining sector address the concerns of Aboriginal women?
Population	Aboriginal women
Interest	Views on CSR, EA, SIA
Context	Environmental assessments and social impact agreements in Canada

Review Question	What do Aboriginal women perceive as the criteria for the resource extraction industry to establish a social license to operate?
Population	Aboriginal women
Interest	Views on criteria for social license
Context	Resource extraction in Canada

IV. Summary of Study Qualities

Study #	Study Context	Study Objective	Study Participants	Study Design	Question 1	Question 2	Question 3
1	Drawn from multiple places across Canada	Explore the perspectives of Indigenous women about water, roles of women, and impact of changes in water quality	11 First Nations, Inuit, and Metis Grandmothers	Open-ended unstructured interviews, analyzed thematically	Environmental degradation w/spiritual cultural impacts	Divergent worldviews frustrating process	No data
2	Dene from N'Dilo, Dettah in Yukon	Analyze changing traditional activities by Dene on land	50 residents of Dene First Nation in N'Dilo (8 men, 21 women) and Dettah (9 men, 12 women)	Questionnaire, open-ended interview questions with thematic analysis	Environmental degradation w/cultural, material impacts. Waged labour impact reduced time for gathering.	No data	No data
3	Northern Aboriginal community displaced by Hydroelectric development	Assessing impact of resource development on family violence in community	11 individuals (10 Aboriginal) involved in family violence intervention	Semi-structured interviews with thematic analysis	Cultural value of land. Increased access to isolated communities mixed impact.	No data	No data
4	Innu and Inuit in Voisey's Bay mine, Labrador	Assessing women's participation in EA process and employment at mine	36 (12 women (3 Innu, 6 Inuit), 24 men) semi-structured interviews with workers at mine, 39 open-ended interviews with key informants for EA	Case study, semi-structured and open-ended interviews comparing IBA provisions to worker perceptions	Access to resource jobs unequal b/t men and women.	Ensure IBAs structured to bring equal economic benefit to men and women	No data
5	Youth of Tâichô First Nation, in Behchokô in NWT	Assess impact of diamond mining on youth of Tâichô First Nation	Mix of male and female, aboriginal and non-aboriginal. Teachers, elders, healthcare workers, community members. 24 Focus group members, 21 interview members	Ethnography, using participant observation, focus groups, and semi-structured interviews	Access to resource jobs unequal b/t men and women. Waged labour shift work impacting negatively on substance abuse, family stability. Resource development improved economic conditions. Shift work altering gender roles in families.	IBA as way to provide resources for schools	No data
6	Moose Cree First Nation, Southern James Bay Ontario. Recently constructed Victor diamond mine 90km to west.	Examine perspectives of band members on impacts of new development of Victor diamond mine	17 band members (former chiefs and grand chiefs, executive directors of community agencies, program directors, business persons, spiritual leaders and elders, property managers, direct-service practitioners, and	Key informant interviews, using grounded theory analysis of interview data	Waged labour mixed impacts, reducing time to gather healthy food from land but more money to buy healthy food; negatively impacting on addictions. Shift work disrupting families. Access	Negotiated agreements bring jobs with mixed impacts; agreements need to establish programs to ameliorate negative impacts; IBAs as way to improve life for youth	No data

			an employee of the Victor diamond mine)		to outside world mixed impact.		
7	Dene from N'Dilo and Dettah in NWT, and Inuit from Nain and Hopedale in Nunatsiavut	Develop insights into health risks within communities	107 people participated (50 people in N'Dilo/Dettah and 57 people in Nain/Hopedale). Slightly more than half of the participants (55% or 59 people) were female (33 people or 66% in N'Dilo/Dettah and 26 people or 46% in Nain/Hopedale)	Questionnaire and interviews, quantitative analysis of questionnaire responses and thematic analysis of interviews	Environmental degradation reducing traditional activities on land	No data	No data
8	Inuvialuit in Inuvik, NWT. Oil and gas development	Examine perceptions of oil and gas industry of Inuvialuit	No specific number presented (Inuvialuit elders; entrepreneurs; public servants; employees of the private sector; managers of oil companies; unemployed persons; housewives; the mayor of Inuvik; and the first aboriginal woman leader in Canada)	Interviews	Environmental degradation negatively impacting harvesting; waged labour improving economic conditions	Importance of limiting impact on environment through claim deals with industry, meaningful consultation hearings allowing people to speak	No data
9	Fort Albany First Nation, Northern Ontario. Potential further hydro-electric development on rivers, increasing mine development	Identification of community values for land-use planning	14 FAFN community members interviewed (chief, councilors, elders). Participant observation of council members, health staff, grade 8 class.	Semi-directed interviews, participant observation	Environmental degradation on drinking water and traditional harvested foods, dams frustrating travel on river; access to outside world mixed impacts; waged labour contributing to social problems through access to drugs and alcohol.	Economic benefits through direct payments, indirect through preferential private sector contracts and jobs	No data
10	Voisey's Bay nickel mine, Labrador	Explore role of Indigenous women in mining negotiations	1 (female lead negotiator for Inuit)	Interview	No data	Inclusion of Indigenous women in formal structures crucial to success of Indigenous employment initiatives, ensure economic opportunity equal between genders	No data
11	Gwich'in of Fort McPherson, Northwest Territories.	Examining Gwich'in women's perceptions of berry harvesting	75 Gwich'in women	Open-ended interviews, participatory mapping	Identified many facets of value from land (material, cultural, spiritual) but expressed little concern about resource-development	Gwich'in Comprehensive Land Claim Agreement should protect berry patches	No data

					activities negatively impacting these		
12	Tlicho (Dene) from Behchoko and Yellowknife. 4 diamond mines operating on territory.	Impact of mining on Tlicho women	7 Tlicho women	Focus groups, thematic analyzing	Negative impacts of waged labour, worsening substance abuse problems; shift work altering gender roles and presenting challenges for relationships	Need for improved services to ameliorate negative social impacts of waged labour	No data
13	Forest processing firms in northern Canadian prairies	Assessing Aboriginal inclusion in workplace	12 women self-identified as Cree, Dene or Metis	Semi-structured interviews, discourse analysis	No data	Importance for inclusion of Aboriginal women in workplace decisions for workplace empowerment; Worries of hiring of Aboriginal workers as window-dressing for IBA purposes	No data
14	Not specified beyond "northern Canada"	Assess the role and contributions of Aboriginal women in mining negotiations and project development	6 participants (5 Aboriginal, 4 Aboriginal women)	Unstructured interviews, thematic analysis	Environmental degradation, waged labour mixed impacts	Development as a foregone conclusion, IBAs as way to gain some measure of control; divergent views between Indigenous and Western made processes complicated; agreements need to deal with social and environmental impacts; need for IBAs to reflect reality of individual community rather than standardized	No data