

Environmental Perceptions among Indo-Canadian, Sri Lankan Canadian and Filipino-
Canadian Communities in Surrey, British Columbia

by

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Abstract

The purpose of this thesis is to understand the perspectives of the environment among Indo-Canadian, Sri Lankan-Canadian and Filipino-Canadian immigrant communities who reside in Surrey, British Columbia. *Environmental perception* has commonly been defined as awareness of, or feelings about, the environment, or “the way in which an individual perceives the *environment*; the process of evaluating and storing information received about the *environment*” (Oxford Reference, 2019). By identifying key stakeholders within these communities, I explored perspectives of environmentalism and concerns for the improvement of the health of the environment, through a series of open-ended semi-structured interviews. The participants in this research demonstrated a willingness to improve and protect the quality of the natural environment. In addition, they acknowledged their lack of awareness regarding consequences of environmentally harmful activities that were occurring during their childhood, adolescence and early adulthood. The findings help identify the issues that prevent inclusive environmentalism in Surrey in these targeted immigrant populations. They could also assist policy makers and environmental programs to implement more effective approaches for raising awareness and promoting more environmentalism among the three diasporas.

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Chapter 1: Introduction

Surrey BC is Canada's third fastest-growing city which welcomes 1,000 new residents each month (Bell, 2015, para. 7). Surrey is a prime example of an urban centre where cultural diversity has become a predominant feature of the present-day cityscape. At the time of writing, immigrants make up 40.5% of Surrey's population and are shaping the growth of the city (City of Surrey, 2014). Immigrant communities in Surrey could play an important role in bringing about environmental awareness and contributing to the City's sustainability. The City has created many strategic goals, initiatives and practices to guide the residents towards sustainability (City of Surrey, 2019). In addition, non-profit environmental organizations are independently operating throughout Surrey such as A Rocha Canada (<https://arocha.ca/>), a Christian Conservation organization that provides a better understanding of the sustainable management of natural resources and ecosystems to residents.

Despite environmental awareness and programs that are facilitated by many groups in Surrey, the effectiveness of their messages and adoption of pro-environmental behaviours among immigrant communities in Surrey may be hindered by unknown factors. These communities may face barriers that prevent them from engaging in environmentalism. In addition, facilitators and policymakers may not be fully capturing immigrants' perceptions of the environment, nor do they understand their values. Such an understanding could help local governments and other environmental organizations adapt their approaches for promoting environmental protection and more sustainable lifestyle choices throughout Surrey.

For instance, immigrants may face personal challenges that arise before they can consider environmentalism. Securing proper shelter, food, and job security when they move to Canada may hinder their ability to embrace environmentalism. As new immigrants try to overcome these

difficulties, they may not prioritize sustainability and the environment over more immediate life concerns. In addition, environmentalism can be perceived in many different ways depending on how individuals frame the term. Each culture has different ways of interpreting the concept of environmentalism, and some immigrant communities may not be familiar with the expression, “global warming,” or understand its full implications (Schuler, 2014, p. 4). In contrast, some immigrant communities may have been so exposed to environmental destruction in their home countries that it has become a normal reality in their day-to-day lives, making them feel as though they have little or no control.

Moreover, we can no longer ignore the fact that cultures also shape climates (Schuler, 2014). It is important to understand and appreciate the cultural beliefs, practices and norms of immigrant communities so we can have a better understanding of how their behaviors are embedded within the “physical and social contexts of everyday life” (Stephenson et al., 2015, p. 5). By having a better understanding of cultural beliefs, practices and norms, immigrant communities such as the Indo-Canadian, Sri Lankan Canadian and Filipino Canadian communities may be reached through an understanding of their cultural-spiritual values when promoting pro-environmental practices or environmentalism.

An exploration of the main religions that are practiced by the Indo-Canadian, Sri Lankan Canadian and Filipino Canadian groups—predominantly Sikhism, Buddhism and Christianity—shows that many of their spiritual beliefs encompass environmentalism to a certain degree. Schuler (2014) argues that “cultural-spiritual values may induce conservation and sustainable use of resources” (2014, p. 28). Furthermore, he argues that past relationships between individual cultural practices and the environment should also be considered (2014) when trying to understand the environmental perspectives of these immigrant groups.

The immigration processes associated with globalization have affected Canadian cities in extraordinary ways (Ameyaw, 2000). “New” cultural influences have led to some changes in urban form, but more significantly, they have created distinct social characters of “difference” (2000). As administrators of municipal policy and programs, city planners are beginning to realize that they have an important role to play in understanding, anticipating and managing the needs and issues that emerge out of these diverse urban environments (2000). In addition, as immigration from “non-European” source countries continue to fuel Canada’s population growth, planners find themselves increasingly challenged not only to understand diverse cultures, but to also “recognize and balance the various needs of those who inhabit the post-modern, multicultural city” (Mitchell, 2004, p. 645).

While Surrey tries to grow its capacity to receive and integrate the large and ever-growing population of newcomers to Canada, I want to try to strengthen and encourage environmentalism among immigrant communities living in Surrey by identifying and understanding the cultural barriers that may hinder its adoption. In addition, by understanding core cultural values that are embedded in the social fabric of these three immigrant communities, I want to be able to use this information to help facilitators and policymakers create a more targeted approach that will further enhance environmentalism and sustainable choices amongst immigrant communities living in Surrey. According to Sahota, Sajeve, Lemon and Brar (2016), “many of today’s interconnected environmental and social problems are the unintended, unforeseen consequences of a failure to recognize, adequately appreciate, or effectively respond to the reciprocal character of humankind’s relationship with nature” (p. 42). The findings of this study may contribute to the efforts of policymakers to help build a progressive, sustainable Surrey that respects and celebrates multiculturalism and diversity.

By gathering data through open-ended semi-structured interviews, I examined human-environmental interactions through the perspectives of three immigrant communities in Surrey—Indo-Canadian, Sri Lankan and Filipino. According to the 2011 census, the second most common language was Punjabi, spoken by 20%, followed by Tagalog at 3%. As these two communities make up the largest immigrant communities in Surrey, and represent a big proportion of the growing population, I wanted to focus my research on their diaspora. I also have strong ties with the Sri Lankan community in Surrey and wanted to include their perspective to honour my own heritage. I was particularly interested in exploring: what cultural values motivate Indo-Canadian, Sri Lankan and Filipino communities to adopt environmentalism; their relationship to the natural world; their emotional reactions about environment degradation; what habits they have brought from their home communities; and their background experiences.

From the interviews, my intention was to reveal the distinct qualities of these three communities in Surrey and understand how these factors might serve to increase their environmentalism. I wanted to understand the multidimensional aspects of their environmental concerns by exploring social, individual and institutional factors that make up the overall environmental perceptions among the three communities.

My research questions are the following:

How is the environment experienced through the perspectives of the Indo Canadian, Sri Lankan Canadian and Filipino communities residing in BC?

What are some ways we can eliminate barriers to practicing pro-environmental behaviours amongst the Indo-Canadian, Sri Lankan Canadian and Filipino Canadian Communities residing in Surrey BC?

How can we enhance the connection to the natural environment and enhance sustainable lifestyles amongst the Indo-Canadian, Sri Lankan Canadian and Filipino Canadian Communities residing in Surrey BC?

Background

This section serves to help understand socio-cultural factors that shape individual perceptions of the environment and pro-environmental behaviours of the three immigrant communities. By examining pro-environmental teachings featured in the religions they follow, the environmental factors in their mother countries and practices that make up their social fabric, we can have a better understanding of how the environment is experienced among these three diasporas.

Indo-Canadian Diaspora

Indian immigrants have migrated and settled in Canada since 1897 and make up the second largest immigrant group in Canada (Jutlla, 2013). Indo-Canadians have diverse religious backgrounds. At 33%, Sikhs are the largest group among Indo-Canadians (Stephen, 2013).

Most Indo-Canadians who reside in Surrey follow the Sikh religion (City of Surrey, 2019). An understanding of the fundamental teachings that make up Sikhism gives us insights into the values that the Sikh Indo-Canadian community practice in their day to day lives. The word *Sikh* implies a seeker of new knowledge (a learner, a disciple of the Guru) who is on a journey to discover and realize the *Timeless* (Sahota et al., 2016, p. 29). In other words, a journey takes the Sikh from the *ego* (the body mind) to the pure timeless form, which Sikhs refer to as the *Khalsa*. For the Sikh faith, attachment to *maya*, which is seen as a condition of the mind that is quite often unsatisfied and displeased, is the root cause of all suffering in life. Moreover, *maya*, is always on a quest of accumulating material things, being intent on control and “never at

peace with itself” (p. 29). According to the Sikh beliefs, a love of and concern for the environment plays an integral part of an integrated approach to life and nature among the Sikh community. Sahota et al. (2016) confirms that “Sikh teachings, combined with the current approaches to sustainability, can lead to more resilient pathways to sustainable development” (p. 32). When one disconnects oneself from the wants and needs of the ego, there is less accumulation of material items, resulting in the prevention of depleting natural resources. In Sikhism *anand* is a disassociation of the spirit from the ego, the recognition of “God as an integral aspect of all creation” (Sahota et al., 2016, p. 28). The seventh Guru, Guru Har Rai, emphasized the importance of recognizing and portraying one’s true identity without falsehood and the importance of taking care of the environment (Sahota et al., 2016, p. 28).

Many types of Indo-Canadian families exist, some of which are completely integrated into Canadian society, others make efforts to combine elements of their Indian heritage with aspects of Canadian life, while some want to bring about a core family structure similar to that in India (Basran, 1993, p. 344). When it comes to family values, many Indo-Canadians “enjoy social relations and programs that emphasize the traditional Indian cultural value of ‘family intimacy’ (Jutla, 2013 p. 234). Indian diaspora elders as grandparents are “active participants in their communities and families and have many suggestions to achieve these goals” (p. 233).

The majority of Indo-Canadian families who are Sikh, have immigrated from the State of Punjab, India. The Indo-Canadian participants mentioned their upbringing in an agricultural environment and explained their “living was based on agriculture, and [they] worked with nature” (Khair1). (Interviewees have been coded as explained in Appendix 2). Some participants created their own linkages with nature to agriculture suggesting that “every time you harvest the crop and you sow a new crop and you deal with the nature” (Khair1). In Punjab “agricultural

livelihoods, environmental, economic and personal well-being” work hand in hand (Fan, 2017, p. 6). With the intention of boosting the drive for agricultural self-sufficiency, the Indian government initiated the Green Revolution. The State of Punjab was chosen for the Green Revolution in the 1960s due to its favorable agricultural conditions, but despite the government-sponsored intentions to create agricultural self-sufficiency, the cultivation of cash crops have instead made farmers unable to withstand the global market prices, while depleting the natural resources of areas “whose environments are not suitable for those cash crops” (p. 5). By 1983-85, 95% of the land in Punjab under food grain cultivation was under high-yield variety (HYV) seeds, compared to 54% in all of India (p. 6). Furthermore, there were damaging on surrounding ground water resources in the state of Punjab due to the unsustainable agricultural practices. The demand for irrigation went up exponentially and this demand was not met in a sustainable manner (2017).

Some Indo-Canadian participants shared stories of the environmental destruction they witnessed as a child, but were unsure about what to make of it. They stated:

because of the lack of rules and enforcement, a province the number one economy is farming, in Punjab, when the wheat crop used to come, they used to cut the top part and burn the rest 20 acres, as a child you question if this is right or wrong. (Brar1).

Commercial agriculture practices have led to environmental degradation, with negative impacts to farmers’ livelihoods (Fan, 2017). The “crop failure, input misuse, and the incompatibility of crop cycles with local rainfall patterns were leading causes of farmer suicides” (2017). To cope with increased input, demand and scarcity, farmers had to resort to unsustainable low cost methods due to a lack of funds (2017). This caused mainstream agricultural development in India to focus on ecologically unsustainable practices that only

produced short-term returns (2017). Farmers are now opting for organic farms, though transitioning to organic farming practices has been difficult without government subsidies for reducing chemical fertilizers. Motivated by growing international demand, the Indian government encouraged a shift toward organic practices. In 2004, India introduced the National Project on Organic Farming, and within 10 years the amount of certified organic land (land free of chemical residue) increased from 42,000 hectares to 4.72 million hectares (2017). In about 40 villages across Punjab, organizations such as the Kheti Virasat Mission and the All India Pingalwara Charitable Society have promoted chemical-free farming and taught local women to grow organic kitchen gardens. Although it takes more time to compost manure and collect buffalo dung, the residents of Punjab are becoming more open to sustainable farming practices (2017).

Philippine Diaspora

The Philippines is a largely Christian Asian country (92% of the population) and the third largest Catholic country in the world (Boquet, 2017). Tagalog is the language of Manila and is the national Filipino language; all the participants that I interviewed spoke Tagalog along with English as the second ‘colonial’ language. The majority of Filipino people do not have stable livelihoods due to unequal and unpredictable incomes, regardless of whether they “live in the countryside, the coastal areas, or in cities” (p. 811).

Although the Philippines is considered a mega-biodiverse country (2017), it is also perceived as a country full of ecological disaster where biodiversity is on the verge of collapse after “decades of environmental neglect” (p. 832). The Republic of the Philippines is one of the most exposed countries in the world to many natural disasters such as earthquakes, volcanic eruptions, tsunamis, lava flows, typhoons, flooding, landslides and sea level rise, and is also

considered a “natural disaster hot spot” (p. 781) due to a lack of coping and adaptive capacities. The Philippines archipelago is not only prone to major disasters, but also suffers from severe human-caused environmental degradation that is aggravated by a high annual population growth rate. Some environmental damage occurs in the marine realm, including overfishing, coral and mangrove damage along with the growing problem of floating plastics ingested by marine animals (2017).

Despite the establishment of protected areas and natural parks, adapting to climate change and mitigating the damage remains difficult and requires building up better institutional resilience (2017). Environmental problems are accelerated by the pressures of a large, fast-growing and impoverished population, which is further aggravated by climatic change. Moreover, environmental degradation is “leading to adverse economic consequences that are pervasive and profound” (p. 780).

The Philippines also experiences large numbers of natural and man-made disasters due to land-use changes. Deforestation has been rapid and widespread in the Philippines (2017) and the demographic growth of the Philippines has led to intensified hillside farming and severe impacts on land-use patterns, vegetation cover, soil nutrient status and erosion. Previously forested spaces are increasingly used to provide subsistence food and cash-crop cultivation (p. 800).

To cope with the destruction of their homes and crops after an environmental disaster, Filipino communities employ self-care methods while trying to reintroduce normalcy back into their lives and their farming activities (p. 786). Furthermore, government and non-governmental organizations support the public by supplying relief goods and providing resettlement areas for communities (p. 786).

In addition, Filipinos of all ethnic origins have developed cultural coping practices to come to terms with living under the constant threat of natural and man-made disasters. For some Filipinos, God is punishing people for their sins by unleashing natural forces to which resisting is useless (2017). Others take a more passive approach while embracing the concept of the *Bahala-na* response, meaning *leave it to God, what will be will be*. This helps to accept circumstances of dangerous situations, and acknowledges the inability for control due to a lack of capacity, time or support (p. 812). The term *Bahala-na* can also be seen as a demonstration of determination and willingness to take risks, or a way to embolden oneself, with perseverance.

Another core value that Filipinos' share is *Bayanihan*, meaning a feeling of shared community. This embodies three main aspects of *Bayanihan*: *pakikisama* (getting along well with people), *damayan* (compassion), and *pakikipagkapwa* (reliance on others). Together, these three aspects help people collectively cope with disaster. Even with limited resources, Filipinos embody the spirit of *pagpupunyagi* meaning “perseverance and resourcefulness” (p. 813). They have the strength and courage to help one another rebuild their homes as quickly as possible, and rely closely on their tight knit community of neighbours and family rather than the Government. The Filipino community demonstrates strong social capital, which helps increase resilience in times of chaos. As Bouquet (2017) explains, “social capital in poor communities may be what allows people to be resilient in times of environmental disaster” (p. 813). This is particularly true for the Filipino community as they often continue to face calamity with a positive attitude, humour and a smile (2017). This positive approach has become another coping practice for the Filipino people, and allows them to quickly bypass discomfort and move towards acceptance.

There have been governmental initiatives that have helped with environmental disasters over recent years. In 2009, the Philippine government passed two laws—a Climate Change Law

and a Disaster Risk Management Law which legislated significant improvements towards “a risk reduction and resilience approach” (p. 816). The country has also implemented a National Greening program (NGP) that carries out a small-scale replanting project. This practice has slowed down the rate of deforestation in recent years. Despite these efforts, law enforcement tends to be weak, and as a result, local communities continue to live in hazardous areas and as such the Filipino communities have continued to rely on community strength and social bonds to deal with the environmental destruction that has impacted their lives.

Sri Lankan Diaspora

Sri Lanka has a population of just over 19 million people and “enjoys higher regional averages in health, education and economic indicators” (Nieusma, 2007, p. 34). Sri Lanka’s demographic makeup is approximately 74% Sinhalese, 18% Tamil, and 7% Sri Lankan Moors, which overlaps considerably with its religious makeup: 70% Buddhist, 15% Hindu, 10% Roman Catholic and 7.5% Muslim (p. 34). Despite relatively strong economic indicators, Sri Lanka is considered a “lower middle-class income” country and large gaps occur across the country’s region and social groups (p. 695). In its aim to boost economic growth through production of its corporations, including “tea plantations, intensive monocultures for biodiesel, offshore platforms for oil extraction, and new metal mines [that] are examples of commodity frontiers” (p. 693), many conflicts have arisen. The construction of ports and other facilities have mainly been directed to improve the country’s import-export capacity and attract Foreign Direct Investment (FDIs) rather than directly improving the livelihoods of local communities (p. 702).

Changes have been seen in the consumption patterns of Sri Lanka’s middle-class, which have oriented towards the accumulation of material goods such as “luxury houses, vehicles, [and] IT technologies” (p. 698), resulting in an increase in extractive activities like the dramatic

growth in the extraction of building and other non-metallic materials (p. 698). Furthermore, as “the social metabolism of Sri Lanka increased together with the GDP,” the domestic extraction of biomass almost doubled from the 1970s to 2015 (p. 698). As a result, biomass and non-metallic minerals (for the building industry or fertilizers) take the highest share of extraction (p. 700). Damage to the environment and to local communities have also been the result of foreign and Sri Lankan investors utilizing the country’s natural resources in an unsustainable manner with the sole intention to make profits (p. 705).

Today, plantations for food and cash crops are expanding in the forests with the extraction of natural resources for the construction sector (p. 701). To a certain extent, an internal ecological-economic colonialism (i.e., internal ecologically unequal trade in terms of material flows) is taking place. The main impacts from the controversial projects are loss of land and biodiversity, rapid depletion of forest cover and hydrological and environmental impacts (p. 702). Land was one of the central issues of the civil war and today it is still at the center of dispossession episodes that occur as a consequence of development projects (p. 702).

Camisani’s (2018) study found the following:

Deforestation is one of the most important impacts, often connected to other visible or potential ones such as biodiversity loss, soil erosion, floods, loss of landscape and aesthetic degradation, drought and loss of traditional practices such as the use of plants for medical purposes. (p. 703)

The significant presence of local Environmental Justice Organizations (EJOs) together with farmers and fishermen grassroots organizations suggests that alliances have formed between environmental organizations and impacted communities. Networks between protesters and international organizations are less common, though in nine cases, international grassroots

organizations in the environmental justice movement, such as Friends of the Earth International, Environmental Law Alliance and the Asian Peasant Coalition (p. 704) have become interconnected. Corporate Social Responsibility (CSR) is exhibited by multinational enterprises which are “influenced by a wide range of both internal and external factors” (Beddewela & Fairbrass, 2016, p. 504) while the state exerts considerable power and control over businesses. In Sri Lanka, CSR can be an important legitimization tool through which multinational enterprises can gain recognition (and support) from the state and other institutions (p. 504).

Beddewela & Fairbrass’s (2016) study found the following:

Sri Lanka has a long history of corporate philanthropy, notably led by individual values and actions rather than formal corporate CSR practices. The voluntary adoption of [CSR] has steadily grown within the corporate sector in recent years. Some of Sri Lanka’s leading companies have become signatories to the United Nations Global Compact (UNGC) principles. Industry-wide initiatives such as ‘garments without guilt’ [have been] promoted by Sri Lanka apparel. (p. 504)

My interviewees from the Sri Lankan community were mainly of Sinhalese Buddhist and Roman Catholic descent. In Buddhism, one of the fundamental values is around sustainability. For instance, when considering sustainability as a way of “ensuring the conditions for “acceptable” welfare levels of all people” (Daniels, 2014, p. 40), extending across all temporal and spatial dimensions, Buddhism looks at consumption, production and lifestyle, and urges the need to change the “nature of consumption” (p. 52). In addition, personal “choices that reflect non-violence, moderation of demands, minimum intervention and disruption with regard to the natural world are quintessential features of the Buddhist-inspired sustainable economy” (p. 57).

Terminology

The term *Indo-Canadian (IC)* applies to people who were born in India and immigrated to Canada and who consider themselves of Indian origin.

The term *Sri Lankan-Canadian (SL)* refers to people who were born in Sri Lanka and immigrated to Canada and who consider themselves of Sri Lankan origin.

The term *Filipino-Canadian (Ph)* describes people who were born in the Philippines and immigrated to Canada and who consider themselves of Filipino origin.

Pro-environmental behavior is defined as “behavior that consciously seeks to minimize the negative impact of one’s actions on the natural and built world” (Newark & Park, 2010, p. 56).

Environmental Perception is defined as awareness of, or feelings about, the environment, the way in which an individual perceives the *environment* and the process of evaluating and storing information received about the *environment* (Oxford Reference, 2019).

Environmentalism has many different definitions. The Merriam-Webster dictionary defines it as “advocacy of the preservation, restoration, or improvement of the natural environment” (Merriam-Webster, 2019, para. 2). Kahraman and Baig define environmentalism as “a broad philosophy and social movement centered on a concern for the conservation and improvement of the environment” (Baig, et. Al, 2010, p. vii). Gottlieb describes environmentalism as a place where “ecological and social issues were necessarily joined” (2001, p viii). He further explains that traditional environmental history had identified two types of approaches: preservation of (nonhuman) wildness and the conservation and efficient management of (socially utilized) resources (2001). He further describes environmentalism as a way to tackle urban and industrial issues related to environmental degradation such as mode of

transportation, technology choice, land use or hazardous material use, along with the problems associate with pollution such as waste by-products, disposal etc. (2001).

For the purposes of my research, I define environmentalism as a different way of thinking about the planet in which people care as much for the physical world they inhabit as they do for human society. It recognizes that human and ecological systems are interdependent and that both must simultaneously be sustained. Solutions for environmental issues emphasize harmony with one another and the sustaining of all life. I believe that increasing both an ethic (environmentalism) and encouraging a behaviour (pro-environmentalism) are necessary.

Chapter 2: Literature Review

A literature review is an essential component for research as it provides insight into important factors that influence perspectives. For this project, the research provides insight on environmentalism and the experiences and relationships immigrant communities living in Surrey have with the natural environment. According to Kollmuss and Agyeman (2010), external, infrastructural and economic factors can enable or hinder people to act environmentally. An emotional connection to the natural environment may exist that can foster “environmental awareness and environmental concern” (p. 250). The literature review below looks at: the challenges faced by the three diasporas; the importance of framing; cultural values; the human dimensions of climate change; community-based social marketing; Canadian environmental concerns; connections to natural behaviours and health; and some of the drivers and barriers affecting environmental behaviours.

Challenges faced by Immigrants in Surrey BC

In order to understand the perspectives around environmentalism among Immigrant communities, the literature suggests that we must look at factors that may limit the opportunities for people to engage in environmentalism. Markowitz, Goldberg, Ashton and Lee (2012) demonstrated that people who committed to perform pro-environmental behaviors are “relatively more affluent” (p. 88). People who adopt environmentalism and are aware of climate change are those who are financially secure and do not face challenges with shelter, food and job security (p. 88). Furthermore, those who have higher living standards are less likely to be concerned with a lack of economic opportunities, are more pro-socially oriented and can therefore look beyond their own basic needs (p. 88). In this case, new immigrants moving to Canada may not be as pro-environmentally aware or adopt environmentalism as quickly as established resident middle-

class Canadians, due to the challenges of obtaining food, shelter and job security. Immigrants who move to Canada face many challenges, including language barriers, lack of affordable housing and lack of employment opportunities (Teixeira, 2014). These challenges may limit the opportunity to participate in more environmentalism. In addition, these challenges can be a major factor in prioritizing the adoption of pro-environmental behaviours. The challenges that immigrants face living in Canada may take precedence over a greater concern for environmentalism.

Teixeira states that “due to a limited supply of affordable rental housing and high housing costs” (2014, p. 168), Surrey is a challenging region for newcomers in which to settle. He explains that suburbs like Surrey are “poorly equipped, in both physical and social terms” (p. 169) to serve their rapidly growing and increasingly diversifying population. Immigrants and refugees, including members of visible minorities, experience higher levels of “core need” (the inability to afford adequate, suitable housing) (p. 170). The problem of housing affordability has become the major challenge facing recent immigrants and refugees in Surrey, especially those with low incomes and large family sizes (p. 175). Immigrants work very hard and try to find solutions through “family sacrifices” (p. 183). For instance, many work two jobs, share housing to save money, rent low-quality housing and live frugally (p.182). Immigrants also are reported to have faced great challenges while trying to “obtain secure, well-paid jobs in Canada” (p. 182). If initial living conditions, basic needs and other additional challenges faced by new immigrants are addressed, they may have more opportunity to engage with the natural environment in which they live and become more involved in its protection through conservation and sustainable practices. Furthermore, if they overcome the initial hurdles of survival by securing adequate

housing and job security, they may have the opportunity to become more aware of their impact on the environment and subsequently adopt pro-environmental behaviours.

Framing pro-environmental action across many different domains

Effectively breaking down key concepts and messaging then communicating them in ways that encourage people to care may improve diverse public understanding of environmentalism. For instance, a lack of participation in environmental programs or initiatives could be a result of messaging that fails to capture the attention or attract people with different ethnic backgrounds. Furthermore, such messaging may not be framed in a comprehensible way or may fail to connect to the values of recipients. This is fundamental for understanding how to effectively communicate messaging to immigrant communities living in Surrey.

In a study on Toronto, Teelucksingh, Poland, Buse and Hasdell (2016) emphasize the importance of the message framing process in relation to energy issues and the needs of marginalized communities. If the energy needs of these populations are not understood in terms of the structural challenges they face, then they may not be successful in influencing environmentalism to these specific groups, especially since the environment is understood to be socially constructed (2016). The different ways in which people view the world must be considered. According to Bales, Sweetland and Vormert (2015) from the Frameworks Institute, common sense is determined by experience and knowledge acquired over time (2015). Since we all have different backgrounds, we all have different notions of common sense (2015).

When considering an immigrant's view of the environment, engagement and message delivery methods should be further explored. According to Ensink and Sauer (2003) "the concept of 'frame' is useful for the description of the way our knowledge is organized and how we use our knowledge in understanding" (p. 12). The way in which we structure our message impacts

how people perceive the message. In this way, framing can play a large role in developing a community's perception of the environment, and may affect engagement of environmentalism. As Ensink and Sauer explain, "our general human cognitive capacities appear to include the ability (and the need) to set up frames, or structured understandings of the way aspects of the world function" (p. 6)

When receiving information, people tend to rely on a set of internalized beliefs and values to interpret meaning. Therefore, different cultures may have varied perceptions and understanding of environmentalism due to the way in which the messaging is framed. In addition, Ensink and Sauer point out that "people use their everyday knowledge in a routine way in the understanding of text to fill in presupposed but implicit information" (p. 15). Therefore, socio-culturally familiar components that trigger recognition and understanding must be inserted into the messaging. In addition, Simon, Volmert, Bunten and Kendall-Taylor (2014) argue that the way in which an issue is framed highly impacts the likelihood of the public embracing that idea. They point out that:

We know that frames shape the way people attribute responsibility, understand how an issue works and endorse specific solutions. Knowing how to frame climate change and its impacts on land and oceans, therefore, is a vital component in creating real and sustained change on this issue. (p. 3).

Gibson-Wood and Wakefield (2012) suggest there are limiting factors to environmental activism in Toronto's Hispanic population due to inaccessibility of typical avenues of participation, narrow definitions of "environmentalism" among environmental organizations, and the perceived whiteness of the environmental movement. These factors should be taken into consideration when looking at participation in environmental initiatives amongst immigrant

communities living in Surrey. Immigrant communities may not feel inclined to take part in environmental initiatives or adopt pro-environmental behaviours because of the lack of avenues for participation and unclear understanding of environmentalism. Moreover, immigrant communities may react to environmental initiatives in different ways depending on how the message of environmentalism is presented. The literature informs us that we need to understand the larger values in which we frame the issue (Bales et al, 2015). For instance, what do these three immigrant communities care about? What are the consequences of their existing beliefs around environmental issues? According to the Bales et al. (2015), to change how people think, we need to consider their existing belief systems and connect with those beliefs. Once the particular group is engaged and supportive, they may be more open to hearing about issues and specific policies (2015).

Moreover, we need to keep in mind that environmental issues need to be reframed in a way that taps into the existing beliefs of immigrant communities. As they cannot be rewired, it is critical that these belief systems are understood. Framing is essentially the art of structuring or presenting a problem in a way that will gain support. As Simon et al. (2014) point out, “value-based messages are an effective way to shift attitudes and increase support for the policies experts endorse” (p. 13).

We must describe the context of the problem by tying the frames as broadly as possible to people’s existing belief systems and worldviews. Orienting a conversation through the use of shared values is a key part of framing an issue. Without seeing their values reflected, people struggle to see the point of engaging with an issue and frequently fall back on individualistic solutions to social issues, for example, recycling. In this way, values serve as fundamental organizing principles that people use to evaluate social issues and reach decisions (2014).

By gaining a better understanding of core values, beliefs and worldviews of the three immigrant communities that are the focus of this research, I can then identify the data, facts and information that enhances environmentalism, recognizing that it does not address changes in behaviour.

However, there may be issues around framing the ideas in a way that speak to the values of the three diaspora communities. For instance, Corner, Markowitz, & Pidgeon (2014) explain that:

by framing messages about climate change according to the dominant values of the target audience, such efforts can lead to paradoxical situations whereby values known to be incongruent with engagement with climate change (for example materialism) are used as the basis of campaigns to engage the public (p. 416).

We must keep this in mind when framing a message that speaks to the values of immigrant communities. Emphasizing shared altruistic values may be more effective when framing environmental messaging than values that promote self-benefit.

Cultural Values

As cultures often frame environmental issues differently, it is necessary examine the effects of culture on pro-environmental knowledge, attitudes and behaviors (Laroche, Toffoli, Kim and Muller, 1996). Profiling various ethnic groups would provide academics with a better idea of the many different perceptions of environmentalism that exist in different cultures. In addition, by understanding the effects of culture on knowledge, attitudes and beliefs, marketers may gain an “understanding [of] different cultures’ pro-environmental knowledge (1996).

For instance, when looking at the Indo-Canadian community, key Punjabi values quickly become apparent to the outsider. In Punjab agricultural livelihoods, environmental, economic

and personal well-being are deeply interrelated (Fan, 2017). In Filipino culture, the basic social unit of the country is the family, which also includes the intermediate family members (aunts, uncles, grandparents, cousins) and other outside relations (godparents and close friends). As such, many children have several godparents and when parents are out of the country to work, children are mostly left in the care of their grandparents. In Sri Lanka, families are becoming more accustomed to a more consumerist lifestyle, breaking away from traditional values of simplicity. Parents in Sri Lanka who hold values of frugality and simplicity now “feel the pressure to conform to the aspirations of their [children], who want to move with the consumerist society” (Chandrasekara and Wijetunga, 2016, p. 316).

Cultural and spiritual values may have significantly influenced human behavior towards the natural environment in the past. Moreover, it is important to understand the dynamics between these immigrant communities and their new country by taking a closer look at the cultural context in which they now live.

The Role of Human Values and Climate Change

By unpacking diaspora core values, we may better understand how they are “shaping public engagement with climate change” (Corner, Markowitz & Pidgeon, 2014, p. 411). In addition, by understanding values, we are able to look at how they are related to general environmental attitudes and behaviors. Studies show that “many non-Western nations are more collectivist (and less individually-oriented) in terms of their culture, and so the tension between pro-environmental messages and individualism may be less apparent than in strongly individualist nations like the United States” (p. 411). Corner et al. also found that a relationship between the “endorsement of certain traditional values (such as honoring one’s parents or showing respect) are generally considered to be indirectly related to pro-environmental

behaviour, albeit as part of a causal cognitive chain that includes domain-specific beliefs, particular behavioral norms and stated intentions” (p. 413). They also focused on how the role of human values in determining public engagement with climate change has emerged. For instance, he notes that “people who endorse self-transcendent values and who exhibit high levels of altruism are more likely to engage in sustainable behavior” (p. 414).

It is important to understand that when we are exposed to information regarding climate change and the environment, we tend to interpret information using the values that are cognitively consistent with our existing ones. This would then lead us to either accept or reject the need for greater engagement and action” (p. 415).

Community Based Social Marketing

According to McKenzie-Mohr, “community-based social marketing draws extensively on research in social psychology, which indicates that initiatives to promote behavioral changes are often most successful when they are carried out at the community level and involve direct contact with people” (McKenzie-Mohr, 2011, p. x). Community-based social marketing (CBSM) involves five main steps to promote pro-environmental behaviors among individuals. The five steps are as follows:

Step 1: Make targeting pro-environmental behaviour a priority as there are several behaviours that can be targeted (2011). To address specific target behaviours, interventions must be designed around them.

The behaviours that are identified should be guided by two criteria: the behavior should not be divisible and each behavior should be “end-state” (p. 13). Divisible behaviors “refer to those actions that can be divided further” (p. 13) while “end-state refers to the behavior that actually produces the desired environmental outcome” (p. 15).

When determining which behaviours are worth considering and subsequently promoting, the following questions should be asked.

1. Is the behavior impactful?
2. Will the audience that you are targeting willingly engage in the behavior?
3. Has this specific behavior already been exposed and penetrated to the target audience? By what level? (p. x).

Furthermore, it is important to get an idea of the impact of the behaviour by surveying individuals, investigating past programs and evaluating their effectiveness (2011).

Step 2: Identify the barriers and benefits of the pro-environmental behaviour.

Next, the key determinants and the barriers of the target behaviour should be identified, which could include psychological and contextual factors. Relevant articles and reports should be reviewed. Furthermore, observations of people physically engaging in the behavior that has been chosen to be promoted should be gathered (2011).

A literature review should also be conducted in order to further explore “in-depth attitudes and behaviors of [the] target audience regarding the activities you wish to encourage and discourage” (p. 22). Along with a literature review, a survey from a random sample of the targeted audience should be conducted. In doing, a further understanding of the barriers to the chosen behaviours can help predict the outcome of pro-environmental activities.

Step 3: Choose an intervention strategy that best tackles the target behaviour. One must also keep in mind the characteristics of the target group. When creating a community based social marketing strategy, the behaviour that is being promoted and the behaviour that is being discouraged should both be taken into consideration (2011). To achieve this, one must “select tools that are tailored to the barriers and benefits you identify” (p.44). Finally, evaluate your strategy with smaller focus groups in order “to receive feedback on your proposed strategy” (p. 44).

Step 4: Pilot the strategy. Facilitate test runs, evaluate the strategy, then execute the strategy. During a pilot test, you want to facilitate a trial run with a small number of people (p. 44). If the “pilot is successful you can be much more confident of success when you proudly implement the strategy” (44).

The purpose of the pilot is to be prepared and tackle any problems prior to launching a campaign throughout the community. Pilot testing will enable you to forecast any possible problems and then refine your strategy to make sure it is carried out efficiently (2011).

Step 5: Implement and evaluate on a broad-scale. Before this takes place, gather high-level information on the “present level of engagement in the behavior to be promoted” (p.143). and make sure to conduct evaluations at different stages of the implementation to measure whether the behavioural change strategy is having a lasting impact (2011).

A community-based marketing approach emphasizes a face-to-face approach, social networks and social diffusion as suitable strategies based on the type of pro-environmental behaviour that is being promoted. This approach may best fit the social values of immigrant communities with their emphasis on personal relationships and connections to place and community.

Personal contact, prompts and commitment have helped foster pro-environmental behavior. For example, to reduce engine idling, a pilot study of two strategies to reduce engine idling were conducted in two locations where idling was common. One strategy simply consisted of placing four signs, the other had facilitators approach drivers and discuss the issue at hand. The results indicated that “while the signs by themselves did not reduce engine idling, when combined with personal contact and commitments, the frequency of engine idling was reduced by 32% and idling duration by 73%” (p. 48).

According to McKenzie-Mohr, looking for commitments in groups can also be helpful. Using the commitment approach has been shown to be effective when community “block leaders” (p. 55) are engaged in implementation. A block leader is a community resident who already demonstrates the behaviour that is being encouraged and who agrees to speak to others. As many of my interviewees were involved in volunteer work within their communities, CBSM might be suitable to these individuals in spreading awareness about sustainable behaviours. In one study, “the block leaders approached homes and used a variety of community-based social marketing strategies, including seeking a verbal commitment, to encourage the household to begin recycling” (p. 55), as one example of using CBSM to encompass more pro-environmental behaviours.

In British Columbia, programs such as *Empower Me* provide personalized support to new Canadians. It offers free energy-saving workshops which are open to all community members. It is one of the only multi-language energy conservation programs that guides and measures behaviour change. Mentors share information about home energy (<https://www.empowermeprogram.com>), can help home owners create personalized energy plans and are trained and familiarized with the community. In comparison with non-personal sources of information, such as brochures or advertising, the conversations we have with people “and particularly with those whom we trust and perceive as similar to ourselves” (p. 73) has a large influence on us. This phenomenon is known as social diffusion. For instance, one study found that “those who intend to install solar panels have been found to have friends and colleagues who already installed them” (p.75). In another study “those who install programmable thermostats have been found to influence the likelihood of friends, family and coworkers installing them, but

not their neighbors” (p. 75), suggesting the “significance of social networks, over geographical proximity, in determining social diffusion” (p. 75).

The case study for the Redwood River Clean Water Project in Minnesota is another example of social diffusion in action. The main goal of the program was to lower the rate of sediment and nutrients in the watershed, increase game fish habitat, fishing, reduce peak flows and increase watershed awareness (p. 76). Farmers were encouraged to engage in the best management practices (BMPs) through one-on-one conservation practices. Farmers were engaged through individual, person to person visits, but also by hearing of BPM’s that were utilized by other farmers. This information was dispersed through newsletters, handouts and public meetings and events. Social diffusion was facilitated through the one-on-one meetings and events (p. 76). The “information on the actions of farmers was accompanied by photos of the farmers, a description of what actions they had taken and the results, along with a map providing driving instructions to their farm!” (p. 77). The handbook that was prepared was distributed to both participating and non-participating farmers. The use of BMPs was normalized, which encouraged discussions between farmers regarding these practices. The distribution of the handouts also increased the likelihood that farmers who adopted repetitive BMPs like nutrient management, would continue with these practices. The outcome of this program was successful as the project resulted in soil and phosphorous reductions of over “158 tons” (p. 77) a year. McKenzie-Mohr suggests that “the media often plays an important role in beginning the diffusion process by facilitating the adoption of the new behaviour by a small minority of people” (p. 76). Other research suggests, however, that once a minority of people adopted a new sustainable behaviour, personal conversations play the pivotal role in the behaviour being adopted more broadly” (p. 76).

General Environmental Concerns in Canada

In a study carried out by Zhou (2013), the environmental concerns of Canadians was explored by examining different factors that were linked to Canadian concerns, which included “affluence, local and global environmental degradation, education, consumption of mass media, political orientation, gender and age” (p. 454). He looked at four dimensions of environmental concern: “environmental threat awareness, priority of environmental protection, willingness to pay for environmental protection, and participation in environmental organizations” (p. 455), utilizing data from the 2006 World Values Survey (WVS).

The findings suggest that income has no relationship to environmental threat awareness and well-off individuals are not necessarily willing to contribute financially for the sake of the environment (Zhou, 2013). However, more affluent people are more likely to volunteer their time and get involved with environmental organizations. While looking at the effects of local environmental problems, he also found that there was no link between local environmental problems and the motivation to be involved in environmental activities. Instead, people who were faced with local environmental problems considered economic growth more of a priority than environmental issues. This finding demonstrated that being surrounded by environmental degradation did not lead to people having the “willingness to pay for environmental protection” (p. 473).

When examining whether education influenced the priority of environmental protection, the study showed that education “significantly elevates the importance of environmental protection” in order to strengthen the economy and increase motivation to make real commitments towards environmental protection (2013). According to Zhou, although education plays a significant role in increasing the value of environmental protection, exposure to mass

media had the opposite effect. The study indicated that people who were more exposed to mass media can become more money-orientated and materialistic, a characteristic that Zhou argued hinders the “development of environmental concern” (p. 474). Zhou also looked at age and gender as possible factors that would influence environmental concerns, and indicated that there were no gender gaps when it came to participating in environmental initiatives (p. 475). When it came to age, younger people tended to show more awareness of environmental threats than older individuals. However, although younger people were more aware of environmental threats, the study indicated that they were not more likely to participate in activities that involved environmental protection. Throughout this study, Zhou emphasized that “environmental concern in Canada is multidimensional and must be approached through a multidimensional lens” (p. 477). He points out that both cognitive and behavioural components of environmental concern must be taken into consideration. In addition, Zhou argues that we must make more effort to inform the public about environmental concern and promote “liberal policies” (p. 476). I concur with Zhou’s argument but I also want to suggest that informing the public is not effective without also establishing public commitment to environmentalism.

A Framework for Healthy Built Environments

Studies have shown that building and protecting natural environments fosters social well-being and develops healthy communities (Markovich, Dinh & D’Angelo, 2018). The physical environment in which we work, live and play impacts our overall health and wellbeing. Healthier built environments can be achieved by preserving and connecting environmentally sensitive areas, creating and maximizing opportunities for everyone to access natural environments, reducing urban air pollution by expanding natural elements across the landscape and by mitigating urban heat islands by expanding natural elements across the urban landscape

(Markovich, et al., 2018). He further argues healthy built-environments should be a responsibility that is shared across the board, and requires expertise and commitment from many stakeholders within local governments and the community-at-large. Furthermore, as Dale, Foon, Herbert and Newell (2014) point out, “designing, re-designing, building and maintaining the built environment represents one of the most effective and economical means of addressing climate change, which in turn contributes to improving the health, prosperity and future options of all Canadians” (p. 59).

Connections to Natural Spaces and Overall Health

One of the first studies on the direct relationship between green space and health was published by De Vries, Verheij, Groenewegen and Spreeuwenberg (2003). This study showed that residents of neighborhoods with abundant green space tend, on average, to enjoy better general health and better mental health and reported fewer symptoms. In another study, this positive link was found to be most apparent among the elderly, among housewives and people from lower socio-economic groups (Maas, 2013, p. 205).

A study by Ewert and Heywood (1991) conducted in the United State showed that undertaking activities in natural environments appeared to have stimulating effects on social contacts and social cohesion. The results of a study by Leyden (2003) show that people in Ireland in walkable neighbourhoods, characterized by the availability of local parks, for example, are “more likely to know their neighbors, to participate politically, to trust others, and to be involved” in the community (Maas, 2013, p. 211).

The findings of studies on green space and health could be considered as informal arguments for preserving or, if possible, enlarging the amount of green space in urban living environments for health reasons, especially in the urban environment where space is under

pressure because of shortage of land on which to build housing (p. 214). According to Dale et. al., (2014) there are many benefits that access to green spaces provides, such as “improved human health (physical and mental well-being), space for reflection, connection and social capital in addition to ecological services and biodiversity conservation” (p. 71).

Drivers and Barriers to Environmentalism and Pro-Environmental Behaviours

While the focus of my research is on the cultural determinants and lived experience of the three diasporas, there are many other factors that affect the adoption of environmentalism. For example, demographic factors, external factors (e.g. institutional, economic social and cultural factors) and internal factors (e.g. motivation, environmental knowledge, awareness, values, attitudes, emotion, locus of control, responsibilities and priorities) can play a role in influencing the adoption of environmentalism (Kollmuss and Agyeman, 2002). There are also demographic factors, external factors (e.g. institutional, economic social and cultural factors) and internal factors (e.g. motivation, environmental knowledge, awareness, values, attitudes, emotion, locus of control, responsibilities and priorities) (2002).

Leonidou et. al (2015) suggest that the pro-environmental attitudes of tourists change depending on their nationality, with people from certain countries showing a larger concern about the environment than those from other countries. In addition, some of these factors include having a positive attitude about the climate-relevant behaviour (as determined by their values and beliefs). Second, individuals must be confident that the social norms within their existing groups support the pro-environmental behaviour and that they are part of day-to-day activities. Lastly, according to Kormos & McIntyre (2011) individuals who engage in environmentalism

believe they have self-efficacy and the power to make actions (Gifford, R., Kormos, C., & McIntyre, A., 2011, p. 803).

Some of the factors that may contribute to the barriers to engaging in pro-environmental behaviors or environmentalism are environmental numbness, techno-salvation and conflicting values, goals and aspirations. Environmental numbness refers to the situations in which “gradual changes in the environment can occur without anyone noticing and when people are unaware of the environmental destruction that is occurring around them” (p. 812). Techno-salvation is an overconfidence in the efficiency of technology to solve all the environmental challenges. Solely relying on technology to solve all environmental problems without having the willpower to change one’s own lifestyle can be a barrier to climate-mitigating (p. 813). With respect to conflicting values, goals and aspirations, many individuals engage in behaviors that require high consumption and a larger footprint in order to meet their own goals. For instance, the pressure to maintain a materialistic lifestyle or acquire certain possessions and experiences may be detrimental to sustaining natural resources (p. 813). A lack of place attachment may also contribute to people’s reluctance to engage in pro-environmental behaviour (p. 813). In addition, community groups and individuals may not have a sense of trust between citizens and scientists or government officials, and for this reason, confrontation and resistance may be present when pro-environmental initiatives are being introduced.

Chapter 3: Methods and Analysis – Qualitative Approach

My research objective was to try and achieve an in-depth understanding of perspectives of three immigrant community diasporas on environmentalism by exploring the cultural and social factors through their own life stories and their experience and views about the natural environment. My research questions were the following.

How is the environment experienced through the perspectives of the Indo Canadian, Sri Lankan Canadian and Filipino communities residing in BC.?

What are some ways we can eliminate barriers to practicing pro-environmental behaviours amongst the Indo-Canadian, Sri Lankan Canadian and Filipino Canadian Communities residing in Surrey BC?

How can we enhance the connection to the natural environment, and enhance sustainable lifestyles amongst the Indo-Canadian, Sri Lankan Canadian and Filipino Canadian Communities residing in Surrey BC?

In this study, I collected, analyzed and interpreted the data using a qualitative research method. This method was suitable for my research as the nature of the study involved exploring the experiences of three immigrant groups with nature, and as such, qualitative research “emphasizes exploring individual experiences, describing phenomenon, and developing theory” (Cope, 2014, p. 89). The research methods for this thesis consisted of two main components: 1) document/literature review and 2) semi-structured interview and analysis.

Document/Literature Review

The document and literature review was an integral component of the thesis as it helped me understand the social norms, cultural values and religious views that make up the social

fabric of the three immigrant groups. The literature and document review also helped me gain better insights into the status of the environment and environmental issues in the participants' mother countries, and understand how the public and local governments have handled environmental destruction and preservation in their home lands. In addition, I was able to look at studies on factors that may hinder the adoption of pro-environmental behaviours and concern for the environment.

The type of documents that were reviewed were journal articles, academic literature and municipal documents. These were retrieved through online searching of the Royal Roads Library portal, Google Scholar and reliable online sources that were vetted by professionals.

Interviewees/Participants

Fifteen interviewees were recruited who had immigrated either from India, Philippines and Sri Lanka and were all residents of Surrey. They were identified through associations with my colleagues and friends who were familiar with community leaders within the three groups. I also identified some of the individuals online and contacted them directly via email. I contacted 5 individuals who were in leadership roles (i.e., association leaders, business leaders, religious leaders and advocates) in each community, using snowball sampling, to arrive at a total purposive sample of 15 interviewees. Weller and Romney (1988) suggest that using smaller sample sizes in research could be sufficient to provide thorough and precise information as long as the participants are familiar with the context and understand their communities' cultural values and needs. The participants were considered leaders (either by title or association) within their specific ethnic group. Suitable participants met the following criteria, adapted from Weller and Romney, (1988):

- familiar with their community's needs, culture, and conditions;

- able to reflect and provide detailed experiential information about their own experience in Canada and their own perspectives on the environment;
- willing to talk, and;
- able to understand, communicate with and effectively interact with people across cultures.

Prior to meeting each interviewee, I conducted some background research on his or her organization. By recruiting individuals in leadership roles with some degree of cultural competency, I did not anticipate having problems gathering information on their perspectives and gaining insights into their individual worldviews as well as the views of their respective communities. I chose participants who could reflect and provide “detailed information” (Whiting, 2008, p. 37) about their lived experience in Canada and their views on the environment.

Data Collection

The focus of my analysis was on individuals who told me stories about their lives and their experiences with nature, using an open-ended, semi-structured interview method. The semi-structured interviewing was open-ended so that participants can reflect and “identify their true feelings” (p. 36) and reveal thicker stories. Interviewees shared stories of their lives and their stories provided a means to better understand the backgrounds and current context of participants. While stories obviously do not provide a transparent account through which we learn truths, “story-telling stays closer to actual life-events than methods that elicit explanations” (Hollway & Jefferson, 2000, p. 32). This approach brings forth a narrative that is not structured according to “conscious logic” (p. 32), but instead, the participants can articulate their stories and

provide explanations from the memories to which they are emotionally attached, rather than speaking from rational intentions.

In a study on the experiences of Arab Muslim Immigrant Women living in the United States, Khatib (2014) utilized semi-structured, open ended interview for data collection (p. 7). This helped to establish a flow of inquiry and this method was suitable for the research study as each participant had unique stories to tell. She also employed other forms of data collection “in order to get a better idea of who the participants were and to generate rich descriptions of their experiences a demographic questionnaire and observation (field notes)” (p. 7) were utilized. This type of interview “gives participants the flexibility of choice to focus on particular experiences in whatever time sequence they desire” (p. 7). Throughout the interview, she engaged “extensively in self-reflection to stay aware” (p. 9) of her own personal perspectives and to control the “impact of the conflicting roles of insider and outsider” (p. 9).

A similar approach to Khatib’s method was carried out for this study. I did not arrange a demographic questionnaire prior to the interviews as I considered the semi-structured interview questions to be sufficient to generate thorough descriptions of the participant’s experiences with nature. Semi-structured interviews were scheduled in advance at a designated time. I met the participants at a place and time that was most convenient to them. The interviews were held at a local library, the participant’s residence, a coffee shop or a location chosen by the interviewees to facilitate rapport and a relaxed atmosphere. The interviews were organized around a set of predetermined questions while other questions emerged from the dialogue (Whiting, 2008, p. 36). The interviews were approximately one hour long and audio-recorded, with permission of the interviewee. I also included “prompt questions” to gain more information (p. 37).

Prior to Conducting the Interviews

Prior to the interviews, I communicated the following to each participant: purpose of the interview; format of the interview; clarification of topics under discussion; approximate length of the interview; assurance of confidentiality; purpose of the audio-recording (asking permission to use it); assured that the participant may seek clarification of questions; and informing participants can ask questions during the interview (p. 36). I also clarified that the names of participants would not be used in the study, that they would remain anonymous, and that audio recordings would be destroyed by December 2019.

Conducting Interviews

Before starting an interview, I engaged in some light conversation with the interviewee to help create a convivial atmosphere. According to Whiting (2008) “it is acceptable for [the] interviewer to share information about themselves and their families.” (p. 38). Nevertheless, because casual conversation could detract from the interview, I kept the preliminary conversations brief. As Whiting points out, the value of the participants should be acknowledged” but since ‘reimbursing’ the participants was not practical (Whiting et al., 2008), I provided the participants with a box of baked goods as a token of my appreciation. According to Whiting (2008), “participants often respond more favourably to interviewers who are similar to themselves” (p. 39). Being a visible minority and a child of parents who are immigrants may have provided some comfort to the participants as they may have found me more relatable to them and their stories. In the interviews, I used 17 open-ended main questions. Five open-ended sub-questions were asked if the participant’s response to the initial question did not go into detail. The questions are provided in Appendix 1.

All participants were asked identical questions in the same sequence, but I also probed a little more into some of the key responses (i.e., when a participant spoke about a key perspective in which I was interested) to better understand their lived experiences. To gain insight into the interviewees' experiences, probing questions were frequently used. Audio-recordings were made on my iPhone and later manually transcribed.

I practiced reflexivity by writing notes on emerging patterns, themes and concepts to be aware of my own preconceptions that could become apparent later. Whiting (2008) points out that personal reflection can be aided by a literature review on interviewing to “enhance understanding of the fundamental issues and enable researchers to question their practice and develop a personal philosophical approach to interviewing” (p. 36). I kept notes of my personal reflections to recognize my own misconceptions and biases and also kept notes containing observations of the participants' responses during the interview.

Data Analysis

The interviewees' responses were analyzed inductively to deduce themes. Using an iterative process, I formulized some general theories based on the context and the participant responses about their lived experiences and how they viewed environmentalism. To achieve this, I established the following workflow: listened; captured the actual words stated by participants; wrote, copied, and/or transcribed their words; skimmed them, which gave me an overall impression of the data while reading the transcripts; read the transcripts repeatedly; re-visited the transcripts; and audited the transcripts (Kekeya, 2016) to ensure that it confirmed what the qualitative data represented; and finally, created meaning from the participants' perspectives by reflecting on the findings.

I created an excel spread sheet where I listed the questions in one column and participant names in the other columns. I then transcribed the responses from each participant. An example of the spreadsheet is provided below.

Questions:	Participant 1	Participant 2	Observations:
Question 1:	Response	Response	Comments
Question 2:			

The iterative process involved four main steps:

1. Organizing the data;
2. Generating units of meaning;
3. Developing themes, and;
4. Writing theory.

I needed to ensure that I did not let my own biases and assumptions influence the questions or the findings of this study. As Whiting (2008) emphasizes, researchers must “acknowledge their limitations and bias and... they [need to] strive to achieve the knowledge and skills that are required to do this” (p. 35).

Immediately following each interview, I wrote a journal entry to capture any ideas about the data, inferences from the interview, and to note my expectations around what was not mentioned in the responses. I transcribed the audio-taped data by listening to the interviews and typing out the answers verbatim. After thoroughly reading the transcripts I then created another excel spreadsheet where I sorted the questions on one column and wrote out the reoccurring answers that were given by the interviewees on another column. I made sure to include all

synonyms and made note of similar responses that were provided more than three times by the participants. For example, if more than three participants mentioned that safety was a reason why they moved to Canada, I made note of that.

By sorting and synthesizing the data, I was able to interpret the responses in a more efficient manner, and created an index based on the questions asked. An example of the 2nd excel spreadsheet that was created is provided below.

Question:	Reoccurring Responses:	Observations of questions responses of the entire group as a whole:
Question 1:	Responses:	
Question 2:	Responses:	

Keeping in mind that I wanted to get a general idea of the contextual appreciation of the three diasporas, I did not compare one group to another unless I found some clear distinctions. During the iterative process, while revisiting the data, I attempted to answer the following questions.

- What did I notice?
- Why did I notice what I noticed?
- How can I interpret what I noticed?
- How can I know that my interpretation is the ‘right’ one? (Hollway, 2009)

I then identified reoccurring themes. The themes were then developed based on the major categories and their properties that provided deeper understanding of the storylines. There were two key stages of data analysis that I employed in this study: 1) managing the data; 2) making

sense of the data through descriptive or “explanatory accounts” (Ritchie, Spencer & O’Connor, 2003, p. 220). Following these two key steps allowed me to understand “the patterns, the reoccurrences, the whys” (p. 205) of the responses. With this information, I then developed a story or narrative from the data.

After synthesizing the data, I created thematic charts where I summarized the key points of the data, and categorized each main theme and associated a subtopic in a separate column (2000). I summarized the key points of each piece of data by working directly from the raw data and placing the key points in the “thematic matrix” (p. 232). I made sure to summarize in the best way possible so that I did not “lose the voice of the respondent” (p. 239).

Trustworthiness of Data

Credibility.

According to Cope (2014) the researcher should “demonstrate engagement, methods of observation, and audit trails” (p. 89). The data collection relies on purposive sampling, with participants being selected on the basis of the population characteristics and the study objectives. I became familiar with the background of the participants, using “tactics that will help ensure honesty” (p. 66) when the informants contribute to the data. One tactic was to make sure the participants were “genuinely willing to take part and prepared to offer data freely” (p. 66). The participants that took part in the interviews did not present any hesitation towards volunteering their time and participating in the interviews when initially contacted. For this reason, I felt that the participants were interested in the study and wanted to share their insights with respect to their experience with the natural environment.

I tried my best to create a comfortable experience for the participants and ensure that they were aware that they had the right to withdraw from the study (Shenton, 2004, p. 67). I also

ensured that the interviewees did not feel like they were being scrutinized. They needed to understand that I was an independent researcher and not affiliated with any other organization that might influence their perception of me as the interviewer. I frequently had debriefing sessions with my supervisor to discuss my experiences and perspectives, and “recognize my own biases and preferences” (p. 67). I used a reflective commentary to monitor my own developing constructions (p. 68). Typically, I asked the “participant to offer reasons for certain patterns observed by the researcher” during interviews (p. 68). Member checks were also important for ensuring credibility. After the interviews were transcribed, I asked the participants to read the transcripts and double-check if the words they used “match[ed] what was actually intended” (p. 68). I needed to provide a “thick description of the phenomenon under scrutiny” (p. 69), which included the background information of the diasporas that were part of the research.

Transferability

The results of this study can be “applied to a wider population” (p. 69) or to other relevant situations if the contextual information provides enough information so that the person following the instructions can transfer them to another situation. The parameters of the study are the “key elements” (p. 70). They may include: the criteria used to select the participants; the number of participants were involved in the research; the methods used to collect data; and the period over which the data was put together.

According to Cope, the researcher should be able to provide enough information on the informants and the research context to “enable the reader to assess the findings’ capability of being ‘fit’ or transferable” (Cope, 2014, p. 89). This requirement has been met as the research context is provided in the introduction and a description of the participants’ characteristics in the ‘informants’ subsection of this chapter. The description of age, place of birth, religion, mother

tongue and gender is also provided on Appendix II. I caution, however, that although the methods are transferable, every diaspora is culturally specific, so the research findings are not as transferable due to this difference.

Dependability

If the work were repeated using the same framework, the same methods and the same participants, the results should be very similar to the original study findings (Shenton, 2004, p. 71), recognizing the cultural distinctive characteristics of each immigrant community.

I demonstrated dependability by making sure the interview questions were properly formulated and understood by the participants in the study. Prior to conducting the interviews, a list of questions was drafted. The questions were then reviewed by my thesis supervisor and committee member. The questions were then revised and subsequently finalized. After this process, friends and family members who were not part of the study but were of Indo-Canadian, Filipino and Sri Lankan origin were asked the questions, to see if they understood them and to see if their responses provided insight into their backgrounds, social values and perceptions of the environment. Once the questions were tested and I felt confident that the questions were worded in a way that would be understood by the participants, I then presented these questions to the participants in the study. The interview questions were reviewed by the participants one week prior to the interview taking place. This gave the participants time to read over and prepare their answers. Participants also had the choice to not answer if the questions made them uncomfortable. By giving them one week to review the questions, my intention was to make sure the participants fully understood the questions, felt comfortable answering them and knew what to expect. This one-week period also gave participants the opportunity to ask any questions about the interview and share any inquiries prior to formally sitting down and participating in the

study. By ensuring the questions were fully understood by participants, the findings of this study were the result of the ideas and experiences of the participants rather than my own perceptions or opinions.

Conformability

As a researcher, I consider achieving objectivity to be a priority for carrying out fieldwork and drawing conclusions from the data. The findings must be “the result of the experiences [and] the ideas of the informants” rather than “the characteristics and references of the researcher” (p. 72). I attempted to maintain my objectivity by checking my ego at the door before beginning interviewing, and by iteratively reflecting through journaling. I ensured this was achieved by iteratively drawing themes that explained how “conclusions and interpretations were established” (Cope, 2014, p. 89) throughout Chapter 4.

I did not choose to use the analytic induction approach which aims to recognize “deterministic laws and the essential character of phenomena”, involving an iterative process of defining a problem, formulating and testing a hypothesis then reformulating the hypothesis or redefining the problem until all cases 'fit' the hypothesis (Ritchie et al., 2003, p. 205), therefore, my applied research did not involve testing a hypothesis. I wanted to simply obtain a contextual appreciation of how the three immigrant communities experience nature, and what their perspectives of environmentalism were, as mentioned in previous chapters. I felt that the content analysis approach was most suitable for this study where both the content and context of documents are analysed, “themes are identified, with the researcher focusing on the way the theme is treated or presented and the frequency of its occurrence” (p. 200). Furthermore, this approach was suitable for my research as I looked at common responses to the interview questions. The analysis was then linked to ‘outside variables’ such as access to nature,

experiences with environmental destruction, social norms and cultural values, religious beliefs etc. One may argue that an ethnographic account of data analysis which are largely descriptive and which document the way of life of particular individuals, groups or organisations might have been more suitable for this research. I did not, however, choose this approach, as my study focused on a particular phenomenon and did not require understanding the way of life of the population but rather focused on how different aspects of the way of life influenced their perspectives and relationship with environmentalism.

There is also the free association narrative interview (FANI) method. In this approach, the agenda is open to development and change, depending on the narrator's experiences. In telling a story, the narrator takes responsibility for telling their account of the experiences they encountered in their lives (Hollway & Jefferson, 2000, p. 310). The FANI method also recognizes that the story told is constructed (within the research and interview context) rather than being a neutral account of a pre-existing reality. A narrative is “the primary form by which human experience is made meaningful ... it organizes human experiences into temporally meaningful episodes” (p. 311). In the narrative approach, you ask the informant one question and they then share their account of events. I did not chose this approach as I wanted the interview to be more structured so I could capture the interviewee’s views on specific issues that could possibly contribute to their perspectives on environmentalism and provide insights into their relationship with the natural environment.

Chapter 4: Analysis

As Zhou (2013) emphasized that environmental concern is “rooted in a complex combination of social, economic, ecological, political and demographic factors” (p. 454), I wanted to explore the three immigrant groups’ perspectives of environmentalism and their experiences with nature by exploring the multidimensional factors that would influence their perspectives.

Memories of Nature are Tied to Friends and Family

The interviews gave me a deeper understanding of the relationship the three case study diasporas had with nature. Interviewee experiences of nature were associated time spent with family and friends. Their memories of nature were intertwined with the quality time they spent with their families to improve their family bonds and overall wellbeing.

Bath1 recalled, “We did farm work with the whole family, planted seeds, watered the plants. All the family does it together; the grandparents, it was a family thing”. Spending time with nature helped Bath1 build meaningful bonds with family, whether it was working at the farm together or spending time with each other during holidays. Khair1 expressed enjoying the “lush green crops”, while others mentioned how they spent their childhood rolling in the fields of cotton and wheat. Thin1 recalled, “My grandfather used to plow with bulls, and I’d sit in between his legs and level the fields after plowing it... living in the lap of nature, surrounded by crops, trees, sugar trees, cornfields; those are my memories”.

Participants described a sense of calm, and freedom that were their fondest memories of nature.

There was a huge rain forest in Sri Lanka called Singha Raja. We went there and were enjoying the wildlife and then the following day we decided to take a longer route

coming back home. We ended up walking through the forest; 18 km. And we got a different bus and caught a train. When there are no borders, it is so free... There are no boundaries, nothing. The freedom you have with nature is great. The sign at the end of the forest says: 'Take only photographs leave only footprints.' I remember that from 30 years ago. (Amar1)

Participants also mentioned how they enjoyed their shared experiences with friends and how they helped them build and foster relationships by experiencing nature together. Weer2 stated, "we went into most of the forests in Sri Lanka. It's amazing to see it in such a small island. It was amazing to be part of different organizations that grow trees". Patt1 mentioned how her "brother made a treehouse in [their] creek and [she] would play in the creek daily on good days. There was also a water stream that had a crab living in it. [She] loved spending [her] time there" (Patt1).

Again, interviewee memories of nature were tied to nostalgia about spending time with family, as exemplified by this statement from Poe1: "Beaches, family, summer time... every summer I would enjoy taking the boat... the tropical climate, no gadgets" (Poe1) or from Khair1, "I come from a farming family... the majority of the family... You see all the lush green crops, it looks very beautiful and at the same time it has an impact on you at the time you see the village" (Khair1).

Social interactions as described above were an important theme that was tied to the participants' experiences with nature. Their shared experiences engaging with nature and their memories of nature were enhanced by being able to enjoy nature with their friends and family. They rekindled childhood memories by linking those memories to spending time in nature.

In Sri Lanka, when we were going to school, and on our way there and back, we would climb the trees, and pluck the fruit... the cashew trees. And some said that if you climbed a little higher, you could see the sea... and we would make little toys along the way with banana leaves... and we all got together and played. We really enjoyed the environment and looked at all the birds and the fruits and flowers that were around. It was a good journey back and forth. (Weer1).

Validation and Sense of Belonging

Having a sense of belonging and validation was really important to these informants. One of the stark differences, almost all of the participants noticed between their home countries and Canada was the way people socialized with each other. In their home countries, people were more familiar with the members of the community, and people were very welcoming and close to one another. They said that one of the biggest differences they noticed in Canada in contrast to their own culture was how the former was not very social, as compared to their home countries.

Socially... In Canada, people are very reserved... most of the people don't know their neighbours, and there's a ripple effect. In Sri Lanka, you know everybody – you know somebody who knows somebody... There's a connection. We know how Sri Lankans talk, and their mannerism, and we know of someone who has connections... socially, I missed it... You have the openness; you can walk into someone's house. (Weer2)

I had more friends in the Philippines. I would go out with my colleagues and friends almost every week. I don't get to go out much with co-workers here. In the Philippines, you are usually talking to your neighbours and have parties and karaoke. I miss the noisy streets and neighbourhood... people always sing their hearts out. (Sabn1)

People in Canada are very private people, in comparison to my country. The sophistication in life... also the approach from person to person is very different. Privacy is very important for Canadian people, while people from India from my background... People share things quite frequently... everyone knows everybody's business. But it is changing now... privacy thing was not a priority. Socially, I think it's an adjustment when you are coming from Asia. (Thin1)

Some of the participants mentioned belonging to a church or temple, and others had a sense of belonging with their family. They saw themselves as being connected to a greater community and found comfort in the commonalities they had within their community groups. The voluntary organizations in which they were involved helped to produce individual and collective goods, and they looked at their own perceived empowerment within the community as a means for socializing and fostering a sense of belonging in the community. Participants disclosed that they were heavily involved in their own cultural organizations, attended cultural events, and associated with other members of the same ethnic community. In addition, all the participants demonstrated they were closely tied to their religious communities through their ties with the Sikh temples, churches, and Buddhist temples, etc. In addition, the participants found a new freedom to discover their inner potential in Canada, which became a catalyst to give back and make a positive contribution within their community groups. For instance, Khair1 explains how he took pride

...in being part of the Sikh community... part of the Board for the Gurduwara. I tried to educate the people... how we should keep the environment clean... Whatever we produced at the Guruduwara, whatever the social evils, or what we were lacking... I tried to explain to the people how we should live a better social life.

Corr1 commented:

My entire family (even our girls) are involved in the work of the church, and we belong to various communities within the church such as Couples for Christ, Parish Ministries, and Answering the Cry of the Poor (ANCOP), a charitable organization. I am also [involved with] the University of the Philippines Alumni Association (UPAABC). Reyfort Media... for which I do *pro bono* projects... and events in the Filipino community.

Some participants expressed that social acceptance was important for their efforts to build more connections with their new communities, allowing them to improve their skillsets and use the resources provided in Canada to build meaningful lives for themselves. From their responses, the participants seemed to have learned that receiving validation and acceptance in their new country helped create a sense of greater belonging and strengthened their relationships with their respective communities. Validation, demonstrated through the language of acceptance, acknowledges that a person's internal experience is understandable and helps to identify with a new culture, enhancing a greater sense of belonging and community. Jocy1 said, "Socially, people here are always busy... not much time... even your family. If you don't have a lot of close friends... here, because people are always busy, you can count by your fingers how many people you keep in touch with". Every interviewee demonstrated a need to belong, and communicated how their interests, motivation, health and happiness were inextricably tied to a feeling of belonging to a greater community that shares common interests and aspirations. When asked about what they appreciate about living in Canada for example, Poe1 said,

No discrimination... opportunities for everybody. There is always an opportunity for everybody. [I] come from a country where there is ageism. Welcoming and inclusiveness

are core values [in Canada]... that is really present and there is a conscious effort that is being valued and implemented. The opportunity for us to see beyond what is here and now so many other resources available. There are so many resources to learn, if you put an effort to learning those resources.

In their mother countries, all of the participants experienced feelings of inequality and encountered barriers to flourishing, as the political system prevented them from fulfilling their aspirations. Amar1 noted:

The biggest thing is the multicultural environment [in Canada], it's a tossed salad of human beings from all over the world... amazing how everyone mingles and lives together peacefully... That's the best thing I like about Canada... less corruption compared to third world countries. When it comes to law enforcement, [and] politicians, you pretty much learn to respect the others, it is within the [Canadian] culture.

Weer2 said:

Canada is a very safe place... security is good... good place to bring up children... medical system is good... the environment is to grow up and enjoy yourself in. Compared to other parts of the world, freedom is a big thing... politically even for businesses or even to do your studies... there were a lot of barriers... there was no proper infrastructure in the country.

Social Capital

The majority of participants had a strong sense of social capital, that is, the importance of connecting to people and places. While they identified themselves with the communities they associated strongly with, their ethnic roots and religions, they did not identify themselves with communities in which they participated through extracurricular activities, except for the ones in

which their children participated. They did not identify themselves as part of a community that harnessed a sense of environmentalism or participate in groups that fostered environmental stewardship. For instance, Bath1 said, “[they] watched [their] kids playing soccer, and hockey. We engaged with all the communities... Chinese, Japanese, English”. Nevertheless, Bath1 mentioned that they participated in some festivals, but did not associate with people outside of their ethnic and religious groups.

Within their own ethnic and religious communities, they mainly enjoyed extracurricular activities where, as Weer1 stated, they

participated in cultural events of other communities with our neighboring families and in the same area where we are living. We have Buddhists, Catholics, Christians, Muslims. Whenever those neighbors invite us or tell us about it, we go willingly and we go and participate in their rituals, to anyone’s religion or other religious people we show respect, participate whenever we can, thereby we become one with them.

Interviewees did not seem to be part of a group that was involved in specific issue or problem, rather they joined social groups to gather and share their cultural traditions. Although they were very receptive about experiencing other cultures and events, none of the participants mentioned anything about participating in community groups that were beyond what they were previously exposed to in their mother countries. This might indicate that they gravitated towards people with similar ethnic backgrounds and they found a sense of community (closeness and feeling of home) by being close to those who had similar backgrounds. Wee1 said “Coming into Canada, we were involved in the Sri Lankan community... We kept making very good friends... I’m an easy-going person, through our church community, we met lovely people”. Thin1 noted “[I engaged with the] South Asian community... As a radio broadcaster, most of our shows on

RedFM were targeted to the South Asian community... it's a multicultural station. I was dealing with Punjabi, Hindi, and English." Poe1 stated "[I] identify with the Filipino communities... different communities share the same values... There's a commonality... our shared hopes and vision, particularly with women who are mothers and wives."

Fear of the Environmental Movement

Many of the interviewees were hesitant about joining the environmental movement. They wanted a more balanced approach, without extremism. They pointed out some of the social stigma around being labelled an environmentalist and were reluctant to identify themselves as such since they did not want to be part of the stereotypes that are affiliated with environmental groups. Thind1 stated that

the militant attitude of the groups, [makes them seem to have] tunnel vision, and a one-track philosophy. And they were not 'into that'. [They were] more flexible, [at the] same time, [they wanted] the environmental issue on top of the rise... The governments will walk all over them if they don't resist... They are doing a very important role, but at the same time... they should be flexible in certain circumstances.

Interviewees also pointed out that they felt the movements were plagued by stereotypes about the kinds of people who were active in them and how their members behaved. For instance, Dela1 mentioned that they thought:

it's the political linkage, on the issues surrounding the environmental issues... When you are pro you are accused of being tied to political... When you are untied, you are untied [from] a political party that is activating this... People will always [have] political parties advocating for whichever part, different parts of the spectrum. I have a feeling that is

what stops people from voicing out their opinion on the environment. I myself have my hesitations.

Most of the interviewees were familiar with environmental groups and understood that attitudes towards environmental history tended to be polarized, either glorifying the achievements of the past or condemning them for their recent consequences, as Chan¹ noted.

There is no barrier... only the time sometimes environmental groups should have a balance... They don't think about if people have to survive, for example, fish bearing... First people have to live, you have to have a balanced approach.

Two main themes surfaced from my interviews with respect to participation in the environmental organizations or groups: 1) they were not motivated by feelings of connectivity to environmental organizations, as they were with the community groups with whom they normally identified; 2) participants feared members of environmental organizations would make judgments about the social groups to which they belonged and feared acting in a way that would confirm any negative stereotypes; 3) moreover, participants were worried about being labeled as extremists if they were associated with the environmental groups.

Feeling Helpless about the Environmental Destruction in their Mother Countries

Every participant faced environmental destruction during their childhoods in their mother countries. This occurred in many different forms, most notably with multinational corporations clearcutting forests, destroying plantations, pouring toxic chemicals in waterways and using hazardous agricultural techniques for crop growth. Environmental destruction was all around them throughout their lifetimes, because of both industrial development and natural disasters. Some participants said they had felt remorseful and helpless when they experienced the widespread environmental destruction, with Dela¹ explaining,

Growing up in the Philippines, there were many pollution... When I was growing up around coconut plantation and guava, in high schools the factories came and I saw those groves diminish. I didn't understand what benefits were given to the people, I only cared about the plantation, the river that used to be near you... can see the waste going down the river. The factory owner was a prominent politician. I didn't like that... I was so angry, and I didn't want to vote for him.

In addition, Weer1 told me

I was not much concerned over there, because it was something usual... something was happening like in the rivers, in the streams, there was a lot of pollution, but we were at the time we couldn't tell anyone... We couldn't do anything about it, if we go to say something we were told to be quiet.

Interviewees also indicated their lack of awareness about the implications of the environmental destruction. Brar2 said, for example,

In India, the two things, the water pollution, the air, at various places, my village was 10 km from a thermal plant. As a child, we used to sleep outside and you see a black layer on your blanket from the smoke coming from the plant. We didn't have a huge awareness of what it was.

The community would carry on with their daily lives without considering the effects of the environmental destruction on their health and wellbeing.

Father was living in the city. Sulfur and gasses very close to an industrial town... that pollution and smoke was really foreign to my system... some time, after a few years we adapted to it. I wasn't aware of what sulfur and nitrogen would do to me or to other people. We were not fully aware of it... We just knew that it was hard to breath, and we

would wrap a handkerchief around our mouths... The lack of awareness was there... we weren't fully aware of the impact on the environment or how it would impact my body and others (Thin1).

Appreciation of the Natural Environment in Canada

The majority of participants in the study demonstrated a strong appreciation for the natural environment in Canada and in their mother countries, insisting that “[In Canada] our environment is such an attraction to the rest of the world” (Thin1).

Interviewees appreciated the fact that people follow the rules and regulations here, and that government enforces the rules and regulations with respect to environmental protection.

[There isn't a] strong environmental policy in Sri Lanka. Basically, if anyone wants to get something done, they can bend the rules and get something done. There is huge forest devastation in Sri Lanka and it is being done by a minister in Sri Lanka. It is a sanctuary... cutting trees like crazy. Here, if you are cutting a tree you need to get permission... Most of the people here respect the environment. I have seen people throwing cigarette butts but most people are self-disciplined and take care of the environment. (Amar1)

Khair1 pointed out, “environmentally, [it's] so clean here. In India, if you go to a city, it's so dirty. Everyone throws garbage everywhere... they don't know [how] to keep the country clean.”

Participants also pointed out that people are not afraid to voice their opinions on environmental issues:

Environmentally, people here are way more aware of the environmental challenges, not only the challenges people face today but for the next 100 years. They are proactive, and

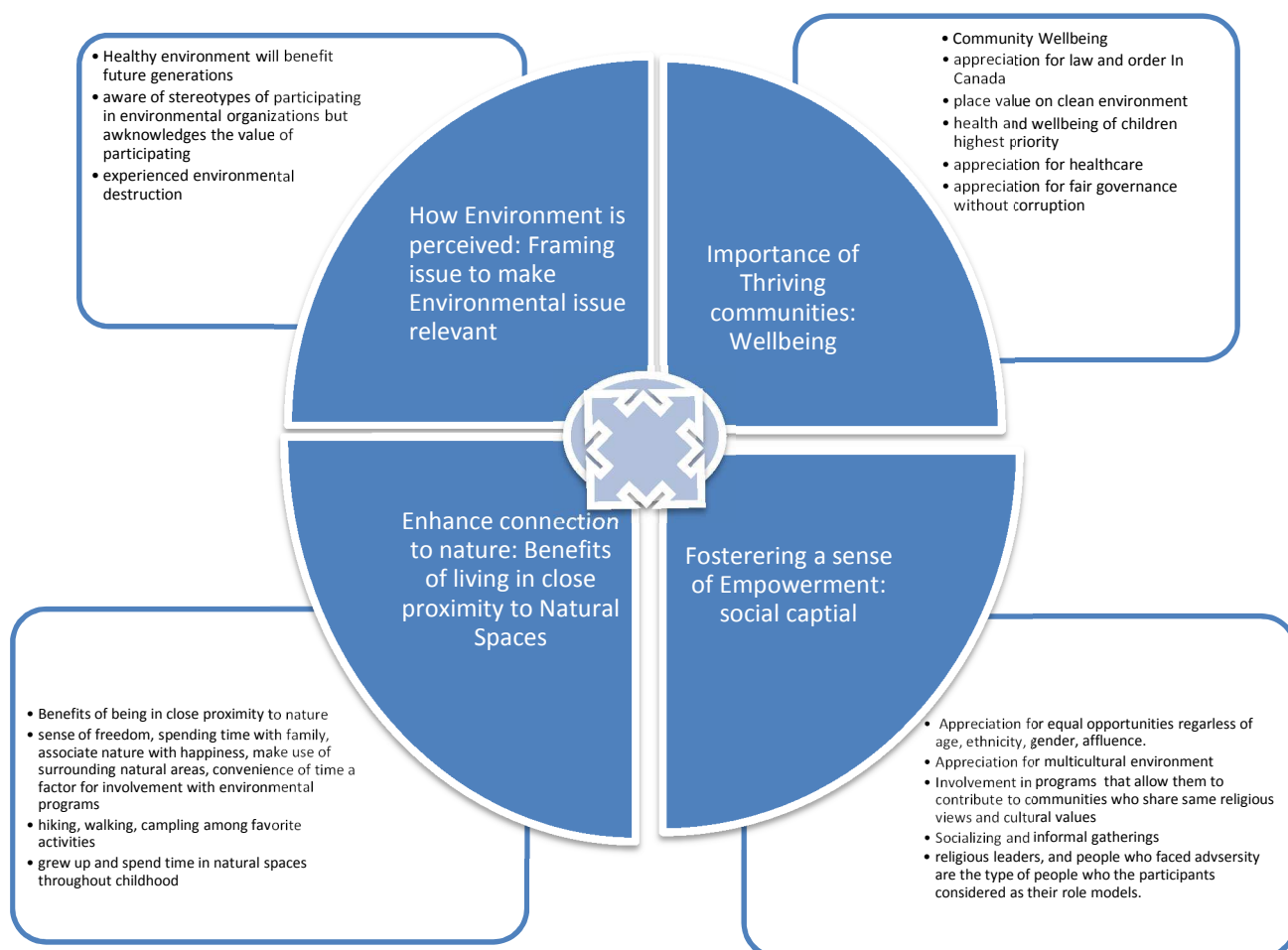
they come out and lobby very strongly to make the policy and legislative changes (Brar2).

When participants were asked about what they appreciated about Canada the most, they mentioned that it was safety, law and order, the clean environment, friendly people, healthcare, equal opportunities, no ageism, opportunities for everybody and the multicultural environment (Poe1). In essence, their answers demonstrate that their overall wellbeing has been improved since moving to Canada. For instance, Brar1 explains his favorite things are “healthcare, where we have universal healthcare, accessible to everyone, irrespective of who you are, we have a beautiful landscape, forest mountains, and thirdly the people are nice to each other, and people respect each other, and people are friendly”.

Finally, many of the participants expressed their desire to promote environmental awareness in order protect the environment for their children. When asked about what motivates them to act pro-environmentally, the most frequent answer was to protect the environment for future generations; “I always think environment is what we borrowed from the future. For younger generations, and yet to be borne... we need to preserve it in a prestige way as much as possible, that is my motivation” (Amara1). In addition, when asked about why the participants moved to Canada, one of the most frequent answers was to provide a better life for their children and their family. As one participant recalls when making the decision to move to Canada, there were “opportunities for my children, husband and I were professionals in our respective fields, factors of politics, uncertainty and the political environment, of the country, the situation was hopeless, was thinking about children, decided to apply as skilled immigrants” (Poe1).

Summary

A graphic summary of the key themes that emerged from the data is presented below that helps to illuminate how the environment is experienced through interviewee perceptions, and key values that were demonstrated as important by the participants. Listed in the centre of the diagram are four key themes that emerged from my data and the corresponding values the participants held around those themes.



Chapter 5: Discussion & Recommendations

Throughout the interviews, every participant displayed an understanding of responsible use and protection of the natural environment. In their home countries, the majority of them were exposed to hazardous substances in the air, water, soil and food. They were also all exposed to either natural or man-made environmental disasters throughout their lives and in their mother countries. They demonstrated a sense of awareness and recognized the need for environmental protection through conservation and sustainable practices. The data revealed very few differences between the three communities, and for this reason I did not compare and contrast the three diasporas. I was surprised by the many commonalities between the three communities, and how very little differences there were. All three communities expressed hesitance in belonging to environmental groups, given certain the negative perceptions, shared a deep appreciation for the social systems in Canada (healthcare, education, equal job opportunities) and for the need to be seen to “be fitting in”. In addition, the participants appreciated the peace, law and order in Canada, as well as the clean and appealing aesthetics of the natural environment. As well, they universally expressed love and devotion for their families, expressing a desire to help their community members as well.

Overall, participants shared a deep appreciation for the natural environment. Through tending crops, exploring forests and beaches as well as finding delight in the natural spaces that existed around them during their childhood, they developed an overall appreciation for nature. Although they stated they were committed to protecting the environment for future generations they did share some hesitation for certain tactics of environmental groups. For instance, when asked if the participants wanted to take part in environmental organizations, they explained that they did not feel comfortable being part of an environmental movement in fear of the stereotypes

that environmental groups had, even though they recognized the importance of advocating for the protection of the environment. The interviewees expressed that the lack of time they had was also a limiting factor for involvement in environmental activities.

The following recommendations are based on my data from the three diasporas. These recommendations were selected as approaches that would best address and respond to the cultural values of these communities, such as a belief that family is of fundamental importance, a commitment to doing good for the whole community, coming together to support, maintaining relationships and taking responsibility for your actions, mistakes and current life situation. They can be implemented from the grassroots level all the way through to the government level, and should be implemented concurrently and holistically while carried forward. By doing so, immigrant communities may develop greater environmentalism through learning about the relationship of living things to each other and to their environment, as well as strengthen their connection and appreciation for the natural environment.

Community-Based Social Marketing Approach

When asked about which primary community they most identified with, they stated that they identified mainly with their religious communities, ethnic communities and used their involvement to help others in their diasporas. None mentioned being part of communities that engaged in outdoor activities or environmental issues. Many also expressed a longing for more social networks and connections to the wider community.

By reflecting on the responses that were provided by the participants of the study, I suggest that a community-based social marketing approach would be suitable for addressing the gaps in adopting specific pro-environmental behaviours and embracing environmentalism among the three diasporas. Although my focus was on cultural values, the two characteristics of this

approach that I think can contribute to enhanced environmentalism in the three diasporas are its emphasis on face-to-face workshops, which responds to the communities' values on relationships and subsequent social diffusion. Social diffusion "facilitates the adoption of new behaviors by a small minority of people" (McKenzie-Mohr, 2011, p. 76) where personal conversations play an essential role in the behavior being adopted more broadly throughout their communities. The CBSM model provides an entry into broader environmentalism by the three immigrant communities through its focus on specific pro-environmental behaviours reducing fears about belonging to the environmental movement. It responds to their cultural importance on relationships by placing value on working collaboratively as partners and teams within the broader community. The three groups can experience a higher degree of social interaction and therefore, belonging to a larger community, through face to face interactions, can enlarge their relationships with people in the broader community. Given the values many diasporas place on close ties with their family and community, their appreciation of social networking and comfort with face-to-face interactions, an informal community-based social marketing design can respond to many of their expressed values. Since community-based social marketing involves identifying barriers to change, developing and piloting a program to overcome those barriers and then implementing the program across a community, it could respond to expanding the social networks of the interviewees, involving the entire family in the local project and more personal interactions. Its emphasis on vivid communication tools with engaging messaging and images could be adapted so that the three diasporas 'see' themselves more directly involved.

The participants emphasized the importance of social interaction and also expressed admiration for the outdoors while sharing stories of enjoyment of nature with family and friends. The key themes that emerged from my research indicate that adopting a community-based social

marketing approach in order to strengthen the awareness of and commitment towards protecting the environment could enhance environmentalism.

In addition, by incorporating community-based and place-based programming, community-based marketing methods could provide participants with opportunities to work on projects involving face-to-face interactions with people outside their traditional community. These programs could build ‘loose’ social connections and networks that require the development of “thin trust relationships” (Beames & Antencio, 2008, p. 107). McKenzie-Mohr (2011) argues that we need to look for opportunities where people can engage in actions, “that upon reflection, alter their beliefs” (p. 47). By working with existing volunteer groups and actively involving leaders from the three diasporas, commitment to participation can be increased (Dale, per. comm). For example, “when the economic and environmental benefits of recycling were explained to members of a retirement home, and they were asked to make a group commitment, there was a 47% increase in the amount of paper recycled” (McKenzie-Mohr, 2011, p. 54). Using the commitment approach has also been shown to be effective when community “block leaders” (p. 55) implement them. A block leader is a community resident who already demonstrates the behaviour that is being encouraged and who agrees to speak to others. As many of the research participants were involved in volunteer work within their communities, this approach would be suitable to having these individuals lead in spreading awareness about environmentalism. For example, in one study, the block leaders approached homes and used a variety of community-based social marketing strategies, including seeking a verbal commitment, to encourage the household to begin recycling (p. 55).

Community-based social marketing is a strategy for enhancing social diffusion and diffusion of innovations among peer groups. For instance, in one study “those who intend to

install solar panels have been found to have friends and colleagues who already installed them” (p. 75). This finding suggests the significance of bonding social networks (Dale & Newman, 2008) over geographical proximity. This demonstrates that once a minority of people adopt a new behavior, that personal conversations play the pivotal role in the behavior being adopted more broadly (McKenzie-Mohr, 2011, p.76). It also shows the importance of local community projects to then move from bonding social capital, which are personal and based on strong trust, to looser, more impersonal linking social capital based on wider networks (Dale, 2005). Furthermore, given the responses that were provided by the participants, the approach taken in the *Empower Me* program, as discussed earlier, appears eminently suitable for promoting greater environmentalism among the three diasporas.

Thus, by using the tools and techniques of community based social marketing, there is potential for building diverse forms of social capital outside of their normal affiliations to emerge among immigrant communities. Fostering a shared sense of identity, interpersonal relationships and reciprocity may improve sustainable lifestyles among immigrant communities living in Surrey. Moreover, as the participants in the study shared fond memories of the outdoors and spending time with family and friends in their home countries, spending time outdoors “by reaching out to build networks across social divisions, bridging has the capacity to ‘generate broader identities’” (Putnam, 2000, p. 23). The participants mentioned that they are involved mainly within their own ethnic community groups, but the “outdoor setting has been described as a powerful medium for exploring the nature of community” (Beames & Atencio, 2008, p. 103) and building bridges from one community group to another.

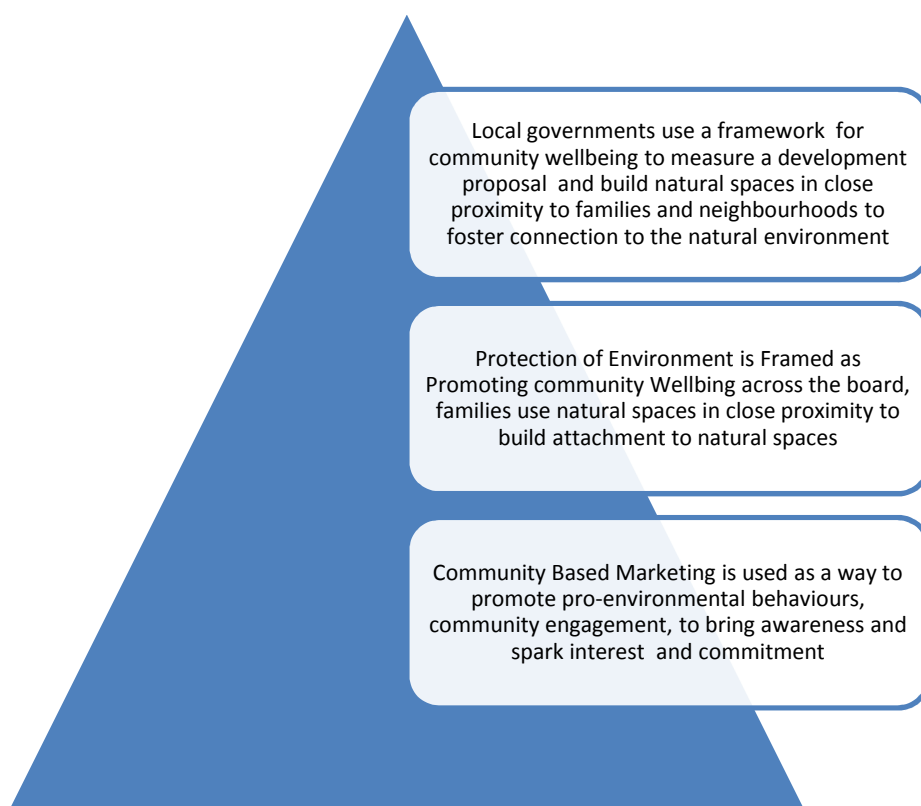
Beames and Atencio (2008) believe that “outdoor experiential educational programs, including those that are adventure-based, environmentally focused or operated through schools

(although conducted outside of schools' confines) would be more capable of building bridging social capital by being embedded into their home communities" (p. 104). They also state that "levels of bridging social capital might increase when programs are immersed in their local communities" (p. 104).

One of the barriers that the participants expressed as a major factor that hinders their involvement in environmental issues was their lack of time to participate. For this reason, programs need to be designed in their local communities, as opposed to taking place in distant, "decontextualised, and exoticised environments that are presented as being more beautiful, natural or wild than home" (p.106). Community-based and place-based programs can further promote the building of bonding and bridging social capital and strengthen their connection to the natural environment (p. 105).

A key component of community development is valuing the local skills of residents' and letting the community develop in "culturally appropriate ways" (p. 104). A study was conducted on the outcome in promoting civic environmentalism and sustainability in both local government and among Montana residents. This study demonstrated that it is possible for a small grassroots group, focused on education and civic-engagement, to work with local community members to make a difference for social change. Community based organizing can be both formal and informal. In fact, simply having every day conversations among friends is an informal way of organizing. Facilitating community-based programs more systematically might provide participants with opportunities to work on projects involving face to face "interactions with strangers" (p. 107). Overall, environmental service projects are effective ways for bridging together different social groups within a community (2008).

With this in mind, since the well-being of children and family are important core values of all the interviewees, this could be used to frame environmentalism in ways that are congruent with the values of the immigrant communities, by emphasizing how the natural environment positively influences the well-being and health of their families and children. At the same time, creating access to natural spaces can enhance their connectivity to nature and “influence day to day lifestyle choices” (Dale et al., 2014, p. 59) as greater access to nature may further increase its appreciation. The diagram below provides an approach that could enhance the existing connections the three immigrant communities have with nature and cultivate a greater sense of commitment towards conserving the natural environment.



In addition, messages that emphasize how access to natural spaces in the built environment can contribute to improving the overall health and wellbeing of an entire community, as well as immigrant communities (2014). Having said this, the wellbeing of the

environment and of natural systems is intricately linked to the wellbeing of people—one is unattainable without the other (Markovich et al., 2018). Design plays a crucial role in preventing the erosion of the ecosystem services and environments that sustain life at both the local and global level. According to Markovich et al. (2018), “design should seek to sustain and enhance the healthy functioning of natural systems that sustain clean air and water, flourishing ecosystems and biodiversity and controllable climatic conditions” (p. 9). Projects should seek to create the conditions that promote healthy behaviours in users, such as the conservation of natural heritage and capital, the reduction of carbon and GHG footprints, the enjoyment of active lifestyles with access to natural settings and to future-proof the wellbeing of communities by building resilience, mitigation and adaptation capabilities. By emphasizing the connections between health and wellbeing of immigrant communities to natural spaces in communication and messaging, this may increase community engagement with environmentalism. In addition, a framework can be used to capture this aspect of wellbeing by analyzing built environment indicators for wellbeing within the context of a community’s population characteristics and tracking them over time (p. 23). Furthermore, by framing environmentalism in ways that speaks to the protection of natural resources and not only for protecting the environment but to improve the overall wellbeing of those they love and value the most, such messaging may capture the attention of immigrant communities more quickly. It may also make environmentalism more relatable when framed in a way that incorporates community wellbeing in the messaging.

Socially accessible places create welcoming environments that are inclusive for all community groups, regardless of socio-economic factors, such as “age and income, physical and mental abilities, sexual orientation, cultural factors, and Indigenous status” (p. 5). Research shows that more socially engaged residents may be better able to overcome threats in their

community, such as crime and disaster recovery, which, in turn, can reinforce their social ties and sense of belonging (p. 52). Deliberatively designed activities that include natural spaces and cultural activities, such as international food fairs are also ways to enhance intercultural appreciation while increasing social capital at the same time.

Social engagement connects us with others and prevents isolation. Additionally, social capital may arise from our relationships when we build an environment of trust where “the reciprocation and sharing of information and social norms takes place” (p. 37). To achieve this, projects should be designed with spaces that foster opportunities for enhanced social interaction with others. Spaces that provide opportunities for social interactions can result in “reduced social isolation, increased social capital and cohesion, and creating a sense of belonging and trust in the community” (p. 38). Green spaces such as parks can “encourage social gatherings” (Dale et al., 2014, p. 71) and can create spaces where people can socialize, ultimately connecting communities. Community connectedness has been identified as an important component of wellbeing, and human relations form an important part of connectedness. Environments that provoke delight and enjoyment through high-quality design features and by connecting users to nature impact positively on people’s life satisfaction and are associated with psychological health benefits (Markovich, 2018, p. 42),

The participants in this study grew up surrounded by nature. They lived in close proximity to nature as they were surrounded by trees, beaches and forests. Some associated agriculture with nature, others spent most of their recreational time outdoors, while many had childhood memories of nature that involved spending time with family, plowing fields with family, picking fresh fruit with friends and spending holidays on beaches with friends and family.

By framing environmentalism in a way that emphasizes how the overall wellbeing of individuals, families and communities can be impacted by lack of connection to the natural environment, immigrant communities may be better able to understand and further support increasing natural spaces into the built environment. Furthermore, utilizing the community wellbeing framework can be a practical tool for guiding and evaluating project design decisions in support of enhancing community wellbeing (2018).

Chapter 6: Limitations

In this study, as the interviews were semi-structured, they were neither a completely open conversation nor were they highly structured. The interviewee had the chance to review the questions and answers prior to the interview. In this way, the respondents were able to answer questions in as much detail as they wanted. At times, I found it difficult to encourage the participants to go into further detail without making them feel as if they needed to provide certain information. Interviewee answers may have been more spontaneous, without an extended reflection had the questions been unexpected. As it was, the participants may have thought there was a right and wrong answer. In addition, they might have been afraid to tell how they really felt. The participants could have also changed their answers to fit with the rest of what they perceived as the norms of the immigrant group they represented. In addition, the data obtained may not be reliable if there are faults in the way questions were asked or understood by the respondent.

Only a relatively small number of interviews took place because the interviews were time consuming, both in terms of data collection and data analysis. Each interview lasted anywhere from 45 min to 1.5 hours. Furthermore, because my sample size is small, it may be possible that the results are unlikely to be representative of the entire population of the Indo-Canadian, Sri Lankan and Filipino communities residing in Surrey.

Some would argue that it can be difficult to compare the results of in-depth and unstructured interviews in that they may be very specific to a particular interaction even with the research interview itself. This is especially true when an unstructured or semi structured interview list is used, and the interviewer must formulate questions as a result of the interactive

nature of communication to ensure that all questions are liable to get answered within the fixed time at the level of depth and detail that is needed.

Chapter 7: Conclusion

My research revealed several key themes that a community-based social marketing approach could use to enhance environmentalism among the three diasporas that were studied. It is not surprising that the importance of connection emerged so strongly from all the interviewees, most importantly, connection to family and friends. Even their memories of nature in their home countries are very tied to friends and family. What was most important to them in their new country was receiving validation and achieving a sense of belonging. Not surprisingly, this wanting to 'belong' and their fear of the negative perceptions of the environmental movement and its associated stereotypes affected their willingness to formally join environmental groups or organizations. Although many had an appreciation for the natural environment in Canada, many had little time to become involved as they were busy building new lives and trying to establish different connections in their communities. Importantly, all three communities expressed feeling helpless about the state of the environment given the environmental destruction taking place their mother countries.

Strategies used from the community-based marketing approach that appeal to their values and reaches them directly in their communities, that offers an opportunity to diversify their social networks and increase their social capital connections, could enhance their desire to become more involved in environmentalism. Emphasizing the strong linkages and connections between human well-being and nature is an essential pre-condition for community-based approaches to environment and development for these three communities. In addition to appealing to their values around social connections, connections to nature and the linkages between health and accessibility to green space could also be emphasized.

As well, recognizing the linkages between the built and the non-built environment can also play an important role in shaping the perceptions and connections to the natural environment, and help to build stronger bonds with nature. Framing environmentalism in a way that reflects the values that are shared by these immigrant communities will also help them to ‘see’ their place and contributions they can play through environmentalism and local community initiatives. As studies have demonstrated the importance of making the link between overall wellbeing and access to nature, this key piece of information can be used to further strengthen the ties between the need for environmental protection in immigrant communities. Further research could be undertaken with respect to identifying the culturally relevant leverage points to move people to increased environmentalism and pro-environmental behaviours (R. Kool, Personal Communication, September 5, 2019).

We must not emphasize the weaknesses found in these communities, rather we must build on these communities to increase environmentalism. This can be achieved by enhancing their existing capacity, skills and common understandings of the socio-cultural context of Indo-Canadian, Sri Lankan Canadian and Filipino Canadian immigrant communities. For example, building on their stated appreciation and devotion for the environment, making linkages to their fond memories of enjoying nature with friends and family in their home countries and imploring their leaders to communicate and convene community workshops are essential. The interviewees from this study also shared stories of their lived experience in Canada, which included unique interwoven experiences and values that showed a distinct identity with their new home. This study demonstrates the need to understand the cultural values and local dynamics of immigrant communities. As previously stated, a community is influenced by many attributes, (economic status, religious background, different languages, worldviews and so forth). In addition, their fear

of not belonging and standing out from the crowd is an additional important factor for the three diasporas. It would be interesting to see if this same fear is common to other immigrant communities. Increasing environmentalism among these immigrant communities, and I suspect other diasporas, must address this fear in key messages.

Given the plurality and multiculturalism values of Canada, and increased pressures for more immigration, we must adopt policies that include and engage all members of society from the initial planning stages, all the way to the execution and implementation of more sustainable societies. Understanding diverse norms, religions and customs can be used to build local partnerships, and given that these three diasporas first join religious and ethnic groups, engage their leaders actively in community-based programs. It is vital to involve key community members from each group to minimize exclusion from environmentalism occurring in their respective communities. Local governments and environmental organizations must also consider local level solutions that are closely tied to specific needs and respond to the values that shape the Indo-Canadian, Sri Lankan Canadian and Filipino Canadian communities. The environmental knowledge, exposure to environmentalism and values that they have developed over time while living closely with nature throughout their lives are unique. These should be reflected in the ways in which local governments, community groups and external organizations encourage environmentalism and how messages of environmentalism are framed and delivered.

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Interview Questions

1. Tell me about what brought you to Canada?
2. What are some of the favorite things you appreciate about living in Canada? (Probing for appreciation of the outside)
3. Have you made any changes in your life adapting to your new country and if so, could you discuss them?
4. How and in what ways do you benefit from having your feet in two cultures?
5. What are the biggest differences you have experienced—socially and environmentally?
6. What are the primary communities you identify with and in what ways do you engage in your new community?
7. How and in what ways do you and your family care about the environment?
 - a. What aspects of the environment do you care about the most?
8. Describe your role models, and how have they made an impact in your life?
9. Describe any childhood experiences with nature, what are your fondest memories of nature?
 - a. Why would you consider these memories the fondest memories of nature compared to other great experiences you've had in the past? Could you describe some of those other experiences and compare them with your experiences to nature?
10. Were you aware of any environmental issues present around you anytime during your life (i.e. pollution, air quality, natural disasters such as floods in your home country? And now in Canada?
11. What is your favorite outdoor activity in Canada, and your family's?
12. What do you think are the most pressing environmental issues facing Canada?
13. Have you been part of any environmental organizations in your mother country or in Canada? If not would you ever consider joining one?
 - a. Why do you think it's important to be part of such organizations? What's making it difficult to join one of these organizations?
 - b. If you don't think it's important, why do you not think it isn't important?
 - c. What prevents you from joining an environmental organization?
14. Were you aware of any pro-environmental destruction present around you anytime during your life and how did it make you feel?
15. Could you describe any barriers preventing you from participating in pro-environmental issues?
16. What motivates you to act pro-environmentally?
17. What would be the most effective ways for you to learn more about environmental issues in Canada?

Appendix 2

Name (pseudonym)	Country of Origin	Age	Gender	Religion
Chan1	Sri Lankan	50-55	Male	Buddhist
Amar1	Sri Lankan	45-50	Male	Buddhist
Suri1	Sri Lankan	40-45	Female	Buddhist
Weer1	Sri Lankan	55-60	Male	Roman Catholic
Weer2	Sri Lankan	50-55	Male	Catholic
Thin1	Indo-Canadian	55-60	Male	Sikh
Khair	Indo-Canadian	55-60	Male	Sikh
Brar2	Indo-Canadian	50-55	Male	Sikh
Patt1	Indo-Canadian	30-35	Female	Sikh
Bath1	Indo-Canadian	60-65	Male	Sikh
Dela1	Filipino	45-50	Female	Roman Catholic
Corr1	Filipino	50-55	Female	Roman Catholic
Jocy1	Filipino	40-45	Female	Roman Catholic
Poe1	Filipino	50-55	Female	Roman Catholic
Sebn1	Filipino	50-55	Female	Roman Catholic