

Pond hockey dads and climate change:

How Canadian fathers feel about the threat of losing the game they love

By

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Abstract

This text/video thesis investigates how Canadian fathers feel about the threat of losing pond hockey, a revered game they love, to climate change. It responds to the David Suzuki Foundation's (DSF) assertion that under a global 'business as usual' rate of producing greenhouse gases, the skating season of the world's largest 'rink'--the Rideau Canal--would shrink from a nine week historical average to just one week by century's end (DSF, 2009a). Seven outdoor-hockey-loving fathers were interviewed, which revealed their willingness to share feelings of concern, sadness, fear, uncertainty, and need for action to mitigate against and adapt to the ill-effects of climate change on this game, and more serious social situations. Despite concerns it was revealed they took few substantial actions against climate change, which they recognized might affect themselves, their children, communities, and future generations. Conversation, at times nostalgic, helped make these issues more salient.

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Chapter 1: Introduction

Canadians are passionate about hockey. Evidence of this enthusiasm permeates this country's culture. From the quaint scene on the \$5 bill, to countless popular children's books, to its reputation—evidenced in the 2010 Olympics—as 'Canada's Game', the "mystery and mystique" (Earle, 1995, p. 3) of hockey has touched almost every Canadian. From its beginnings—which correspond roughly to the nation's—Canadians from every part of the country have played the game with zeal, tenacity, elegance and pride. Though Canada has struggled over the years with a thoroughly documented national identity crisis, one part of its identity which has never been in question is that it is a hockey-playing nation (Robidoux, 2002). For many, hockey represents a land of stoic, courageous, physically dominant males who value "individualism, flair and, most of all, character" (Robidoux, 2002, p. 221).

The image of a group of boys playing on an outdoor rink or frozen pond symbolises all that is best about the game. It "evokes something distinctive –"the true north strong and free" (Earle, 1995, p. 5). For many, playing pond hockey is "nothing less than a Canadian rite of passage" (Earle, 1995, p. 16). It is also the genesis of the game—playing on natural ice is where it all began. (From this point on the terms 'pond hockey' or 'outdoor hockey' refer to the same phenomenon: hockey played on natural outdoor ice).

Pond hockey is the foundation upon which the entire structure and culture of the game is built. But how solid is this foundation, or, put another way, how 'thick is the ice'? This Canadian cultural touchstone is in jeopardy of slowly vanishing if current climate change trends continue into the 21st century.

Skating on frozen outdoor rinks could be reduced to a nostalgic memory in many parts of Canada within three or four generations (90 years) unless significant action is taken to reduce the

causes of climate change (Arena, 2008; David Suzuki Foundation, 2009a; Koehl, 2005; Prowse, Bonsal, Duguay, Hessen & Vuglinsky, 2007). Even if global emissions are significantly reduced today, many Canadian outdoor rinks would still likely lose roughly 30% of their season by the year 2100 (David Suzuki Foundation, 2009a). I have friends who have said that over the last ten to fifteen years their neighbourhood rinks have had more inconsistent weather, and have seen a reduction, on average, of two weeks of reliable ice time each year. I have noticed a similar trend, and as both a life-long lover of outdoor hockey and a father of two young boys who also enjoy the benefits of outdoor skating and other winter sports, I find this extremely troubling. Even more dire than the predictions from the 2009 DSF report, however, are others which foretell a certain end to the kind of regular outdoor hockey that is common to most enthusiasts in this country.

(A)ll the data indicates that even if we went to a zero carbon emission situation, there are already so many things entrained in the present situation that really nothing that we can do now will change a shrinking winter season for perhaps a millennium.... So how do we help people to act even when they are looking at dozens of generations before things will change? (R. Kool, personal communication, 2011)

Even if worst-case predictions like this are well founded, it would not diminish my resolve to try to do what I can and reverse this climate trend for two simple reasons: things can change, and there's always hope. I will touch on the first one now, and hope will be discussed in the literature review.

The subject of how to change the current course of climate predictions is vast and far beyond the scope of this thesis to go into detail. I will, however, briefly discuss two authors who offer insights into why I think that dire climate predictions are not necessarily foregone conclusions.

Inglis (2008), discussing the similarities of how patients deal with troubling news of their personal health with how people deal with troubling news of climate predictions, talks about various stages of the transitions people go through when dealing with very difficult news. She puts forward that perception of a difficult situation can have a strong bearing on its outcome.

For some, this shift in perception has extended their life, and for others, it has even changed the diagnosis of their health status and its prognosis.

Can the intense work of noticing, sorting, prioritizing, and reconciling choices actually transform an individual's biological, neurological, cognitive, and emotional patterns and thus allow a more integrated pattern to emerge? Many studies, including those on brain plasticity, would suggest it can. This process, then, of confronting difficult news about personal survival can have generative impacts resulting in life-changing qualities and even transformative outcomes. (p. 102)

As citizens of this planet, I believe we are far from coming to a decision that we want to end climate change. When this moment of decision can be reached, however--as my second author alludes to—we will have a far greater chance of addressing the issue of altering the outcome of climate change.

Until one is committed, there is hesitancy, the chance to draw back-- Concerning all acts of initiative (and creation), there is one elementary truth that ignorance of which kills countless ideas and splendid plans: that the moment one definitely commits oneself, then Providence moves too. All sorts of things occur to help one that would never otherwise have occurred. A whole stream of events issues from the decision, raising in one's favour all manner of unforeseen incidents and meetings and material assistance, which no man could have dreamed would have come his way. Whatever you can do, or dream you can do, begin it. Boldness has genius, power, and magic in it. Begin it now. (Johann Wolfgang von Goethe (1749 –1832))

And although it may be ‘pie in the sky’, who’s to say that some new technology (a CO₂ scrubber, for instance) won’t be invented in the next decade that could radically change the climactic warming trend? Indeed, things can change.

Since I don’t believe it’s prudent to count on these type of hoped-for inventions, however, I would like to take steps to reverse this warming climate trend and believe that the best way to do this is to try to reach my target market—fathers—and appeal to their intellect and emotions around this topic. Because of the serious nature of credible climate predictions, however, every measure should be taken to inform any target market about the reality of the situation, so that they are well informed about predictions on the climate, and hence, on activities like outdoor hockey. Mitigation and adaptation strategies should be discussed, so that those hearing the message understand that, despite all of their best intentions and plans, they may not be able to ‘save the ice’; in other words, mitigating against climate change may not work very well as an option to protect against losing outdoor hockey. In this case, adaptation measures may have to be seriously looked at. What is ultimately most importance with any campaign to try and protect outdoor hockey, is to stress that all steps taken in this regard benefit other, and often times, far more important outcomes of climate change (i.e. crop stability, droughts, ocean-level rise, etc.), which will likely and hopefully help to benefit future generations. Using pond hockey to discuss all of these issues, is just an ‘in’, i.e. because of its familiar and congenial nature, people can relate to it and may be open to discussing it along with the other more serious issues.

The first step in trying to reach a target market—fathers or any other group--is to get them to recognize that there is a threat, in other words to get them to ‘wake-up!’ Similar to citizens in pre-WW II England, many people today are in denial about a serious threat. Hamilton (2010) discusses this further. Then, most people were in denial about the threat posed by an

acceleratingly aggressive Germany, since few wanted to admit to the real possibility of another war due to their loathing and exhaustion caused by their hellish battle only a generation prior. Today, the threat posed by climate change is also very real and very ominous, and like the British citizens of that time, I believe most citizens of the world today are in denial about its threat. Denial will be discussed in greater detail in the literature review. At that time in 1939, it took the concrete event of the Nazis suddenly invading Poland overnight for British citizens and the world to finally wake up. When this happened the threat became very real, and the British then rose up because they were forced to. And when they did, they faced their threat with determination, courage, ingenuity, team-work and a “never surrender!” mind-set. There were times when it looked like all was lost to them, but with a combination of hard-work, perseverance, help from allies, luck and good planning, they were able to overcome what threatened them and eventually preserve their British way of life.

The first step on the long road to their success was waking up to the reality of their threat, and, in regards to how Canadian fathers are currently dealing with the threat of climate change on their lifestyles, a ‘wake-up call’ is desperately needed. It is the ultimate intention of this thesis to offer insights on how to go about conducting this wake-up call. Appealing to losing something that is dear to them--pond hockey--will hopefully jar them awake to the reality of what is looming.

The first part of this research explores the emotions that arise when enthusiastic outdoor hockey fathers are given an opportunity in a private interview situation to reflect on how they feel about the demise of this cherished winter pastime and beloved national activity as a result of climate change. The second part of this research deals with suggesting how these emotions might influence the pro-environmental behaviour of these types of individuals. For this study, I

conducted in-depth interviews with seven fathers. All but one interview was videotaped in order to use parts of the videotaped footage in this thesis, as well as to perhaps use it to help create a documentary film on the subject matter at a later time. Informants were restricted to Canadian fathers who professed to ‘love’ the game of outdoor hockey, and who also purport an important identity as outdoor hockey players.

I focused on fathers for four reasons: (a) I am a father who is very concerned about the effects of climate change on various aspects of my children’s lives. Like many Canadian fathers I have always loved playing pond hockey, and I’m using the dynamics around climate change and its effects on outdoor hockey to understand what other fathers feel about witnessing their children losing something they, themselves hold dear; (b) as a father, I have firsthand knowledge of what fatherhood is like, and I believe this common ground helps me to identify with the fathers who are the informants in this study; (c) I am interested in the notion of a father’s legacy for his children; of wanting to care for them by leaving something of value for them. I believe introducing them to pond hockey is one of those legacies and I want to know how other fathers engaged in the game feel about this issue; and (d) I believe the framing of climate change in respect to fathers wanting to protect their children in order to help them lead healthy lives has tremendous potential for encouraging pro-environmental behaviour. According to a 2007 study by Minnesota Fatherhood Advocates and Practitioners,

(s)ince the early 1990s, there has been a growing body of evidence that points to the important benefits of a strong father-child relationship. Among these benefits are ... increases in healthy behaviors. Fathers who are able to develop into responsible parents are able to engender a number of significant benefits for themselves, their communities, and most importantly, their children. (p. 4)

According to the report, healthy and involved fathers are central to their children's well-being. The implications of fathers being concerned about the health of their children made me think about the possibility of coalitions of fathers against climate change emerging in Canada and other Western nations.

Canadians, on the whole, know that climate change is real and potentially very dangerous for themselves, the country and the world (Pabillano, Canseco & Perdomo, 2007). Two media releases announcing climate change polls that were released within a week of each other in proximity of the December 2009 dates of the landmark Copenhagen Climate Change Conference reported that Canadians remain concerned about the state of climate change and the environment. “(A) recent survey (on key national issues) ..., found that just over half of Canadians (55%) rate climate change and the environment at least eight out of ten on a ten-point scale of importance” (Harris/Decima, 2009, p. 1). Another poll on climate targets stated, “A recent (representative sample) survey of (1502) Canadians showed that 74% of Canadians believe the Harper government should go further in addressing climate change and adopt a more ambitious goal of reducing greenhouse gas emissions” (Équiterre, 2009, p. 1).

Yet knowing about negative environmental issues does not insure that people will enact pro-environmental behaviour to combat them (Pabillano et al., 2007; Kollmuss & Agyeman, 2002; Norgaard, 2006a). In fact, some studies point out that knowledge alone about environmental degradation can have very little effect on changing behaviour (Kollmuss & Agyeman, 2002; Lee, 2008; Loewenstein, Weber, Hsee & Welch, 2001; Norgaard, 2006a; Pooley & O'Connor, 2000). If knowledge about a situation as potentially harmful as climate change does not convince people to change their behaviour, what will? As Kollmuss and Agyeman (2002) state,

The answer to the questions: ‘Why do people act environmentally and what are the barriers to pro-environmental behaviour?’ is extremely complex.... Numerous theoretical frameworks have been developed to explain the gap between the possession of environmental knowledge...and displaying pro-environmental behaviour. Although many hundreds of studies have been done, no definitive answers have been found. (p. 240)

What has been shown by several studies, however, is that a strong emotional reaction to the environment can lead to pro-environmental behaviour (Kollmuss & Agyeman, 2002; Lee, 2008; Loewenstein et al., 2001; Norgaard, 2006a; Pooley & O’Connor, 2000; CRED, 2009). As Pooley and O’Connor (2000) state “... for environmental educators interested in changing environmental attitudes, emotions and beliefs, rather than knowledge, need to be targeted as sources of information on which to base their environmental programs” (p. 711). Kollmuss and Agyeman (2002), citing Chawla’s (1998, 1999) work, also state: “... an emotional connection seems to be very important in shaping our beliefs, values, and attitudes towards the environment” (p. 254). They go on to say that “the stronger a person's emotional reaction, the more likely that person will engage in pro-environmental behaviour” (p. 254).

Due to outdoor hockey’s unique position of being both an environmental indicator of climate change’s effect on Canadian winters, and, for many Canadians, a heartfelt part of our national identity, the emotions expressed about climate change’s effects on pond hockey could be a strong indicator of how certain Canadians feel about the effects of climate change on the entire nation and its identity. As one author states, “Outdoor hockey players are the canaries of climate change” (Koehl, 2005, no page number). By conducting this research study, the collected emotions-based findings can hopefully be used—along with compelling and sound knowledge-based information—in new programs aimed at altering behaviour to be more pro-environmental.

Background

My interest in this topic arose from my profound concern for the near and long-term future well-being of my family, friends, other people and global life forms; my love of outdoor hockey; and my belief, supported by evidence (cited above), that public programs attempting to foster pro-environmental behaviour have more success when they marry emotions-based approaches with knowledge-based approaches.

Outdoor hockey commands a special place in many Canadians' hearts, especially men. It transcends cultural specificity, and includes almost all sectors of Canadian male society: east/west, north/south, English/French, poor/rich, educated/working class, and even immigrants, who are often quickly brought into the fold and caught up in hockey-mania. One has only to consider the breadth of popular cultural material over the decades to realize this. From Roch Carrier's famous children's story *The Hockey Sweater* (1979), and Stompin' Tom Connors' popular *The Hockey Song*, to the recent full-length film about Maurice Richard, *The Rocket*, and the maniacal national response to our dramatic gold medal win in the 2010 Olympic men's hockey game, the number and variety of hockey-laden national cultural pieces and moments is impressive.

Playing hockey on a pond or outdoor rink obviously means playing a game, but it also means many other things: friends and family time, fresh air, community ties (often with complete strangers), exercise, communing with nature, peacefulness, solitude, pondering our vast natural legacy, leisure time, and appreciating—even revering—our distinct Canadian culture. “The lull (when the puck is momentarily lost (in a snow bank)) allows everyone to catch their breath and affords us a moment's reflection—to worship the game, the night, our lives, and our good

fortune in bringing them all together” (Sanger, 2006-2007, p. 3). Outdoor hockey is a big part of Canada.

Amongst all of my many identities—father, husband, brother, son, environmentalist—is one I am particularly fond of: hockey player. I have considered myself a hockey player for as long as I can remember and my identification with this hard-working tribe of fun-loving and competitive athletes (and for me, mostly guys) who share a special skill for sliding on frozen water, started early. I was born and raised in the hockey hotbed of Montreal where the game is so zealously followed it has been described by many as a religion; and I was a faithful devotee. I lived within walking distance of what was then the ‘Vatican’ of the game, the Montreal Forum, home of the winningest team to ever play the game: The Montreal Canadiens, or as they’re known in their native French, Les Glorieux!. For a young sports-crazy boy I was born at the right time, since ‘The Habs’ were in one of their dynasty periods in the mid-70s, and winning most of the time. Although the team’s winning ways and storied history certainly fuelled my appetite for hockey, the main reason for my passion for it was undoubtedly simply due to playing it, which I did as often as I could during the winter, and that meant playing a lot of it outside at the local neighbourhood rink. My most cherished childhood memories, in fact, were playing outdoor hockey after dinner on school nights with my best friend when we were around ten years old. We would walk the four blocks by ourselves and play for hours until we had to get home to go to bed--or we couldn’t stand the pain of frozen toes any longer! I love hockey because it’s a fast, graceful, rough, and skilful game and, when played outside for fun with friends on a calm cold night under the lights, becomes a transcendent moment in excitement, beauty, camaraderie and performance art of the highest order. I treasure these moments because they were extraordinary. For me as a young boy, outdoor hockey was also a proving-ground; a place where I could try my

hardest to improve so that I wasn't chosen last in the pick-up games, and so that I could play with the big boys. It taught me to have fun and work hard, and helped to form part of my identity.

When I learned about predictions by numerous climate experts that there is a real possibility that these moments are headed in the same direction as threatened species, I felt deep sadness. I felt sadness not so much because I wouldn't be able to experience more of these awe-inspiring moments (though I still desperately want to), but mostly because many children and adults that will come after me won't be able to. This concern became very real to me on a late March 2010 afternoon when I was talking on the phone to a Montreal father about issues surrounding climate change, and he mentioned the particularly balmy winter he just went through in that city. At that particular moment I overheard his three year old son in the background—completely out of the blue and without any prompting—say to his father “I want more snow. I want more snow”. For many children winter is a magical season, and the fact that every Canadian child may not have the chance to experience the wonder and magic of winter—and of playing outdoor hockey—is indeed a very sad prediction for me.

But so what? It's one thing for people to feel sad—or angry, frustrated, depressed, or many other emotions—about this or any other situation surrounding climate change or other disturbing realities, and quite another to actually do something to try and rectify those situations; in other words, to take some sort of remedial action. Thomashow (1995) discusses this idea when he speaks about the *path of citizenship*. He describes this path as

the professional and political obligation to educate the public about the threats to nature, and the various types of involvement that result.... Inevitably, as people widen their circles of identification, they become involved in thinking about the Commons, the assets

of nature that everyone shares, and typically, this leads to participation in the public arena. (p. 30-31)

This is the type of path that I now find myself on. Doing this thesis is my attempt to do something about climate change's effect on pond hockey. I also know, however, that without others also doing something, my efforts will not be enough. Most Canadians will likely agree that it's too bad that there is climate change and that the climate isn't as conducive to outdoor hockey as it used to be, but what are they willing to do to rectify the situation? People may be concerned but are their actions trying to rectify their concerns? Canadians have a long history of perceiving themselves to be closely connected to the natural environment and be good stewards of the land, but as the nation becomes more and more urban and less and less actually connected 'to the land', can we still believe ourselves to be this way? Do our actions still reflect this? How we think of ourselves and how we actually are do not always coincide. This dynamic was revealed in a study of Florida surfers; a sport often perceived and characterized as being very pro-environmental.

While respondents expressed rhetorical commitment to environmental conservation and the need for awareness of environmental issues, survey responses indicated a lower degree of commitment through lifestyle or environmental action.... Thus the idea of what it means to be an environmentalist is highly textured and variable. (Hill & Abbott, 2009, p. 164)

It is my hope that by trying to be responsible and taking action to bring the issue of how climate change may affect outdoor hockey into the public realm, I can get more people to consider how their actions are contributing to the issue. Writing this thesis may also help me feel better about my future, which can feel very bleak at times. "There is a healing component to

responsibility, the therapeutic and moral imperative to construct a viable future, to contribute to the ecological commons, to act according to our ecological identity” (Thomashow, 1995, p. 160).

My love affair with this game goes to the core of identity and environmentalism, which, according to Thomashow (1995), is “sense of place” (p. 192). To fully enjoy the game, you need a special place. It needs continuous cold days and a group of like-minded people close by to play with. For generations, Canadians have had this ‘sense of place’ regarding the outdoor rink. For the initiated, there is a code of conduct that you understand and an expectation of the experience you will have. You know to dress warmly, bring shovels, and extra pucks (because you’ll probably lose at least one!). You know how teams are picked by tossing your stick into the middle pile so someone can split them up. You know to include all ages and abilities into your play. And you know that you might be playing anywhere from an hour to ‘lights off’ depending on the quality of the game. You also know that even if it's really cold and your toes freeze that the joy of playing the game will be worth the terrible pain when they thaw out (so much so, in fact, that if you’re under the age of 13 you’ll probably even go through it again the next night!).

In the section *Childhood Memories of Special Places*, Thomashow (1995) talks about the shared experiences of environmentalists from around the world.

They have fond memories of a special childhood place, formed through their connections to the earth via some kind of emotional experience, the basis of their bonding with the land or the neighbourhood. Typically these are memories of play experiences, involving exploration, discovery, adventure, even danger, imagination, and independence. And what stands out is the quality of the landscape—full descriptions, vividly portrayed, embedded in their memories. Yet these memories are often juxtaposed with a distressing contemporary picture. In many cases, the childhood landscape has been transformed by economic development. These people also expressed feelings of loss, despair, and frustration as their special places are irrevocably changed.... (p. 9)

Canadian fathers who grew up playing at local outdoor rinks or ponds share a lot with these environmentalists. In reference to outdoor ice surfaces, however, the “quality of the landscape” refers to the quality of the ‘airscape’: the quality and duration of cold air. The “transformation of the childhood landscape by economic development” in relation to contemporary fathers now refers not necessarily to local development of the land (although this could be the case), but to global development, whereby as increasing development happens around the planet, CO₂ levels also continue to increase, which raises global temperatures, the enemy of outdoor hockey.

Research Question

This study will address one research question: How do Canadian outdoor hockey playing fathers feel about the threat of losing the game they love to the effects of climate change?

Study Limitations and Delimitations

Limitations are “conditions that restrict the scope of the study or may affect the outcome” (Royal Roads University (RRU), 2009, p. 19). They are matters not within the control of the researcher. Delimitations are “restrictions/bounds that researchers impose prior to the inception of the study to narrow the scope of the study” (RRU, 2009, p. 19), and, as such, are within the control of the researcher. The reason for disclosing them is to acknowledge how the generalizability of the study may be affected by them. According to several authors (Cohen, Manion & Morrison, 2008; Miles & Huberman, 1994), a qualitative study such as this can arrive at statements which are generalizable if they adhere to the dual tenets of *comparability* and *transferability*. Lincoln and Guba (1985) and Eisenhart and Howe (1992) (as cited in Cohen et al., 2008) describe that “it is possible to assess the typicality of a situation—the participants and settings, to identify possible comparison groups, and to indicate how data might translate into

different settings and cultures” (p. 137). Cohen et al. (2008), referencing Schofield (1990), elaborate and explain that in order to be able to make generalizable statements in qualitative research one must “provide a clear, detailed and in-depth description so that others (researchers) can decide the extent to which findings from one piece of research are generalizable to another situation, i.e. to address the twin issues of comparability and transferability” (p. 137).

Limitations for this study include the following. The winter that the interviews took place in Kamloops, BC (2009-2010) was both unseasonably warm and with a low snow-pack, and included a general warming of the region which started in the uncommonly early period of mid-January, 2010¹. In light of the climate change focus of this study there is a possibility that informants may have had more concerns about climate change as a result of this weather phenomenon than if temperatures and snow depth had been average or above average, as was the case the year prior and after the interviews.

Another limitation is that the definition of the term climate change may have been different for each of the seven informants. This is noteworthy because of the obvious importance it plays in this study. Based on the findings of a 2007 study of the basic understanding of the concept of climate change (Sterman & Sweeney, 2007) which showed widespread misunderstanding about some of its fundamental facts (such as confusing it with the effects that produce the ozone hole), there is reason to suspect that some of my seven informants might also have confused issues around climate change with other environmental issues not necessarily related to it. I did not set out a firm definition of climate change in advance of the interviews.

¹ The average temperature for January, 2010 in Kamloops was +1.0 C., versus the decade long (2000 to 2009) mean average January temperature of -2.9 C (Environment Canada, 2011a). Total precipitation for the whole winter of 2009/2010 was only 23.8 cm, versus the average winter precipitation of more than three times that, 75.5 cm (Environment Canada, 2011b).

There were several delimitations in my study, including the four criteria that restricted who my informants could be. The criteria were: being a father; being Canadian; having played pond hockey as a boy and continuing to play it now; and professing to love the game of pond hockey (however the informant defined the word love). I imposed these delimitations for the following reasons. I wanted to interview fathers mostly because there is virtually no information on how fathers feel about this subject. Outdoor hockey is traditionally a male domain and so I believed there would be richer material in just interviewing fathers rather than both fathers and mothers. Also, since I am a father myself, I felt more comfortable interviewing other fathers; I felt that I would be better able to relate to them during the interviews since we shared this common trait. I only interviewed Canadians in order to keep the scope of this study manageable, and since hockey is also such a popular Canadian pastime, I felt that my findings might have a better chance of being used in a national context than if my informants came from any nation. I only wanted to interview informants who were intimately familiar with the game so that they would have an emotional and historical connection with it and a broad base of knowledge, and for this reason they needed to have played it as a boy, and continued to play it now. I wanted informants who admitted to loving the game of pond hockey since love is a very strong emotion, and, again, I was interested in how these fathers felt about losing something that they cared deeply about.

Another of the possible delimitations of this study had to do with the informants being given the interview questions several days in advance of their interviews. (The interview questions can be found in Appendix A). I did this in order to provide them with an opportunity to feel at ease with the questions/concept of the study in the hopes that they might then be more emotionally open during the interviews. Having the informants in a relaxed state and emotionally

accessible was central to how the study was set up. The delimitation has to do with the fact that the informants may have formulated their answers prior to the interviews and tempered them in order to tell me what they thought I wanted to hear on the subject, and not how they truly felt or thought about various subject areas. It is also possible that they may have expressed different feelings upon initially hearing the questions, than they did upon further reflection. Due to the fact that we were all friends prior to the study (except for one), they may also have only provided answers which would not cause any conflict between us.

The flip side of this, and which was my rationale based on my experience of dealing with people, is that I believe that when people are in a prepared and relaxed state and feel comfortable and unhurried, they are more likely to be honest with each other—both analytically and emotionally—and therefore their answers will be more genuine.

Chapter 2: Literature Review

The literature review for this study is divided into five areas:

Hockey in the Canadian cultural fabric

Canadian public attitudes toward climate change

Men's emotions around loss

Emotions-based approaches to influencing behaviour

Emotional responses to climate change

Hockey In the Canadian Cultural Fabric

The literature on hockey in the Canadian cultural fabric, even pond hockey, is extensive.

Michael A. Robidoux's *Imagining a Canadian Identity Through Sport: A Historical*

Interpretation of Lacrosse and Hockey and Neil Earle's *Hockey as Canadian popular culture:*

Team Canada 1972, television and the Canadian identity both offer strong historical insights into

the reasons for hockey's almost mythic place within today's Canada. "(T)here has been one expression of nationalism that has remained constant since confederation, that being the game of ice hockey" (Robidoux, 2002, p. 209). Earle (1995) postulates as to why the game has such an appeal to Canadian males.

... (H)ockey reflects another part of the male sensibility... This aspect is its most redeeming cultural feature and lies close to the core of the hockey mystique. This was and is the game's evocation of a particularly Canadian paradisiacal myth, the appeal to "the boy inside the man," a myth that intelligent students and players of the game have captured... The image of the boy with his hockey stick on the outdoor pond evokes something distinctive—"the true north strong and free". (p. 5)

A recent Canadian art exhibition on hockey, with an accompanying catalogue containing images, commentary and essays, also points strongly to the deep-rooted importance and passion that Canadians have for the game. One has only to consider the image below of an artwork from the exhibition by contemporary Canadian-based artist Christian Nicolay, poignantly titled *Climate Change*, to realize how firmly entrenched the game of pond hockey is in our national character.



Christian Nicolay, *Climate Change*
currency, 2009²

² The artist has granted permission of this artwork for use in this thesis. The artwork is also used courtesy of Esplanade Art Gallery, Medicine Hat, Alberta.

Once Upon a Pond, is “a group exhibition on pond hockey in the era of global warming”, and opened in October 2010 at the Esplanade Art Gallery in Medicine Hat, Alberta. Although small in scope with only three artists, it offers particular relevance to this thesis because of the direct association of its two central themes, spelled out in the exhibition by-line. The exhibition alludes to the importance of hockey in Canada’s cultural fabric, as evidenced in the Forward’s opening line by the gallery’s Curator, Joanne Marion: “The tradition of pond hockey runs deep in almost every community in Canada” (p. 7). The importance of such things as community, friendship, and identity, all strong strands within most robust cultural fabrics, are also mentioned by the exhibition’s Curator, Linda Sawchyn, when discussing the artwork:

In all of these works, we see the love of playing pond hockey and enjoying other winter activities as well as the importance of such activities in building trust, friendship and community. Is there any danger that this sense of community, collective memory and identity will melt away if pond hockey disappears? (p. 11)

The central role that hockey plays in the nation’s identity even made it to centre stage of Canada’s Parliament when, in 1994, Kamloops MP Nelson Riis spearheaded a mission to get legislation (Bill C-212) passed that would recognise hockey as Canada’s official national winter sport and lacrosse as the official national summer sport. In an analysis of the proceedings, Jedwab (2007) concludes that Canadian unity, which is closely associated with identity, needed bolstering at the time due to fears of Quebec separation, and wanting to pass Bill C-212 was the “underlying motivation” (p. 192) of this cause by elected representatives from the federalist parties.

From these ‘formal’ recognitions of the importance of hockey in Canadian society, to more popular recognitions, the influence that hockey commands cannot be discounted. As one author states, “... like soccer to the British or baseball to Americans, the game speaks to us and

of us. Hockey is arguably the greatest *pop* of all in our culture, and it demands attention” (McSorley, 1999, p. 152). Hockey abounds in Canada’s pop culture. From a 2010 Olympics postcard image of young boys playing on a frozen lake, to a Rockwellian depiction of a ‘rosy-cheeked’ winter scene on a Tim Hortons to-go coffee cup, and from NHL team car-flags flying everywhere during the playoffs, to front page stories about the game appearing regularly throughout the winter, hockey is all around us ‘up here’.

(G)iven its historical roots and prominent presence in many forms of popular culture, it is clear that hockey is one of Canada's strongest, most insistent cultural “songlines”, an icy repository of individual and collective memory played and replayed in endless variation, inscribed by generations on the frozen landscape of the very nation itself. (McSorley, 1999, p. 151)

Whether promoting Tim Hortons coffee, or tough—as hockey—pick-up trucks, advertisers use hockey to sell stuff to many Canadians. One particular sales tactic used on a regular basis is using sentimentality. By combining children, adults and hockey, and often set in natural outdoor spaces, advertisers use this combination to try to pull on heart strings—and it must work since this combination is used on a regular basis by major retailers. Tim Hortons and Canadian Tire have used this tactic to strong effect in many TV commercials over the years.

Here are three examples from YouTube. (a) Proud Fathers:

<http://www.youtube.com/watch?v=QINv6rebyTU> (Tim Hortons, n.d.); (b) Sidney Crosby -

Timbits Hockey: <http://www.youtube.com/watch?v=JmUBATgNSE&NR=1> (Tim Hortons, 2009); (c) A Skate Story:

<http://www.youtube.com/watch?v=0KMlIrtS2JQ&playnext=1&list=PLFE10B4269CF5CEDE>

(Canadian Tire, 2010). A further example of how sentimentality is used was evident in the marketing of special NHL outdoor hockey games in 2011. Both the *Winter Classic* (January 1 in

Pittsburgh) and the *Heritage Classic* (February 20 in Calgary) used the sentimentality associated with outdoor hockey to help sell tickets. Regarding the later game, a half page colour ad appeared in the *Globe and Mail* the day before the game (sponsored, I might add, by Tim Hortons), depicting a simple image of a freshly hand-shovelled rink on a frozen lake set in a pristine wooded area with a poem about a lake printed over the image. The sentimentality of the poem, combined with the wintery image, speaks to the importance that Canadians place on outdoor hockey.

In his 2010 New Year's Eve front page article, long-time *Globe and Mail* sports columnist Roy MacGregor writes specifically about how sentimentality was used in an effort to boost the presence of hockey in the U.S. by heavily promoting the Winter Classic game to the entire US viewing audience. MacGregor quotes Brian Jennings, NHL executive VP of Marketing, who says that the outdoor Winter Classic is all about getting back to "that time of simplicity" (p. A12). MacGregor also writes that plans are afoot to stage the Winter Classic event annually for as long as sponsors and fans keep coming back for more. The reason for this, he says, is simple: "sentimentalism. It is at the very core of sport... it is a powerful emotion and taps into memory and pocketbook with equal ease" (p. A12). He concludes by saying that

(t)here is a collective memory out there that is nursed by the real experiences of ... parents, of older fans.... (M)ost fans and players accept that, no matter how contrived it might be (having an outdoor rink built for a one day event in a football stadium), there is still a romance to the game if it is played as it was invented: outdoors on real ice. "Good, warm, fuzzy memories," former Edmonton Oiler Paul Coffey called it". (p. A12)

Who amongst a hockey playing crowd with fond childhood memories of playing on outdoor rinks wouldn't feel sentimental about an outdoor game like this? It certainly does help harken back to a simpler, less hectic time and fill you with pleasant memories (and once you're

feeling good inside (the promoters are counting on) then forking over the big bucks for front row seats won't really feel that bad).

In conclusion, the importance that hockey plays in the cultural fabric of this country is wonderfully captured by Maclean's magazine humorist Scott Feschuk, who offers this amusing analogy on the issue. "Pond hockey! Short of getting Gordon Lightfoot to write a song about Stompin' Tom Connors singing a song about Ann Murray, you just can't get any more Canadian" (Feschuk, 2010, p. 71).

Canadian Public Attitudes Toward Climate Change

The literature on Canadian public attitudes toward climate change is also extensive and generally points to three conclusions: (a) Canadians are quite concerned about the predicted ill-effects of climate change, (b) they want to see much greater action on the part of their federal government officials to take strong leadership on the issue, and, in keeping with this last point, (c) they say they want the federal government to tackle climate change issues even at the expense of the economy (Borick, Lachapelle, Rabe, 2011; Canadian NewsWire (CNW), 2010; Climate Action Network Canada, 2009; David Suzuki Foundation (DSF), 2009b; De Souza, 2010; Harris/Decima, 2009; Hoggan & Associates, 2009; Pembina Institute, 2008; Reid, 2007).

This thesis specifically draws upon a 2009 study published by one of Canada's most trusted science-based environmental organizations, the David Suzuki Foundation (DSF), called *On Thin Ice: Winter Sports and Climate Change*. It uses a variety of sources that point to the fact that Canadians feel passionately about their winter sports—including outdoor hockey—and are worried about the negative effects that climate change might have on them. The study relies on the well-earned reputation of the DSF for critical material, the compelling opinions of nine high level Canadian sports figures, and an extensive reference list to make the case that it represents the beliefs, attitudes and concerns that many Canadians have on the subject of climate change's effects on their winter sports. The report provides a detailed outline of what may befall these sports under various climate change scenarios, and recommends measures that members of the public can take in order to avoid the worst outcomes. The report targets specific audiences with these recommendations for action, which include influential sports and business leaders, politicians of all levels, winter cultural event organizers, and the public at-large. The often-times disheartening chapter outlining possible 'what ifs' of climate change's impacts on winter sports,

is followed by practical and more hopeful chapters, leaving the reader with many useable tools to take proactive steps towards greater environmental behaviour.

Another comprehensive report, *Canadians and Global Warming: Citizen and Consumer Impact* (Pabillano et al., 2007), by another trusted Canadian source, Angus Reid Strategies (now called Vision Critical), gives a detailed snapshot of the country's views on global warming/climate change. With a sample of nearly 3700 Canadians from all geographic and demographic areas, this source is comprehensive in its understanding of what Canadians generally think about global warming. Most believe global warming is happening and that harmful human activity has hurt the planet. They believe that unbridled energy use will negatively impact their lives at all levels and agree that action is needed to prevent a major collapse of the Earth's entire ecosystem. Politically, they are clear that the environment is not a fringe topic anymore and are calling on Canada's leaders to take the environment more seriously, which includes decisive guidance and new legislation on climate change. Canadians resent their poor environmental record in international circles, and generally perceive governments as enemies of nature. They also think of businesses as enemies of nature, and would like to see them become more transparent in their actions including eradicating any harmful practices. Canadians want the environment to become one of the key issues in the boardroom, and the classroom too. They believe scientists and the media have strong global warming credibility and are listening very closely to what they have to say on this matter. There are significant regional differences across the country, with Québec standing out as the greenest province and Alberta at the other end of the environmental spectrum with low concern about global warming. There are also significant demographic differences with how the national population perceives and acts on

global warming, and the report has identified five discernible groups: Sceptics, Agnostics, Converts, Believers and Activists.

Canadians are concerned about climate change.

Angus Reid Public Opinion did two other opinion polls which they published in 2009 and 2010. (Angus Reid Public Opinion was a separate company from Angus Reid Strategies when they conducted these polls, but is now also Vision Critical). Both surveys polled 1000 Canadians to get their opinions on a number of global warming related issues and found that in both polls 56% and 58% respectively believed that “global warming is a fact and is mostly caused by emissions from vehicles and industrial facilities” (Angus Reid Public Opinion, 2010, p. 1). The 2009 poll also found that “40% claim that global warming will significantly impact their lives and the lives of future generations, while 36% expect it to not significantly impact their life, but the life of future generations” (p. 2). In response to the survey question “Would you believe what they (various groups listed below) say when they are talking about global warming?”, the 2009 poll echoed the 2007 poll with its findings of positive opinions concerning the credibility of scientists (73%), average opinions of environmental organizations’ credibility (47%), but with low confidence in provincial governments (20%), federal governments (16%), individual corporations (8%), and industry associations (6%). Unlike 2007, however, respondents also had little faith in the credibility of television news-stations (23%) or media opinion columnists (15%). And there are several other surveys dealing with Canadians’ general beliefs and concerns about climate change (e.g., Équiterre, 2009; Harris Decima, 2009; Hoggan & Associates, 2009).

Canadians want strong government leadership on climate change.

The GlobeScan (2010) survey shows how Canada is perceived internationally regarding its stance towards climate change. “Canada is widely seen as a major laggard.... (T)he non-

governmental organization Germanwatch ranked Canada 54th out of 57 countries in its performance in halting climate change” (Butler, 2010). This finding speaks to the issue of what many Canadians have said about their federal government’s role in dealing with climate change. In the 2009 Hoggan & Associates survey more than three quarters of the public felt embarrassed that Canada wasn’t taking a stronger lead on lessening harmful emissions. The survey emphasises its next point by pointing out what respondents from Alberta said, a province which typically lags behind the rest of the country in over-all pro-environmental attitudes.

(E)ven in oil-rich Alberta, the province that would likely bear the highest financial costs of dealing with any rules to reduce the burning of fossil fuels,.... 65%... agreed with a statement that “it’s embarrassing that we are not doing more to curb emissions. (p. 1-2)

The overall message is clear regarding how Canadians think that their federal government should respond to climate change. In a June 2010 survey of 1158 Canadians, commissioned by Climate Action Network during the lead-up to the G8 and G20 summits, a press release read: “78% of respondents wanted Prime Minister Stephen Harper's government to use the summits to signal that Canada wants to be a leader in the global fight against climate change” (p. 1). This sentiment was echoed in the 2007 Angus Reid study (Pabillano et al., 2007). The Climate Action Network survey also found that 2/3rds of Canadians want the Harper government to stop the practice of subsidizing the fossil fuel industry, and that they oppose this same government’s strategy of waiting to find out what the USA and other nations will declare in their plans for addressing climate change before it develops its own plan. This last idea was agreed on in another survey done by McAllister Opinion Research in December 2008. It surveyed 1,015 Canadians and found that 83% agreed with this same sentiment.

These findings about how Canadians think government needs to take a greater leadership role regarding climate change are made even more relevant in light of the results of a February 2011 survey of US and Canadian public opinion, which concluded that “Canadian citizens generally see roles for all levels of government in combating global warming” (Borick et al., 2011, p. 6).

Canadians want action on climate change even at the expense of the economy.

The relationship between the economy and climate change was elaborated on further in several surveys. In a 2010 CanWest News press release about a May 2010 survey, commissioned by financial advisory services provider Ernst and Young, 300 corporate executives from 16 countries were polled. Of the Canadian executives, 82% said that responding to climate change is “imperative” and plan increases to spending on climate change initiatives. The survey also found that “71% of Canadian firms already have climate change initiatives in place, and another 11% plan to implement programs in the next 12 months” (p. 1). Finally, 43% of the Canadian executives said that they worked with suppliers to make sure the suppliers’ inputs were environmentally friendly too.

In another survey conducted by Environics Research just prior to the UN climate negotiations in Cancun, Mexico in November 2010, 1000 Canadians were polled to determine opinion differences between the Canadian public and the federal government regarding economy/climate change issues. The press release about it reported strong opinions on focusing more on pro-environmental directions for government (CNW, 2010). 87% of Canadians strongly or somewhat agree with the statement: “The root cause of climate change is too much focus on economic growth and consumerism. We need to have an economy that is in harmony with nature, which recognizes and respects the planet (CNW, 2010, para. 12).” Further, 83% also

strongly or somewhat agreed with the statement that “(t)he Canadian government should invest in green jobs and have transition programs for workers and communities negatively affected by a shift away from reliance on fossil fuels” (para. 14). Lastly, the survey found 71% of Canadians strongly or somewhat agreed with the statement: “The money spent on wars and the military would all be better spent on efforts to reduce greenhouse gas emissions and the impacts of climate change” (para. 16). There are other recent surveys on this topic (e.g., Borick et al., 2011; Pembina Institute, 2008).

People’s perception of the level of personal climate change risk is well represented in a survey conducted in December 2010 and commissioned by the insurance company RSA. Although Canadians chose “climate change “ and “environmental degradation” as the number two and three answers from a list of 39 issues that they felt posed a “significant risk” to them personally, they reserved their number one answer for “rising cost of living”. This result suggests that although people recognize the future risks posed by climate change, they are still more concerned with the short-term risks of a faltering economy over the longer-term—but more significant—risks that climate change poses.

Men’s Emotions Around Loss

Martin and Doka (2000) use the terms *Instrumental* and *Intuitive* grievers to differentiate the two predominant types of grievers, commonly often thought of in gender-specific ways.

(I)nstrumental grievers tend to have tempered affect to a loss. While intuitive grievers are more likely to experience their grief as waves of affect, instrumental grievers are more likely to describe it in physical or cognitive terms. While intuitive grievers often need to express their feelings and seek the support of others, instrumental grievers are more likely to cognitively process or immerse themselves in activity.... some instrumental grievers attempt to evaluate their experiences cognitively rather than experience them

emotionally. When instrumental grievers do respond behaviourally to a loss, it usually involves immersion in some sort of activity. Sometimes this is work, but other times it may be intimately related to the loss (p. 5).

The authors decided on these terms instead of attaching gender-based labels to avoid confusion and not perpetuate stereotypes. According to Rando (cited in Martin & Doka, 2000) “while gender influences grief patterns, it does not determine them.... The focus is placed where it ought to be—upon the individual, who, after appraising the situation, brings what he or she wants, needs, or can to the loss experience....” (p. xiii). This approach of focusing on the individual is echoed by Anderson (2001) who advocates for grief models which encourage an acceptance of the different grieving patterns that men and women choose while on the road to “healing and wholeness” (p. 323). In regards to different grieving patterns, Doka and Martin (2000) continuously elaborate on trying to get past the gender stereotypes of how to grieve, i.e. there’s nothing wrong with men who grieve in non-‘manly’ ways. They conclude by stating that “Differences in patterns are differences, not deficiencies” (p. 160).

Other authors also suggest that men and women grieve differently in Western cultures (e.g., Bowlby, 1980; Martin & Doka, 2000; Parkes, 1996; Thompson, 2001). Western males tend to incorporate many of the four following strategies into their grieving process:

Rather than experience grief emotionally, they process it more cognitively and by being involved in actions and activities (for example carving the headstone, or setting up a memorial scholarship).

Men are not as affective as women; they don’t express their emotions as openly and freely as women. There is a tendency for men to suppress or hide their feelings when dealing with loss (Bowlby, 1980; Parkes, 1996).

Men are selective about when they choose to express their emotions so that they make sure they are in circumstances that they feel are appropriate to show those emotions (Bowlby, 1980; Varselle & McDowell, 2005; Walton, Coyle & Lyons, 2004). Men believe that society often looks more favourably upon them if they grieve in an accepted fashion which stresses independence and outer strength, and this leads them to grieve in this non-expressive way (Varselle & McDowell, 2005).

Men tend to grieve alone instead of seeking out support from others.

Of the four core human emotions— anger, fear, happiness and sadness—men are most comfortable expressing anger and then happiness, and this is largely because of how they have been socialized to behave (Thompson, 2001). Most men are not comfortable expressing sadness and fear since these are not ‘manly’ emotions, and therefore when they do experience these feelings, they often express them in the feeling that men are most comfortable expressing, which is anger (the extension of which is violence) (Men’s Line Australia, 2011; Walton et al., 2004). Bottling up emotions and not processing grief comes at a cost, however (Anderson, 2001; Martin & Doka, 2000; Thompson, 2001). Men’s Line Australia (2011), a national crisis telephone and website support service, describes several problems related to this type of grief processing: chronic tension in the body, relationship difficulties, psychological problems (depression, insomnia, anxiety), and behavioural issues (such as violent outbursts).

Some men’s ontological security—the nature of their very being; their ‘rootedness’—can be seriously undermined when they’re confronted with a loss that they’re not capable of dealing with properly due to a lack of a manageable grieving process. According to Thompson (2001), not dealing with grief properly can turn an already difficult—even sometimes overwhelming—situation into a full-blown “existential crisis” (p. 32). Martin and Doka (2000) expand on this

concept when they discuss the notion of Dissonant Grievors, who are those “truly at war with themselves; (who are) at odds with one's feelings” (p. 58). How these people intuitively grieve runs counter with their perception of how they think society believes they should grieve in gender-stereotyped manners, and because of this dissonance their very sense of self can be severely threatened.

Thus, the key for men when dealing with their grief is not how they express their grief but that they do express their grief, and to do so in whatever way works for them. Many men may feel, however, that unless they are expressing their grief in an affective, openly expressive way, that they're not doing it properly. Martin and Doka (2000) explain that there is a strong bias in Western society that places great inherent value in affective expressiveness over more cognitive or behavioural therapeutic expressions. This belief is spelled out in what has been termed the *grief work hypothesis*, which is a very female-centric way to grieve, and essentially states that one really has to openly express grief or it can't successfully take place (Martin & Doka, 2000). While these authors admit that this type of grief work is effective for some, they believe that “other strategies, building upon activity or cognition, can be equally effective” (p. 2).

Anderson (2001) shares the belief that there are many ways to grieve and places particular emphasis on the value of group work amongst men. Based on her observations from an eighteen month volunteer group-work study of seven men of various ages and backgrounds from Southern Ontario, the focus of which was men coping with grief, she concludes that

(t)here are many ways for men to grieve. Men do carry much grief and have carried it silently for centuries, believing that this was the only way. They have been silent sufferers because no other way has been modeled to them; no other way seemed safe. Men can and do help other men through grief, given the opportunity. A men's group with

grief as its focus is a helpful tool for men who wish to break the silence for themselves and for the ones they love. (p. 324)

She goes on to say that proper precautions and training for facilitating such a group should be in place before this type of work is undertaken. Several other authors also point to the value of support in various forms as an important strategy for men to be able to better deal with the inherent difficulties associated with the grieving process (Bowes, Lowes, Warner & Gregory, 2008; Martin and Doka, 2001; Parkes, 1996).

In summary, men dealing with grief would be wise to consider all of the various options open to them to process their grief in a constructive way, even if some of these options may feel foreign to them. By doing so, they may avoid falling into the patterns of grief that may feel familiar to their gender, but which may ultimately not be helpful for their individual long-term well-being.

Emotions-Based Approaches To Influencing Behaviour

Several sources support the argument that public educational marketing campaigns employing analytic information-heavy approaches aimed at altering people's behaviour to be more pro-environmental are often ineffective (CRED, 2009; Kollmuss & Agyeman, 2002; Lee, 2008; Milton, 2008; Norgaard, 2006a; Pooley & O'Connor, 2000; Randall, 2009). What is needed are campaigns that combine a stronger emphasis on reaching people's emotions resulting in approaches that communicate a balance of analytic-centric and emotion-centric information messaging. Milton (2008), in fact, claims that emotions are the key motivators for action: "Without them we do nothing" (p. 73). She goes on to explain that each person is motivated to act for their own individual reasons and that what ultimately motivates our actions is either the promise of positive emotions or the relief of negative ones: "(P)ut simply, people act in order to

feel better” (p. 75). Emotions may, in fact, according to another team of authors, shape responses to climate change more than scientific facts.

(T)he fact that “the greenhouse effect is not linked to any scientific ‘smoking gun’ comparable to the ozone hole... [and] is not founded on everyday experience, has no immediate effects, and is not readily observable” (Ungar, 1992, p. 489) (means that) (p)ublic responses, therefore, may well be built as much upon values and emotion... as on science. (McKie & Galloway, 2007, p. 373)

Three other studies also point to the finding that emotions play an important role in shaping pro-environmental behaviour. “(I)t is the adolescents’ emotions (reflected as environmental concern), but not cognition (reflected as environmental attitude) that governs their behaviour” (Lee, 2008, p. 34). The second study reports that: “(e)nvironmental attitudes have been found to have a varying, usually very small impact on pro-environmental behaviour (whereas) an emotional connection to the natural environment seems to be (important) in fostering environmental awareness and environmental concern” (Kollmuss & Agyeman, 2002, p. 252). Finally, Pooley and O’Connor’s study (2000), which specifically targets environmental educators interested in changing environmental attitudes, also confirms the effectiveness of focussing environmental programs on an emotions-based approach. “(E)motion and beliefs, rather than knowledge, need to be targeted as sources of information on which to base... environmental programs” (p. 711). This is important to consider since changing attitudes can often be the first step to changing behaviours.

Norgaard’s 2006a study also confirms the vital importance that emotions can play in reaching people in powerful ways about the issue of climate change. “(E)motions have been described as the missing link in the development of a sociological imagination and have recently become a focal point in the study of social movements ” (p. 374). Although Norgaard’s study

talks mainly about the management of emotions as a means of protecting one's collective identity and one's ontological security³ from the frightening elements of climate change, it does state that one of the discussion points missing from talk about the nonresponse to global warming is emotions. Regarding the inability of information by itself being able to transform people's behaviours, Norgaard says "...information is the limiting factor in public nonresponse.... the people I met were generally well informed about global warming. They expressed concern frequently, yet this concern did not translate into action" (p. 373). Norgaard's study elaborates on the role that emotions can play in social transformative action, of which the primary focus is changing behaviours. "(B)y serving as sources of information, elements in the training process, and ingredients in the transformation of identity, emotions have been understood as impetus for engagement in social movements" (p. 384).

Randall (2009) also discusses how people's behaviours towards climate change do not change simply by having greater information and awareness about it. "(N)ews from the frontline suggests that many of the public nonetheless respond with indifference, apathy, or cynicism and that increased awareness of climate change does not necessarily translate into appropriate concern and action" (p. 118).

Climate change is considered by many to be a risky situation, and therefore it is important to understand how to communicate about risk. Sundblad, Biel and Garling (2007) discuss how people cognitively process risky situations to arrive at decisions on how to act, and conclude that emotional reactions often drive behaviour over cognitive assessments.

³ *Ontological Security* is defined as "the confidence that most human beings have in the continuity of their self-identity and the constancy of the surrounding social and material environments of action" (Giddens, 1991, p. 92)

Both cognitive risk perception and anticipatory emotions function as antecedents to decisions and behavioural intentions. In addition, the two antecedents influence each other. Furthermore, emotional reactions to risk events may diverge from cognitive assessments of risk, and in those cases emotional reactions often drive behaviour. (p. 97)

Columbia University's Center for Research on Environmental Decisions (CRED) put out a very useful guide in 2009 called *The Psychology of Climate Change Communication*.

Discussing how to effectively communicate climate change messages in order to try and alter people's behaviour, it focuses its message on using a balanced approach by addressing people's emotions in balance with appealing to their intellect. It begins by laying the groundwork for how humans process information by explaining how the brain has two different processing systems: "the experiential processing system, which controls survival behaviour and is the source of emotions and instincts...; and the analytical processing system, which controls analysis of scientific information" (p. 18). Regarding the shortcomings of climate change public education marketing campaigns aimed at changing people's behaviours using information-heavy messaging it says: "(d)espite evidence from the social sciences that the experiential processing system is the stronger motivator for action, most climate change communication remains geared toward the analytical processing system" (p. 20).

In 2007 CRED researchers conducted a study looking at how analytically framed information (such as scientific analysis, statistics and graphs) versus experientially framed information (using vivid imagery in the form of photographs, videos and local news footage) influenced feelings of worry, risk perception, and the willingness to take action about climate change. The results confirm the strength and necessity of including experientially framed information, which, according to CRED (2009), is emotion-driven. "(P)eople retained more

factual information about the presentation after viewing the experiential module” (p. 21). Other studies also support these findings (Leiserowitz, 2006; Newell & Pitman, 2010; Sheppard, 2005).

In a sober reminder, however, the guide warns against focusing too heavily on appealing to people’s emotions. “(W)hile an emotional appeal may make people more interested in... climate change in the short run, it may backfire down the road, causing negative consequences that often prove quite difficult to reverse” (p 25). The researchers do not elaborate on why these consequences would be difficult to reverse, but do, however, explain why appealing too heavily to people’s emotions around climate change has its limits, which is due to most people’s finite capacity to worry, known as the *finite pool of worry*. In relation to climate change communications, they outline three aspects that should be considered: (a) people pay greater attention to near-term threats, since they’re more pressing than long-term ones (like climate change), (b) appeals to the emotional system may work to get someone interested in an issue in the short term, but that it is hard to retain that level of interest unless they are given reasons to remain engaged, and (c) appealing too much to someone's emotions can cause them to worry too much about an issue and lead to *emotional numbing*. The guide elaborates on this last point since the possibility of causing people to go numb is especially prevalent in today’s media saturated and explicit world where people are exposed to an array of threatening situations, often graphically and on a regular basis.

In summary, the guide has a simple and hopeful message about what it takes to get people to adapt their behaviours and attitudes toward climate change. “(I)nformation balanced with both analytic and experiential materials, and personal accounts to convey the message, may be more likely to have an effect on attitudes and behaviours, creating a desire in people to act on their new knowledge” (p. 21).

Emotional Responses to Climate Change

Emotional responses to climate change are extremely complex (Newell & Pitman, 2010). This complexity is due largely to the enormity of the issue combined with much confusion about it. Unlike the emotional responses to something like the death of a family member, which may also be highly charged but which is clearly defined, understood and agreed upon, people's responses to climate change are complicated by the fact that there is widespread misunderstanding of its causes, great debate as to the severity of it, and even assertions that it doesn't even really exist (J. Hoggan, personal communication, March 3, 2011). For those who do believe it's happening and have a grasp of how it functions, the emotional implications of climate change can be enormous, and the responses to it are similar to those of discussing, fundamentally, the end of the world as they know it (Norgaard, 2006a).

Factors that effect emotional responses to climate change.

The literature on the factors that effect emotional responses to climate change is extensive (Borick et al., 2011; Brechin, 2008; Brossard, Shanahan & McComas, 2004; CRED, 2009; Kolmuss & Agyeman, 2002; Krosnick et al., 2006; Leiserowitz, 2006; Leiserowitz, A., Maibach, E., & Roser-Renouf, C., 2010; Lorenzoni, Leiserowitz, De Franca Doria, Poortinga & Pidgeon, 2006; McKie & Galloway, 2007; Newell & Pitman, 2010; Norgaard, 2006a, 2006b, 2009; Pabillano et al., 2007; Sandvik, 2008; Sheppard, 2005; Sundblad et al., 2007). Since every person and every society is different, it is very difficult to say that certain factors are more or less important than others in regards to affecting emotional responses to climate change. Yet the following eleven factors appear to cross this literature.

Accuracy of information.

Since emotional responses arise from the information received from all of one's senses (what one reads, watches, sees, feels, hears, touches, etc.), the accuracy of the climate change information one receives will have an enormous bearing on emotional responses to it. Accuracy in this sense refers to the fact that the information, besides being understandable and true, should be unbiased, focused on core issues, and proportional. If people have accurate information, all other factors being equal, they are far more likely to support measures to combat climate change (Norgaard, 2009).

In regards to the importance of proportionality, there is a telling study by Brossard et al. (2004) comparing the differences between reporting practices in France and US when covering global warming. It demonstrates how, due to cultural differences in journalistic practices, even though the proportion of leading international climate scientists that agree on the root causes of global warming far outweigh those who disagree, this handful of sceptics are still given equal press time in the US since there is a culture of giving equal voice to each side of the story in that country. This culture arose out of what was called the 'fairness doctrine', as set out by the Federal Communications Commission and abolished in 1987 (Kool, 2011). The end result is that the public is left believing that there are, indeed, two sides to the climate science story, and consequently that there is no scientific consensus about climate change. This lack of belief in a consensus then stalls or evaporates any action to mitigate against climate change, further compounding the problem.

Combine this journalistic practice with strong allegations of industrial interests effectively sidetracking climate change discussions and policies, especially in the US, through crafty campaigns focusing on bogus concepts around climate change like 'flawed science' and

the ‘non-problem’ (Brechin, 2008), and is it any wonder many in the public are highly undecided about it? A 2010 poll of US citizens found that 40% believed there to be “a lot of disagreement” amongst scientists as to whether global warming is happening (Leiserowitz et al., 2010). Vested interests under threat will often ‘bend’ the truth to protect their interests (McKie & Galloway, 2007). The fossil fuel ‘industry’ may try to bend accurate reporting about climate change in a way that suits its interests (Norgaard, 2009).

Having unbiased information is a close cousin of proportionality and is also fundamentally important. One area where this is becoming more and more difficult to achieve is in US politics, and due to the fact that the US produces 25% of the world’s CO₂ emissions (Leiserowitz, 2006), this is a significant issue. Newell and Pitman (2010) explain that getting unbiased information about global warming can be very difficult due to it being such a politicized issue; it receives “considerable political ”spin” that goes beyond the scientific domain in which climate scientists feel comfortable” (p. 1012).

Finally, focusing on core issues around climate change is also paramount in order to get accurate information. To counteract ‘crafty campaigns’, which often lead lay people on a dance around core issues, McKie and Galloway (2007) call for a refocusing of corporate values where ecological risks are given much greater weight. In a challenge to the audience they’re writing for—public relations professionals (the very people who often construct the crafty campaigns)—they state:

To move beyond being a globally expansive, to being a more globally responsible, force, public relations needs to institute strategic conversations that discuss failures and success for risks that transcend individual's, consultancies, professional alliances, and nations. Indeed, following theorists elsewhere, the field could be productively widened along the lines of Shrivastana’s (1995) prophetic call for “a management theory that is not

anthropocentric, a theory that acknowledges ecological risk and degradation as central variables in organizational analysis” (p. 133). Shrivastana points to how the field of public relations might go beyond its predominately corporate-centric orientation, its nationalist tendencies, and its neglect of the flora, fauna, and fabric of the planet itself, to identify with a more truly global future. (p. 374)

Framing.

Emotional responses to the issue of climate change will depend in part on how the information is framed. Framing is defined as “the setting of an issue within an appropriate context to achieve a desired interpretation or perspective” (CRED, 2009, p. 4). Framing decisions have an important impact on the emotional responses to what is being read, watched or heard about regarding climate change (CRED, 2009; Norgaard, 2009). The following six framing factors emerged from the CRED and Norgaard papers: Emotions, Time scale, Loss/Gain, Local/Distant, Statistical reporting, and Target Market.

Emotions.

As explained in the last section of this literature review, the benefits and drawbacks of framing information in an emotional way has already been stated.

Time scale.

Climate change is often portrayed as a problem that will happen ‘in the future’. This affects people’s emotional response since it doesn’t seem like an immediate threat and doesn’t require urgent attention (CRED, 2009). Due to the tendency of not dealing with long term threats, many people have a tendency of not thinking of future events as too important. The CRED guide (2009), in fact, reports that this dynamic is one of the top reasons that many social scientists believe prevents people from being motivated to take action on climate change.

Loss/Gain.

The area of loss/gain ties-in directly with time scale in so far as messaging around both deal with how people perceive certain benefits over time. Two studies contend that given the choice, people would rather not lose something that they have than have the chance to gain something of equal value (CRED, 2009; Newell & Pitman, 2010). This choice of how to frame a message will affect emotional responses to it. From the point of view of how this affects framing issues around climate change, the CRED (2009) study explains it this way:

... people may be more likely to adopt environmentally responsible behaviour and support costly emissions reduction efforts related to climate change if they believe their way of life is threatened and that inaction will result in even greater loss. They are less likely to adopt these measures if they focus on the current situation which they see as acceptable and discount future improvement of it. (p. 11)

Newell and Pitman (2010) elaborate on this and offer a practical money-saving example which is easily understood by many people, and which, in fact, was a subject that often came up with my informants. They suggest capitalizing on the message of “loss aversion” (p. 1008) by explaining how current actions to mitigate against global warming (e.g., insulating one's home), which in the short term may require the loss of some money, will lead to the avoidance of even larger losses in the future (i.e., higher energy bills for years to come).

Local/Distant.

People in wealthy, predominantly northern nations perceive the fall-out from climate change as effecting people in distant lands, not themselves and their own country (CRED, 2009; Leiserowitz, 2006; Lorenzoni et al, 2006; Norgaard, 2009). In a study that compared the risk perceptions of US and UK citizens, Lorenzoni et al. (2006) found that the study participants did acknowledge the threat of climate change, but it was seen as “relatively distant in space and

time” (p. 277); it was not salient in their minds. When issues around climate change are framed using far away people and lands they elicit relatively weak emotional responses because they don’t affect people in a direct way. To counteract this, the CRED guide (2009) suggests that it may be more effective to frame climate change using both local and national examples. Using local examples might also have the added benefit of “effectively illustrate(ing) climate change solutions” (p. 10). Adhering to these suggestions may increase audiences’ sense of connection to the problem, and may help with the promotion and development of local and regional solutions that could transfer well to national and international situations, and even “inspire future action everywhere” (p. 10). Newell and Pitman (2010) agree with this framing advice: keep it local and make it specific.

Statistical reporting.

How statistics are reported ties-in directly with knowing one’s target market. Many people grasp numerical facts better when they’re framed in certain ways. For instance, 1 out of 5 people is often more clearly understood than 20% of people, and certainly better than 0.2 amount of people. Newell and Pitman (2010) offer clarity on this and explain that numerical information should be conveyed whenever possible using an easy-to-understand format; i.e. “straightforward graphs ... with a minimum of potentially opaque abbreviations” (p. 1009).

Target Market.

Knowing one’s target market is a must before considering any framing strategy, and will dictate most decisions about framing messages to them. For instance, framing a climate change concept for oil company CEOs will vary considerably compared to presenting the same subject to ‘soccer moms’. Key considerations in this realm include the issue of choosing specific words/concepts/messages, and “the audience’s membership in specific subcultures (groups of

people with distinct sets of beliefs, or based on race, ethnicity, class, age, gender, religion, occupation)” (CRED, 2009, p. 5).

Gender.

In general, women tend to be more emotionally engaged than men (Sundblad et al., 2007), and this, according to Kolmuss and Agyeman (2002), shapes environmental awareness, attitudes and concern. These two authors go on to say that women are more willing to change in order to address environmental destruction.

The gap between environmental perception and environmental behaviour for both sexes is outlined in a statement from the 2007 poll by Angus Reid Strategies about Canadians’ beliefs and attitudes toward global warming. “Males are less likely to live an environmentally-conscious lifestyle or plan to do so in the future. The opposite is true for women” (p. 11). Further, that

There is a clear division along gender lines when it comes to perceiving the consequences of global warming in our study. Women clearly tend to be more prone than men to believe the world is already experiencing the negative impacts of climate change, as opposed to in the future.... men are usually more inclined than their female counterparts to say that the alleged consequences of global warming will never occur. (Pabillano et al., 2007, p. 28)

Another study by Sundblad et al. (2007) explains that gender is the greatest demographic factor dealing with risk perception. The study states that the reason women may be more concerned with a risky phenomenon like climate change is because of their perception of risk. It states that dozens of studies have concluded that men tend to judge risks as less problematic than women do, and so it follows that men don’t consider climate change as risky. Sundblad et al. (2007) admit that their findings cannot be directly correlated with the domain of climate change, since they found no testing on this subject.

Locus of Control.

Emotional responses to climate change also depend on locus of control (also known as *personal efficacy*), which is the perception an individual has about how much control they can exert on a situation as a result of their own behaviour.

People with a strong internal locus of control believe that their actions can bring about change. People with an external locus of control, on the other hand, feel their actions are insignificant, and feel that change can only be brought about by powerful others.

(Kolmuss & Agyeman, 2002, p. 243)

Kolmuss & Agyeman (2002), in fact, call locus of control “(a) decisive factor for action (against environmental degradation)” (p. 255). Those with an external locus of control are far less likely to act ecologically since they don’t think their actions are going to make a difference anyway (Kolmuss & Agyeman, 2002). For a massive, complex, and, for many, very emotional issue like climate change, those with an external locus of control may see it as an insurmountable task to overcome and easily feel defeated since their emotional response to it may be one of helplessness.

Other life needs.

How well satisfied all of one’s other life needs are will colour one’s emotional responses to climate change. For those in a war-torn country, for example, their short term needs for security and safety will trump most other basic needs. In a finding propped up by many other studies (such as Maslow’s Hierarchy Of Needs, 1943) Kolmuss and Agyeman (2002) report that “(p)eople who have satisfied their personal needs are more likely to act ecologically because they have more resources (time, money, energy) to care about bigger, less personal, social and pro-environmental issues” (p. 244).

Perception of time (temporal discrepancy & cultural norms).

“Temporal Discrepancy refers to the fact that people's attitudes change over time” (Kolmuss & Agyeman, 2002, p. 242). Newell and Pitman (2010, citing Weber, 2006), expand on this, though they refer to it as *recency*: “events that have occurred more recently are more salient in memory and thus tend to have a disproportionate influence on our judgments” (p. 1006). Regarding emotional responses to climate change, the phenomenon of Temporal Discrepancy is also well documented by Sandvik (2008) and is illustrated in the following simple and common scenario: when people experience hot recent local temperatures, they’re more likely to be concerned about climate change, which leads to support for costly climate programs. The opposite is also true, and I have often heard off-hand comments doubting the severity of climate change during particular cold snaps in my home town. Norgaard (2006b), quoting Nilsen (1999), illustrates this by reporting on cultural norms around the perception of time and how this could also have a profound effect on emotional responses to climate change.

The most serious consequences from damaging the environment are long term. In societies such as in the contemporary Western world where thinking and attention spans are aimed at the extended present, or the immediate future, environmental problems of the magnitude that climate change represents, for instance, will be difficult to find solutions to, also because of the general time horizon involving less attention to the long-term future. (p. 176)

As a citizen of the Western world, if my perception of time is focused on the ‘extended present’ or the ‘immediate future’ my emotional response to climate change may be that everything seems relatively OK, and hence I may feel just fine. If, however, I have a more long-term future-focused perception of time, then my response may be that the outlook is very troubling, and hence I would feel very worried.

Political Affiliation.

It is worth noting that in the US, and Canada to a lesser degree, there is a relatively new factor that is shaping emotional responses to climate change: political party affiliation. Since 1994 in the US there has been a noticeable partisan split between Democrat and Republican viewpoints on climate change, and this is based on the questioning of climate science (Norgaard, 2009). Since emotions help shape perception, this split can at least be partially attributed to an emotional response. As was stated earlier, due to the fact that the US accounts for 25% of global CO₂ (Leiserowitz, 2006) this factor becomes an important world-wide issue.

More recently, a similar Canadian divide has been noticed in federal politics. In a 2011 survey of US and Canadian public opinion, the results of the 1214 Canadians polled found that respondents identifying themselves as supporters of the Federal Conservative party (were) significantly less likely to believe in the existence of climate change (64% who did believe), compared to both supporters of all other parties (average of 88% who did believe) and undecided voters (80% who did believe). Conversely, Conservative party supporters (were) nearly 3 times more likely than all other voters to express disbelief that average global temperatures are warming. (Borick et al., 2011, p. 4)

Prior environmental actions.

Emotional responses to climate change can vary depending on the environmental actions people previously took. For instance, feelings of helplessness can be minimized or even converted to feelings of hopefulness by those who see beneficial outcomes from their pro-environmental actions. Feelings of guilt—of ‘not doing enough’—can be lessened by actively participating in these actions. Of course, taking certain of these pro-environmental actions in and of themselves are generally good things to do to help the environmental cause, but if people only engage in limited environmental actions and participate in no other actions once their guilty

conscience has been assuaged, then the net effect towards combating climate change will be marginal. For instance, people may only ‘pick the low hanging fruit’ like participating in curbside recycling or switching to Compact Fluorescent Light bulbs (CFLs). This phenomenon is known as the *Single Action Bias* and, according to the CRED guide (2009), “(i)t is human nature to fall prey to it and it is difficult to avoid” (p. 28). The guide offers three suggestions to counteract it: (a) make your audience aware of the phenomenon; (b) ask them how many actions they participate in (and offer a list of options); and (c) provide a convenient checklist that encourages them to take incremental steps and adopt a diversified approach with many energy-saving actions. Taking incremental steps may also help form new environmental habits, which is so important in the development of long-term pro-environmental behaviour. As Kolmuss and Agyeman (2002) state, “... old habits form a very strong barrier that is often overlooked in the literature on pro-environmental behaviour” (p. 257).

Use of landscape visualizations.

Powerful images can invoke strong and instantaneous emotional responses that can have an effect on cognitive responses, and even effect behavioural changes. For this reason I am including the phenomenon of landscape visualizations as a factor that can shape emotional responses to climate change. Sheppard (2005), justifying the use of landscape visualizations because of what he states as the urgent need to address mitigation and adoption issues around climate change, makes a persuasive case for them. He feels that some types of visual communication (i.e. realistic landscape visualizations), which try to touch on strong emotions by visualizing the future, may “substantially enhance awareness-building on various complexities and implications of climate change” (p. 637). This awareness-building may then help motivate behavioural change at both the individual and societal levels.

His framework includes four key points: (a) make the visualizations as personal as possible for the audience (which often, but not necessarily, means putting them in a local context); (b) make them realistic and tangible; (c) offer both positive and negative potential outcomes; and (d) make the visualizations as dramatic as possible in order to specifically try and engage the audience emotionally.

On this last point he recognizes many ethical considerations of trying to illicit strong emotional responses and lays out an entire section of his paper on how to address them. He recognises the potential of using dramatic visualizations to affect the public in rapid and powerful ways, and notes that further research is needed in order to use them in effective and ethical ways. He admits his framework has shortcomings since it has had no specific precedents nor been tested in research settings, and that because of the lack of understanding of human response to “the many dimensions of visualization use” (p. 641), communication experts should be cautious about making broad generalizations.

He concludes by pointing out the many advantages of using landscaped visualizations to engage people both emotionally and cognitively, and that there is evidence that they do arouse people, who have the potential to positively change their behaviour on environmental issues.

Wealth and Personal emissions levels.

These two are paired together since the findings about them are mostly intertwined. People’s level of wealth has an effect on their emotional response to various stimuli. Feelings such as security/vulnerability, competence/incompetence, and even how ‘sexy’ or dowdy one feels, can be affected by self-perception of one’s level of wealth. There is evidence that high levels of wealth adversely affects responses to climate change as well (Kolmuss & Agyeman, 2002). Referring specifically to Canadians, Reid (2007) had similar findings: “Canadians with

higher incomes are clearly the most reticent to adjust their behaviour in order to fight global warming” (p. 4). In another finding which contrasts with the conventional wisdom that environmental concern is an indulgence only affordable by the economically advantaged, Sandvik (2008) states “(t)he proportion of a country’s population that conceives global warming as a serious problem decreases with increasing gross domestic product” (p. 337). These findings came from a cross-national study of datasets of public concern about global warming in 46 nations from every continent but Antarctica. Sandvik (2008) offers these explanations:

The reason may lie in human cognition and psychology. "Uncomfortable truths" can be met by an array of psychological responses (Leiserowitz, 2006): flat denial, conspiracy theories, assumptions of hype, or belief in alternative explanations. As Norgaard (2006b) points out, “Citizens of wealthy nations who fail to respond to the issue of climate change benefit from their denial in short-run economic terms. They also benefit by avoiding the emotional and psychological entanglement and identity conflicts that may arise from knowledge that one is ‘doing the wrong thing’ [in a social context]” (p. 366). Viewed this way, the denial of global warming is an instance of the tragedy of the commons. Nobody profits directly from bearing the costs of climate change, while all benefit if others bear these costs. The higher the costs an individual has to bear relative to all others, the lower is his or her motivation. Logically, the costs are perceived to be higher for well-off people. (p. 338)

In the same study, Sandvik (2008) also highlights a fascinating psycho-social fact about those nations who have the highest emissions and are, by extension therefore, the most responsible nations for the causes of global warming: “It is harder to accept global warming as a fact and as a problem the more the respondent feels responsible for it” (p. 338). In his study he found that the more CO₂ emissions that a country produces, the smaller the proportion of its public who consider climate change to be a serious issue. He explains this, as well as expanding on the issue of wealth and global warming:

Individuals (or regions) with higher incomes and/or higher carbon dioxide emissions can expect higher transition costs when policies are designed to reduce anthropogenic greenhouse gas emissions.... The wish to not incur these costs can explain the cognitive tendency to disregard global warming as a fact or at least as a problem.... (p. 334)

Regarding the issue of making assumptions about individual behaviour based on data from entire nations, Sandvik (2008) admits that they won't allow conclusive interpretation about individual motivation, but that his findings are "clearly compatible with the psychological mechanisms invoked at lower levels" (p. 338).

In conclusion, and what is a frightening prospect for the future of the planet, Sandvik (2008) reports that the more dire a situation looks, combined with lack of clear solutions to solve it, the more tempting it is for people to "cognitively suppress its reality" (p. 339).

Where you live in the world.

As was mentioned earlier under *Framing*, several authors (Brechin, 2008; Kolmuss and Agyeman, 2002; Leiserowitz, 2006; Lorenzoni et al, 2006; Norgaard, 2009) have documented the fact that although many citizens in Northern hemisphere countries claim that climate change does concern them, they also say that it has not affected them in any significant manner. As Norgaard (2009) points out: "(E)cological collapse seems a fanciful issue to those in the 'safe' and 'stable' societies of the North" (p. 33). Having an emotional response to climate change in the realm of 'fanciful' is very different than a response from, say, citizens of a small island nation like the Seychelles, who may be worried about the very existence of their homes and lives because of their susceptibility to the threat of rising sea levels. Brechin (2008), using a familiar, easy-going metaphor to drive home his point about the difference in attitudes between the haves and have-nots, states that as far back as the 1970s "(e)nvironmental concerns have become and

continue to be seen as background noise, like distant thunder on an otherwise sunny day, so why pack up the picnic?" (p. 472).

Responses to climate change also differ within a single country depending on the city or region one lives within. For instance, general environmental attitudes in a region like BC's Southern Gulf Islands, which is considered one of the strongest ecologically-minded regions in the nation, can be very different compared to certain regions in Alberta, which often score very low in terms of overall ecological mindfulness (Reid, 2007).

Specific emotional responses to climate change.

In general, there are negative emotions associated with climate change, even though few people (at least in Western nations) "relate it to themselves personally and very few people associate (it) with either its causes or solutions" (Lorenzoni et al., 2006, p. 276).

As is the case when responding to most emotionally difficult situations, people are generally far better equipped to deal with the difficult emotional responses to climate change if they have social support (Hamilton, 2010; Inglis, 2008; Randall, 2009). Randall (2009) elaborates on various aspects of this type of social support.

... we need to create support structures that facilitate the process of mourning and provide containment for the anxieties that will inevitably be revealed. We need strategies to deal with the difficult issues of status and identity and a culture of stories and role models that offers meaningful examples to identify with. (p. 126)

Inglis (2008) offers some insight into what may happen without social support: "... for any of us to assume we can resolve this issue (climate change) without the generativity of diverse minds working together could breed a futility of its own" (p. 104).

The specific emotional responses to climate change that I will discuss in this section include: Anger, Concern/Caring, Denial, Depression, Fear, Guilt, Loss/Sadness, and Hope.

Anger.

Some people have very angry, often irrational responses when they hear about certain predicted outcomes due to climate change, even when those predictions come from highly credible sources. Running (2007), a professor, climate scientist and member of the Intergovernmental Panel on Climate Change (IPCC), says “Because of my public speeches, I receive my share of hate mail, including being labelled a ‘bloviating idiot’, from individuals that are clearly incensed at the thought of substantially altering their lifestyle” (p. 1).

Randall (2009) offers one possible explanation for this type of anger: people denying their feelings of loss and sadness because of the outcomes they attribute to climate change. She claims that by better understanding the mourning process, the environmental movement might be able to better deal with some of the anger that’s thrown at it by those who deny that climate change is a serious issue, and instead blame environmentalists for trying to take away their lifestyle. “If the loss is denied then the effect is to breed resentment and bitterness, and to create a cruel, puritanical superego that meets the world with severity and criticism” (p. 124).

Western males in particular have a history of turning feelings of loss and sadness into feelings of anger. They have been socialized to avoid feeling sadness, and so it often emerges as anger, a feeling that men are comfortable with expressing (Walton et al., 2004).

In an endorsement of a benefit of venting anger, Hamilton and Kasser (2009) believe that instead of “blaming China” (p. 7) for building a new coal fired power plant every week, or advocating for more eco-consumerism as a way to deal with the pitfalls brought on by climate change, what is needed is a two-fold approach: get active and get angry. “(A) nation composed of people engaged in problem solving and willing to vent their anger and sadness will create an environment in which politicians and businesses feel compelled to take stronger action to reduce

carbon emissions” (p. 7). One worry with this approach when it comes to men, however, is that some men proceed from anger to violence (Walton et al., 2004).

Concern/Caring.

In general, people (in wealthy Western nations) are concerned and do care about climate change, even though they may not really understand it, nor believe it affects them personally. Other observations include the counter-intuitive finding that understanding climate change is not correlated with concern about it, nor a desire to support policies to mitigate against it; that concern, although globally wide-spread, is inversely correlated to wealth and carbon footprint; and that people’s level of concern drops when they believe there is no easy solution to the problem, i.e. they have no sense of efficacy (Feinstein, 2009; Norgaard, 2009). If people don’t think their actions will have any affect on an issue, many will not even try to affect it. “Many people judge as serious only those problems for which they think action can be taken” (Norgaard, 2009, p. 6). This last point may explain the paradoxical finding that “as evidence for climate change pours in and scientific consensus increases, interest in the issue throughout many Western nations declined during the 1990s and into the early 2000s” (Norgaard, 2009, p. 13).

In regards to why people’s concern about climate change does not translate into action, several authors (Brechin, 2008; Lorenzoni et al., 2006; Norgaard, 2009) make reference to what Norgaard (2009) calls a “double life” (p. 26), meaning that even though people do care about climate change, they don’t really do anything about it. The reasons put forward for this lack of action are that “people want to protect themselves from disturbing information in order to 1) avoid emotions of fear, guilt and helplessness, 2) follow cultural norms and 3) maintain positive conceptions of individual and national identity” (Norgaard, 2009, p. 26). Lorenzoni et al. (2006) add to this and state that “(o)pinion polls generally show a high level of awareness and public

concern regarding climate change.... (h)owever, the priority of climate change is often secondary to most other personal, social and environmental issues.” (p. 267). The authors list the following as reasons for this: (a) people have the perception that it will affect distant countries and not their own, (b) they have an unwillingness to adopt mitigation strategies due to issues of personal convenience and benefits, and because they don’t trust their government, and (c) they are still confused over the causes of climate change. Brechin (2008) states simply that the reason why people don’t take action against climate change is because it doesn’t resonate with them personally; it lacks “issue salience” (p. 472).

Denial.

Denial is not an emotion (one cannot feel denial), but a psychological response enacted to distance oneself from dealing with an unpleasant emotion or fact (Hamilton & Kasser, 2009). Despite not being an emotion, however, I am including denial in the literature review section of emotional responses to climate change since denial is often employed expressly to suppress emotional responses. Denial is a highly complex topic and I will attempt to outline the main concepts put forward by several authors regarding its relationship with climate change (Hoggan, 2011; Hamilton, 2010; Hamilton & Kasser, 2009; Heffernan, 2011; Kolmuss & Agyeman, 2002; Krosnick et al, 2006; Norgaard, 2009; Running, 2007; Sandvik, 2008; Sterman & Sweeney, 2007; Taylor, 1989).

Climate change denial in one form or another is rampant in developed Western nations (Norgaard, 2009), and there are many reasons for this. The simple reason as to why there is so much climate denial is that the predictions about climate change are too distressing and unpleasant for many to think about. Norgaard (2009) summarises many of the main reasons why climate denial is so common.

They (interview informants) said they care deeply about global warming, but their concern did not translate into any forward motion. As they thought about the problem, they seemed to run into brick walls, characterized by lack of clear knowledge, seemingly irreversible causes, and a problem with no real solution. As a result, they were frustrated and eager for a solution, but unsure of which way to go. The symptoms of this frustration are clear. The first is that people literally don't like to think or talk about the subject. Our respondents always seemed to want to move the topic from global warming itself to more familiar topics, such as moral deterioration, where at least they felt on firmer ground. (p. 20)

These reasons for climate denial will be discussed in more detail in the section below, Denial strategies.

In order to facilitate the discussion of the extensive literature on climate denial, I will discuss it in terms put forward by Hamilton and Kasser (2009) of Denial strategies and Maladaptive coping strategies. I will then touch on what Norgaard (2009) calls the Social organization of denial, and conclude with a fourth brief section called Getting past denial.

Denial strategies.

Denial strategies “aim primarily at suppressing anxiety associated with predictions of climate disruption by not allowing the facts to be accepted in the conscious mind” (Hamilton & Kasser, 2009, p. 2). The end result of employing these strategies is to eliminate any emotional response to climate change. There are four reasons why people engage in denial strategies: scepticism, lack of clear knowledge, seemingly irreversible causes to a problem with no real solution, and because they believe that all is well. Casual denial is another type of denial strategy, but will be discussed separately at the end of this section since it can be employed with any of the four just mentioned.

Scepticism – Several authors allude to climate science denial initially being organised and promoted by fossil fuel interests who claimed to be sceptical of certain aspects of it (Hamilton, 2010; Hoggan, 2011; Norgaard, 2009). Their reason for promoting scepticism was their obvious and massive vested interest in preserving the lucrative status quo. As Norgaard (2009) says they could not “afford to care” (p. 23). Norgaard (2009) is very blunt about what she thinks about their motivation, which she says shows “rampant selfishness and greed” (p. 23).

How could the majority of the population be so vulnerable to “the fanaticism of a small minority of active deniers” (Hamilton, 2010, p. 15)? Hamilton (2010) explains many of the reasons why the strategy these sceptics employed was so successful:

... climate deniers, adopting the heroic mantle of sceptic, claim to be protecting official epistemology from internal corrosion. The strategy required an attack on the system of peer review and sustained attempts to deconstruct the motives of climate scientists. They are always on the lookout for biases and prejudices that could lie behind the claims of climate scientists, explaining away the vast accumulation of evidence by impugning the motives of those who collect it.... Deniers have adroitly used the instruments of democratic practice to erode the authority of professional expertise, including skillful exploitation of a free media, appeal to freedom of information laws, the mobilization of a group of vociferous citizens, and the promotion of their own to public office. At least in the United States and Australia, democracy has defeated science. (p. 3)

Another reason why these sceptics are successful is because they are “able to exploit a weakness in the popular psyche—the desire to discount or disbelieve the warnings of scientists” (Hamilton, 2010, p. 4).

Can the public be blamed for wanting to disbelieve? The news on climate change is hard to handle.

When climate scientists conclude that, even with optimistic assumptions about how quickly emissions can be cut, the world is expected to warm by 4°C this century. It is too much to bear. Who can believe that within the lifetime of a child born today the planet will be hotter than at any time for 15 million years? When scientists say we will cross tipping points leading to chaotic weather for centuries we retreat to incredulity.

(Hamilton, 2010, p. 4)

The public understandably finds it hard to believe the hard evidence of climate change, which includes talk of the future demise of humanity, and we therefore retreat to what we can believe in; what we know. The cognitive dissonance is too great, and so we grab onto our beliefs. As one author states: “facts quail before beliefs” (Hamilton, 2010, p. 2). Beliefs can be so strong, in fact, that they can actually ‘dig-in’ against facts. “Once people have made up their minds, providing contrary evidence can actually make them more resolute, a phenomenon we see at work with the upsurge of climate denial each time the IPCC publishes a report” (Hamilton, 2010, p. 2). It’s no surprise that many in the public are sceptical about the evidence around climate change, since believing it means accepting the fact that a lot of what is now ‘normal’ might dramatically change within the next generation or two. The public’s reaction is reminiscent of how it has reacted to other major scientific discoveries throughout history (for example the earth not being the centre of the universe, or Einstein’s theory of relativity (Hamilton, 2010)), so it should really be no surprise that it’s reacting the way it is towards news of climate change. What scientists are saying—by “just reporting the facts”—is like having the rug pulled out from under you. “Innocently pursuing their research, climate scientists were unwittingly destabilizing the political and social order” (Hamilton, 2010, p. 3).

Lack of clear knowledge – People will deny that climate change is happening if they don’t have a clear understanding of it. The fact that there are many people without a clear

understanding of it is nowhere better exemplified than in a 2007 study by Sterman and Sweeney already noted in Chapter 1. Norgaard (2009) also found that people lacked clear knowledge of climate change in her study of citizens from a small Norwegian town: “Overall (climate change) was an area of confusion and uncertainty” (p. 27).

Seemingly irreversible causes and a problem with no real solution – Three studies point to the fact that people slip into denial when an issue seems too big to handle with no clear solutions (Krosnick et al, 2006; Norgaard, 2009; Sandvik, 2008). People want to know that they can make a difference when tackling an issue, or they may not even try to affect it.

Even problems which are quite serious and affect many individuals do not automatically receive space in the public eye. Rather, the one criteria of whether an issue will make it to the level of a recognized “social problem” is that the condition can be solved through collective action. (Norgaard, 2009, p. 16)

All is well - There are also those who deny that climate change is happening because they believe that, essentially, everything is ok; that all is well. They may believe this for several reasons: because they think that their governments will take care of things; that international agreements on emissions reductions will be effective; because they have faith in either technological fixes or a higher power; or they “resign themselves to their fate” (Norgaard, 2009, p. 16).

Casual Denial - This is another strategy that is common with many people and is characterised as engaging in inner dialogues to reduce anxiety. If what you tell yourself has shades of doubt, this can shield you from the threat of disturbing issues like climate change. Examples of casual denial narratives are “Environmentalists always exaggerate”, or “I’ll worry about it when the scientists make up their minds” (Hamilton, 2010, p. 4).

Maladaptive coping strategies.

Those employing maladaptive coping strategies are those that “acknowledge and accept the facts about global warming up to a point, but the emotional impact is such that they need somehow to blunt some aspects of the facts or the associated emotions” (Hamilton & Kasser, 2009, p. 2). By using these strategies individuals are saved from dealing with painful emotions in the short-term, but in so doing stall appropriate action to deal with the longer-term issues posed by climate change. There are four primary maladaptive coping strategies used to deal with climate change: (a) reinterpreting the threat, (b) diversionary strategies, (c) apathy/indifference strategies, and (d) unrealistic optimism/wishful thinking.

Reinterpreting the threat of climate change can take several forms. For instance, one can *de-problematise* the threat by telling oneself that if things were really bad then the authorities would do something about it; or that people have solved big problems before so there’s no sense in worrying about it too much because when it gets bad enough the authorities will figure out a way to deal with it. The information is filtered “thereby reducing its power and tempering its emotional impact” (Hamilton & Kasser, 2009, p. 3). *Distancing* (Hamilton & Kasser, 2009) is another strategy used, whereby the threat is thought of as happening far enough in the future or far enough away in other parts of the world that it doesn’t feel like a big issue that needs dealing with right away. In other words, “I’ll worry about it later”. Those employing this mind-set may believe that since it’s happening ‘in the distance’ it leaves time for someone to devise a solution (i.e. figure out a technological fix). Distancing can also keep thoughts to the present as a way of protecting oneself from uncomfortable thoughts of climate change. Finally, by dealing with other, more *pressing needs* (jobs, kids’ education, etc.), one can also distance oneself from the threat. Norgaard (2009) also discusses the idea of distancing but refers to it in the sense of a

hierarchy of needs (Maslow 1970), i.e. immediate needs will be dealt with before long term needs.

Diversionsary strategies - Diverting one's attention from the threat of climate change is another common maladaptive practice. For instance, by switching to CFLs or committing to more household recycling, people believe that they have done their part and so don't have to worry about the threat. Discussed earlier as the *Single Action Bias*, Norgaard (2009) refers to this as the *metaphor of displaced commitment*. While these strategies might make people feel that they're "doing something", they can also divert their attention away from more significant behaviours which are what is needed to really deal with climate change (Hamilton & Kasser, 2009). Other people engage in either *Pleasure-Seeking* or *Blame-Shifting* to divert their attention away from dealing with climate change. For some groups of adults, pleasure-seeking is the coping strategy of choice in order to avoid environmental threats (Homerberg, Stolberg & Wagner, 2007). It has the doubly negative consequence of diverting attention from dealing with the threat of climate change, and, secondly, probably adding to the causes of it by engaging in activities that typically create more greenhouse gases, such as shopping and airline travel. *Blame-Shifting* refers to absolving yourself of collusion in the causes of climate change by blaming others. Common forms of blame-shifting are blaming the US for being the world's largest GHG emitter, or China for "building a new coal-fired power plant every week" (Hamilton, 2009, p. 4).

Apathy/Indifference Strategies – Some people become apathetic towards climate change as a way to protect themselves from painful feelings; they take on the attitude 'If I don't care, I won't feel bad' (Hamilton, 2010). Both Kolmuss and Agyeman (2002) and Hamilton and Kasser (2009) mention that apathy often arises from actually feeling too much around a certain emotional subject, and this certainly is the case with a highly charged issue like climate change.

Denial of the issue sometimes happens because people don't know how to process such a complex, intense and life-changing issue like climate change. Norgaard (2009) succinctly puts it this way: "not wanting to know was connected to not knowing how to know" (p. 28). In other words, some people simply don't have the personal capacity to effectively process such a world-changing situation as that which is predicted under climate change; they don't know how to deal with such troubling information.

Unrealistic Optimism/Wishful Thinking is another common maladaptive coping strategy employed to deal with climate change and is defined as "a proclivity that leads us to predict what we would prefer to see, rather than what is objectively most likely to happen" (Taylor, 1989, p. 33). Wishful Thinking around climate change can take the shape of certain "benign fictions" (Hamilton, 2009) such as faith in technology (Wright, 2004), high expectations around climate conference accords (like Kyoto and Copenhagen), or political leaders who will "save the day". For instance, the US public's perception of the threat of climate change decreased as soon as President Obama was elected to office in 2009 because he was believed to have a stronger environmental predisposition than his predecessor. Leiserowitz (2006), in fact, characterizes the entire United States as a country in a wishful thinking phase of responding to climate change.

Social organization of denial.

People respond to situations based on social context. How I react to a situation when I'm around close friends, for instance, will often be far different than how I would react were I to be around young children. Norgaard (2009) argues that this dynamic is at play with climate change. She lists several of the social reasons that people engage in denial.

Denial is socially organized because societies develop and reinforce a whole repertoire of techniques or 'tools' for ignoring disturbing problems. Individuals may block out or

distance themselves from certain information in order to maintain coherent meaning systems..., desirable emotional states..., a sense of self efficacy..., and in order to follow norms of attention, emotion..., and conversation.... (p. 27)

In her 2006a study of the residents of a Norwegian town she discovered that even those who were well educated, well intentioned and well informed about climate change would often do very little of any substance against its ill effects, and she attributes this partly to the various social norms just listed that the public wanted to uphold. For instance, Norwegians generally pride themselves on being strong environmentalists and humanitarians, but because they are also big producers of oil, they find themselves feeling guilty and not wanting to discuss the issue of climate change because of the negative environmental and egalitarian issues it raises. In relation to this dynamic, as elaborated on earlier, these people are living a “double life”, i.e. they care about the issue, but are ambivalent about doing anything about it (Norgaard, 2006a).

Norgaard (2009) also discusses the importance that conversation has in the realm of social interaction and the building of community.

(C)onversation is the site for exchange of information and ideas, for human contact and the building of community. It is also an important site for the creation of collective meaning making and reality.... Conversation can help people understand their relationships to the larger world, or obscure them. (p. 28)

People in the Norwegian town felt uncomfortable talking about climate change because it didn't adhere to certain conversation norms, and hence it didn't get discussed in proportion to its importance. The fact that climate change threatened people's ontological security (Giddens, 1991)—essentially, their faith in a normal tomorrow—was a strong reason people didn't want to discuss it.

Another concept which fits within the concept of Social Organization of Denial is *Willful Blindness*, described by Heffernan (2011) as “a legal concept that states that if there are things you could have known and should have known, then the law treats you as though you did know; you are still responsible” (p. F4). The author argues that willful blindness was the main reason why Bernard Madoff was able to bilk so many investors out of their millions for so long. While he was doing this there were many people who had a sense that things were not quite right or who should have known to react differently but who didn’t, and for these reasons many people lost a lot of money. Heffernan’s concluding sentence about wilful blindness from Colm O’Gorman, whose legal action against the Irish Catholic Church exposed decades of hidden abuse, offers us timely and sober words to consider as we move forward and deal with our ever-present and collective denial around climate change: “When we pretend we don’t know, we make ourselves powerless. When we turn a blind eye, what we do... is we deny the best of ourselves, which is our capacity to respond” (p. F4).

Getting past denial.

In light of how ubiquitous climate denial is, I felt compelled to include a brief section on ideas for how to get past it. Hamilton and Kasser (2009) and Running (2007) suggest that responses to climate change share many similarities with how people grieve about other troubling issues in life. In the grieving process denial is often the earliest stage, even though the order of the various stages can shift around on a regular basis. There is also mention of this in Kubler-Ross’ well recognized theory on the five stages of grieving (1969). Hamilton and Kasser (2009) suggest that in order to move past denial and maladaptive coping strategies and into more adaptive coping strategies, one of the first things one has to do is to acknowledge, express and manage one’s emotions.

Cultivating mindfulness—“a calm and detached awareness of one's own feelings and emotions” (Hamilton & Kasser, 2009, p. 6) is one technique that can help get past denial. *Taking action*, ideally with others so as to develop community connections and relationships (both of which I've already touched on), is another powerful strategy useful to break free of denial. *Informing oneself* about climate change—getting one's head out of the sand versus being ignorant— can lessen anxiety and is yet another important step to help one move past denial. Despite the fact that learning about climate change can at times be an unsettling experience because of its many dire predictions, this cannot be used as an excuse for not doing it. Adopting a personal value orientation which focuses more on intrinsic and pro-social values and less on materialistic and superficial ones is another step towards getting over denial of climate change. The two authors who discussed this also mention that even having more debate about mortality can help people overcome denial.

The expected effects of a changing climate over this century naturally stimulate thoughts of mortality—of ourselves, our descendents, vulnerable people in poor countries and non-human animals—and reflection on the possible end of civilization and progress. While it is natural to resist such thoughts and push them out of awareness, the research evidence suggests that an open public engagement with notions of impermanence and death could contribute to a value orientation that is more protective of the environment (Hamilton & Kasser, 2009, p. 7).

Those who subscribe to Terror Management Theory (TMT), however, as described by Dickinson (2010), would likely counter this claim of Hamilton and Kasser (2009). They would probably argue that denial is a mechanism employed to protect oneself from confronting one's sense of mortality, which climate change awakens. Engaging the public on issues of their mortality might actually be dangerous. TMT, based on evidence from more than 300 worldwide

studies, suggests “that making people think about death elicits striving for self-esteem (which often entails anti-environmental activities like becoming more materialistic), antagonism toward other groups or even violence toward people who think differently (such as those with pro-environmental beliefs)” (Dickinson, 2010, n. p.).

The “open” public engagement Hamilton and Kasser (2009) refer to may be the key to their approach. If they’re talking about being open both in the sense of ‘open to all members of the public’ and also ‘open to new ideas’, then they may be in agreement with what Dickinson (2010) alludes to when she says, “How we teach about climate change matters, because we cannot count on logic, concern for children and grandchildren or even instinct for self-preservation to prevail” (n.p.). Perhaps an issue that this thesis is trying to bring forward-- learning about important contributions made by paying attention to one’s emotions in concert with one’s thoughts--might be part of this teaching.

If society holds on to its denial and maladaptive coping strategies, Hamilton and Kasser (2009) also mention how this might effect individuals who are trying to be more adaptive in their coping strategies. The fallout for these pro-active individuals who recognise how dangerous climate change is becoming and hence are trying to do something about it may be that they feel more isolated or labelled as “eco-obsessives”. They may alienate friends and family as they pursue more eco-friendly alternatives. Hamilton and Kasser (2009) conclude by pointing out the danger of current ‘hands-off’ climate change communication policies with the public.

At present most governments and environmental organizations adopt a “don’t scare the horses” approach, fearful that exposing people fully to the scientific predictions will immobilize them. With climate scientists now stressing the need for extremely urgent action and spelling out more catastrophic impacts if action is inadequate, this now seems to us a dangerous approach to undertake. (p. 8)

Depression.

Another emotional response to climate change that several authors have touched on is depression (Hamilton, 2010; Hamilton & Kasser, 2009; Inglis, 2008; Norgaard, 2009; Randall, 2009; Running, 2007). In the context of climate change, depression refers to feeling the emotions of helplessness, hopelessness, paralysis and intense despair brought on by what some describe as “the task ahead to be impossible” (Running, 2007, p. 2). Randall (2009) describes depression as “the prototype for all unfinished grieving” (p. 121). In other words, one must grieve fully or risk slipping into depression.

People become depressed when considering climate change because they feel there’s nothing they can do about it; that it’s too big to handle and out of their control (Inglis, 2008; Norgaard, 2006a). Since “the primary way to control one's emotions is by controlling one's thoughts” (Norgaard, 2006a, p. 384), people devise ways to keep their minds off of climate change to avoid feeling depressed. Three examples of this are expressed by interviewees in Norgaard’s 2006a study: (a) “I don't really know what to do, so I just don't think about (it)” (p. 385); (b) “I don't allow myself to think so far ahead” (p. 386); and (c) “focusing on something that you (can) do” (p. 387). Regarding this last point, certain authors discuss how ‘doing something’—in particular with others—is an effective way to deal with the depression brought on by thinking about climate change (Hamilton & Kasser, 2007; Inglis, 2008; Norgaard, 2009). “It is well known that taking action and thereby exerting some control over the situation is an effective response to depression...” (Hamilton & Kasser, 2007, p. 6). Even if those actions are very small and can sometimes seem futile, doing them and believing that they are having an effect is paramount to maintaining hope and trying to steer clear of depression (Frankl, 1946).

Fear.

Fear, one of the four core emotions, is also a common emotional response to climate change because of what people fear they might lose: "... about the problem of climate change, loss features dramatically and terrifyingly..." (Randall, 2009, p. 118). People fear the loss of some or all of the following to climate change:

- a sense of normalcy/predictability
- their children's/grandchildren's/great-grandchildren's future
- animal and plant species
- their conveniences, wealth, prosperity
- their ability to consume and to travel
- a sense of personal efficacy
- the livelihoods/communities of 'the poor' in vulnerable parts of the world
- predictable weather

Another thing they fear losing is something that incorporates all of these together: their ontological security. They fear climate change because it has the potential to be a game changer; to threaten people's very self-identity.

Fear of climate change often prevents people from doing anything about it (CRED, 2009; Milton, 2008; Norgaard, 2009). The authors of the CRED (2009) paper conclude that using a strong emotional appeal like fear may be effective in getting people's attention in the short-run but that its prolonged use may, in fact, backfire because people can only worry about so many things before they ignore the worry and actually start to go numb.

Milton (2008) looked at climate change literature aimed at public consumption, and examined whether using fear was an effective tool to motivate people to take action against

climate change. She concluded that it's not and that we need to find more appropriate emotional stimuli to do so (although she doesn't say what they might be). By discussing how people psychologically manage everyday fears she explains that in many instances the techniques often used to help people overcome their personal fears are inappropriate when it comes to climate change.

(B)ut when the things we fear are genuinely dangerous, and statistically probable (like climate change), fear management is a potentially disastrous strategy to use on its own--we need, as well, to deal with the external threat, by avoiding it or eliminating it. There is another circumstance in which we might be inclined to opt for fear management rather than addressing the danger: when what we fear is so big or complex that it makes us feel helpless. In this situation, we manage our fear because we cannot envisage managing the threat. (p. 75)

Norgaard (2009) offers the following as suggestions to counteract the fear of an issue like climate change: provide honest information, hopeful examples, and open discussion (e.g. acknowledgement of the risks).

Guilt.

Some authors (Hamilton & Kasser, 2009; Norgaard 2006a, 2009) have also discussed why people feel guilt and what they do to avoid feeling it. Norgaard (2009) discusses how her research informants recognized that their actions contributed to the problem and felt badly about it, but then didn't really do anything about it because of pressures to socially conform. "So many times I have a guilty conscience because I know that I should do something, or do it less. But at the same time, there is the social pressure" (p. 31). The informants wanted to have a 'normal life' and so continued with 'business as usual' even though they knew they were being unsustainable. Similar to dealing with depression, in order to alleviate their guilt, many people partook in

relatively insignificant, although well-meaning, green activities like switching to CFLs. Also similar to avoiding depression, Norgaard (2009) mentions that to combat feelings of guilt one needs to acknowledge the present situation while simultaneously engaging in realistic actions, and to do so, whenever possible, with others.

Loss/ Sadness.

How people grieve is a complex subject and beyond the scope of this thesis to go into in great detail. For example, many people feel a deep sense of loss when they think about some of the possible outcomes of climate change (Hamilton & Kasser, 2009; Randall, 2009), and they deal with this loss in many ways. When responding to intense sadness, it is worth noting, as both Hamilton and Kasser (2009) and Randall (2009) point out, that emotions rarely proceed in a linear fashion but rather are always in progress and never totally complete. “The work may falter or stall, the bereaved person may return to an earlier stage, sink into depression, abandon their attempt at recovery, take heart again, move forward, and so on” (Randall, 2009, p. 122). This is important to consider when discussing emotional responses to climate change because people may switch from ‘believers’ to ‘non-believers’ and back again at any particular time depending on how they’re processing their grief towards climate change.

One conclusion on how to properly manage grief, which is in keeping with what I mentioned in section 1 of this literature review on *Men’s emotions around loss*, is to acknowledge it and express it (Hamilton & Kasser, 2009; Randall, 2009). By doing this, the individual will then be in a position to take meaningful steps on the road to dealing with climate change.

The purpose of emotion-focused coping is to allow these deep feelings of anger, depression and despair to be expressed (Homburg et al. 2007). Remaining indefinitely within these feelings can, however, be debilitating, leading to apathy and resignation, so

the objective is to manage or transcend the emotions by engaging with them. (Hamilton & Kasser, 2009, p. 6)

Randall (2009) agrees, and adds that one of the noticeable, tangible outcomes of not expressing one's grief is keeping people from political engagement. We need to grieve, with the full range of emotion which that implies. Only then will we become able to remake our futures using all of our creativity, reason, feeling, and strength" (Randall, 2009, p. 128).

Three other concepts put forward by Randall (2009) in relation to feelings of loss as a result of climate change are *chosen loss*, *intellectual but not emotional acceptance of loss*, and *numbing*. *Chosen loss* refers to choosing to do without something (e.g. airline travel) because going without it is now more important to you than continuing with it. "... (W)hen the capacity for concern can be awakened in people, then loss can be chosen as part of a desirable, creative act that strengthens the individual both personally and socially" (p. 125). Randall (2009) explains the concept of *intellectual but not emotional acceptance of climate change* using the analogy of a casual conversation. "They are able to chat concernedly about the latest climate predictions, interspersed with tales of their weekend in Barcelona. Moving to a lived, emotional experience of the reality and then beyond that, to an acceptance of the irreversibility of some of the losses seems beyond them" (p. 122). *Numbing* refers to engaging in actions like manic activity or pleasure seeking in order to numb the pain caused by one's feelings of loss; in this case due to climate change (Randall, 2009; Hamilton & Kasser, 2009). The CRED (2009) paper also mentions how numbing occurs by "repeated exposures to emotionally draining situations... (which are) especially high given the modern media environment where people confront a bewildering number and diversity of emotional experiences every day..." (p. 26)

In regards to people's emotional responses to climate change, feelings of loss and sadness are very prevalent, although surprisingly little researched. This is based on the fact that expression of loss and sadness is something I have heard in discussions with my research informants, through everyday interactions with various people, and through many minor references about it (Thompson, C, 2007; Farbotko & McGregor, 2010; Levy, 2005). I was unable, however, to find any significant literature on it. I believe further research is warranted in this area.

Hope.

Of all the emotional responses to climate change, I believe that hope is the most important in order for people to want to keep working towards a better tomorrow. This is nowhere more tellingly explained than within the pages of Viktor Frankl's seminal book *Man's Search for Meaning* (1946). In one of the most hopeless settings humans have ever found themselves in—a prisoner in a Nazi concentration camp—Frankl tells of witnessing fellow prisoners experience horror after horror at the hands of their captors and yet retain their composure because, for a variety of reasons, they still had hope for a better tomorrow. He also tells how he would see moments when inmates would be subjected to a 'last straw' of inhumanity, and, like a switch being turned off, would lose hope and often die within days. What Frankl stresses in his book is that this loss of hope was triggered by a conscious decision—I no longer care; I have lost hope—and it was usually this decision to stop caring, as opposed to other things going on in the camp, which caused the inmate to usually die.

Strategies to maintain a sense of hope include Community action, Telling the truth, and Psychological preparedness.

Community action.

The prospects for a ‘normal’ way of life on earth are looking more and more grim as the months and years go by without significant change regarding climate change (Boyce, 2008; Fritze, Blashki, Burke & Wiseman, 2008; George, 2010; Hamilton, 2010; Inglis, 2008; Orr, 2007; Thompson, 2009). Hawken (as cited in Boyce, 2008) makes this very clear. “The enormity of what is passing away is almost unspeakable. It’s not just species and ecosystems, but entire cultures, the seasons, civilization itself” (p. 47). In the face of such dire statements, how is it possible to still maintain a sense of hope? One strategy advocated by many authors is engagement in *community action*, i.e. getting together and doing something positive (Boyce, 2008; Fritze et al., 2008; Inglis, 2008; Knight, 2007; Wills, 2007). Wheatley (as cited in Boyce, 2008) elaborates on this: “Community is the answer. Community is the unit of change. The only way we get through difficult times is together” (p. 104). Wheatley (as cited in Boyce, 2008) claims that the small group is best suited to this end, and that the simple act of a conversation—which nurtures relationships—is where it begins. These discussions then can lead to people influencing each other, and it is this that ultimately leads to change. “All of the truly marvellous changes wrought by humans can be traced back to ‘some friends and I started talking and...’” (Wheatley, as cited in Boyce, 2008, p. 104). The Transition Town Movement is an example of how engaging in positive community action can raise one’s sense of hope for a better tomorrow. This is in strong evidence in this YouTube clip: <http://www.transitionnetwork.org/news/2011-03-01/transition-heathrow-most-inspiring-video-2011-so-far>

As the climate crisis worsens and resources and other necessities become more scarce, humans will either gravitate towards greater community or towards greater conflict (Wheatley, as cited in Boyce, 2008; Fritze et al., 2008). George (2010) asserts that political organization is

the form of community action that will get us out of this mess. “On the negative side are many fears but on the positive side, some hopes, which could ripen into reality if popular forces began to organize into alliances with political weight and clear purpose” (p. 19). She suggests six areas—or hopes—that need this political weight thrown behind them.

Regulation - since she believes that deregulation has caused this crisis, putting regulations back in place seems an obvious thing to do

Redistribution – progressive taxation would bring a greater sense of equity back into society

‘Re-localisation’ – bring economic activity (especially around food production and other necessities) back closer to people most concerned by them

Emergency action on climate – from the personal to the global, and right away! She singles out the huge waste from energy use that needs attention

New North/South balance needed – she’s referring mostly to the rich North exploiting the poor South

Democracy under siege – “The enormous task before us is to restore both representative and participatory democracy in order to regain and exercise political control over our own affairs”

Telling the truth.

Hamilton and Kasser (2009) conclude that what is needed now in order to combat climate change is to expose the public to the scientific facts even if those facts are upsetting. Orr (2007) agrees: if you tell people the truth they will act with “extraordinary greatness appropriate to an extraordinarily dangerous time” (p. 1394).

Psychological preparedness.

In 2008, Fritze et al. produced a white paper linking climate change to mental health concerns. “In the long run, hope and morale in the community about climate change is deeply intertwined with mental health promotion” (p. 9). In it, one of the tactics they advocate for as a means to counteract some of the negative side-effects felt by individuals and communities hard-hit by climate change is to be psychologically prepared. To do so, they suggest following the sixteen recommendations outlined by the Australian Psychological Society in one of their ‘tip sheets’, titled *Climate Change: What you can do* (Australian Psychological Society (APS), 2011, para. 8). Fritze et al. (2008) offer this summary of the tip-sheet.

Although environmental threats are real and can be frightening, remaining in a state of heightened distress is not helpful for ourselves or for others. We generally cope better, and are more effective at making changes, when we are calm and rational.

Be optimistic about the future.

Remind yourself there is a lot you can personally do.

Change your own behaviour.

Become informed about problems and solutions.

Do things in easy stages.

Identify things that might get in the way of doing things differently.

Cue yourself.

Look after yourself!

Invite others to change.

Talk with others about environmental problems.

Present clear but not overwhelming information, and offer solutions.

Talk about changes that you are making in your own life.

Share your difficulties and rewards.

Be assertive, not aggressive.

Congratulate people for being environmentally concerned.

Model the behaviours that you want others to do. (p. 7)

Regarding the first point, *Be optimistic about the future*, Orr (2007) differentiates between optimism and hope. He believes the difference lies in the odds of something happening. He says that optimism arises because you believe there are good odds that things will work out as you anticipate, whereas hope arises regardless of the odds of something happening as you anticipate, and this is so simply because of your faith that it will happen. He says that he's not very optimistic about the future for humans, but that he is very hopeful.

As an affirmation of the fourth point, *Become informed about problems and solutions*, Orr (2007) reinforces the importance that he believes truth has in order to be hopeful. He offers this conclusion to his article:

Hope, authentic hope, can be found only in our capacity to discern the truth about our situation and ourselves and summon the fortitude to act accordingly. We have it on high authority that the truth will set us free from illusion, greed, and ill will, and perhaps with a bit of luck it will save us from self-imposed destruction. (p. 1395)

Inglis (2008) also talks about the necessity of employing psychological tactics so that there will be reason to be hopeful in this "climate crisis domain" (p. 104). She argues that by being intensely *self-perceptive* about the issue of climate change you can change the way you think about the unpleasant situation which then forces you to come up with new and appropriate solutions to the problem. She refers to this process as *stage transition*. "This self reflective inquiry creates feedback loops, and learning. These in turn can potentially generate new, yet

unseen options and adjustments. These adjustments could alter the course of the (climate change) prognosis” (p. 103). She recognises that her theories may not have large-scale practical applications due to all of the related fields needed to bring about significant change, which she describes as “standing as surprisingly separate silos” (p. 104). Her answer to this quandary is to “advocate for dismantling these and many other such silos that limit our ability to see and work with the whole” (p. 104).

Some authors discuss what behaviours and ways of thinking need to be employed now in order to better ensure a hopeful future many years from now, as opposed to those issues dealing with hope for the present and near term future (Boyce, 2008; Hamilton, 2010; Thompson, 2009). Thompson (2009) anticipates a likely and abrupt end to today’s dominant culture due to the current “catastrophic” indications about the pace of climate change. He sees our Western culture as inherently consumeristic and “intimately connected... to the burning of fossil fuels for energy” (p. 44). He likens the demise of this culture to that of the historical North American plains Crow Nation, when it went through its massive transformation in the mid to late 1800’s. Like them, he predicts that we will have to ask ourselves some very fundamental questions as we head into a largely unknown way of living, which for us will be brought on by a post-fossil-fuel lifestyle. “What if deeply ingrained ways of going on, practiced for generations, suddenly become inappropriate, simply impossible, or downright detrimental? How adaptive are we going to be?” (p. 47). In answer to questions such as these he discusses the concept of *radical hope*, which is basically, the hope for revival: for coming back to life in a form that is not yet intelligible,” the virtue of seeing that the world's goodness outstrips the ability of one's culture to capture it.... Radical hope is against despair, even in the face of a well justified despair. It is the idea that an inadequate grasp of the good should not lead one to believing it is not to be hoped for. (p. 49)

Hamilton (2010) also speaks about the importance of goodness and imagination as key components to maintaining a sense of hope in an unknown future brought upon us by climate change. Quoting Camus' from his novel *The Plague* (1947), which "is typically read as a representation of how the French responded to Nazi occupation" (p. 12), the text reads "(O)ne should start to move forward, in the dark, feeling one's way and trying to do good." Hamilton continues:

(Camus) was acutely aware of the importance of hope. "How hard it must be to live only with what one knows and what one remembers, and deprived of what one hopes." Some will argue that, in facing the facts of (global) warming, we must not succumb to apathy, but re-imagine a different future and begin to hope that it can be the best possible in the new conditions (p. 14).

In a very sombre analysis of what a future under climate change might hold, Hamilton (2010) dissects hope to its very core and, referencing Nietzsche (elaborated on by Heidegger), examines the grim direction humanity is headed and discusses the concept of a *pessimism of strength* versus a *pessimism of weakness*.

Pessimism as strength faces up to the facts as they present themselves, accepts the danger fully, and engages in sober analysis of what is.... (In contrast to others who became absorbed in despondency, adopted a submissive stance and capitulated to the situation through a weary knowingness, taking refuge in ineluctable fate (which is a pessimism of weakness). (Hamilton, 2010, p. 14)

When asked where he finds hope in spite of his despair, Homer-Dixon (as cited in Boyce, 2008), discusses a universally understood notion about the future: our children's children's children. He explains that all people, regardless of ethnicity, class, geography, etc., essentially want the same thing: "a future in which our children are secure and safe and can develop their

potential and flourish as human beings” (p. 106). For him, hope for a better tomorrow is a hope for future generations.

In summary, hope in these anticipated troubled times ahead may at times be hard to come by but it’s still an option one can choose, even if the only strength one can muster is a pessimism of strength. Hamilton (2010, quoting St. Francis), expresses it this way: “Even if I knew the world would end tomorrow, I would still plant this tree” (p. 14).

Chapter 3: Methodology

This qualitative study was conducted using open-ended interview questions, which were then analysed using discourse analysis. During the winter of 2009-2010 I sent out an invitation to many hockey players who I knew well through my involvement in the sport. I explained the broad parameters of the study, and asked them to consider volunteering to participate in an interview, or to recommend someone who they felt would be a good fit for this study. There were four criteria necessary for being considered a suitable research informant: (a) a father, (b) a Canadian, (c) having played pond hockey as a boy and continuing to play it now, and (d) professing to love the game of pond hockey (however they defined the word love). Some fathers responded to this request and agreed to being interviewed without more intervention on my part, and some I had to discuss project details with and specifically ask them to participate before they agreed. The informants were drawn from two sources: six of them were personal contacts, and one, who I had no prior contact with, approached me after learning of my research intentions. I generally sought out informants who I knew previously so that there would be a level of trust between us because of our familiarity with each other, which I hoped would help them to ‘open up’ emotionally during the interview. My level of familiarity with the first six spanned from my ‘best friend’ growing up as a young boy in Montréal, to someone who was one of the coaches on our sons’ hockey team at the time of the interview and who I met three months prior to the interview. I would certainly say I was on friendly terms with each of these six.

I conducted six face-to-face interviews and one phone interview, each between 35 and 65 minutes long. Three of the informants lived in the same cities that they grew up in (two in Kamloops, BC and the other in Montreal, PQ), and the other four lived in Kamloops but grew up in various regions around Canada (South West Manitoba, Cape Breton, Southern

Ontario/Okanagan, and East Central Alberta). I specifically chose informants who grew up in locations all across this country for two reasons: 1) in order to get a sense of what playing pond hockey was like for them as boys growing up in various parts of the country, and 2) to compare the differences in geographic climate patterns between what they recalled growing up and what they observe now as men. This last point still applied for those who moved away from their home towns since they still visited friends and family 'back home'.

Four interviews occurred outdoors in close proximity to outdoor hockey rinks or ponds. I specifically chose these locations to make the experience of talking about outdoor hockey as real as possible for the informant and not just a memory. Also whenever possible, the interview location was chosen by the informant based on a personal and special connection he had with it. The intention of this was to foster a sense of place for the informant during the interview with the intended end result, again, of heightening the informants' emotional connection with the whole interview process. For logistical reasons, I had to conduct three interviews at indoor locations: at a pub, a recreation centre, and one recorded via telephone at the informant's home. In every case effort was made to insure that each setting afforded a private and comfortable atmosphere where time pressures were at a minimum so that the interviewee felt relaxed enough to speak his mind at length without interruption. All but one interview was videotaped. That interview was conducted over the telephone and was audio recorded.

Conducting the interviews near outdoor hockey locations also provided good backdrops for the video footage I took, which forms an important component of this thesis. All informants were informed that I hope to use aspects of the thesis in a separate documentary film project on the same subject, and informants gave written consent for their images and words to be used in the research and the documentary project.

The interview questions (see Appendix A) focused on the informants' beliefs and feelings about outdoor hockey both in their past and present. They were also questioned on their feelings about the future of outdoor hockey due to the forecasted impacts of climate change on it. Informants revealed whether and how they think and feel climate change has affected outdoor hockey through time, and what they envision for the game in the future. When appropriate, I respectfully probed the informants for details about their answers and asked questions to elicit how the informants felt emotionally. The interviews were conducted in a casual, conversational format in order to try and make the informants comfortable with me as the researcher and the subject matter. By conducting the interviews in this relaxed fashion it was my hope that the informants would be more likely to open up in an honest way and feel able to really let me know how they felt about the topic.

The informants were given the research questions several days in advance of the interviews in order to give them a chance to ponder the questions so that they felt comfortable and prepared for the interview. It was never my intention to surprise the informants with a question or put them 'on the spot'. It is my belief that by showing a sense of openness about all aspects of my research intentions that the informants would be more likely to open up emotionally. I was also keenly aware of not being judgmental about the informants' responses, nor getting into debates or arguing about what they had to say. It was my intention to ask the questions, listen and be open to their answers. This style of qualitative research is in keeping with what DeLaine (2000, cited in Cohen et al., 2008) says on the subject of how to best treat your research informants. DeLaine's advice includes:

showing interest, assuring confidentiality (where appropriate) and avoiding being judgmental.... Add to these the ability to tolerate ambiguity, to keep self-doubt in check,

to withstand insecurity, and to be flexible and accommodating.... Such features are not able to be encapsulated in formal agreements, but they are the lifeblood of effective qualitative inquiry. (p 181)

Throughout the research process I was keenly aware of wanting to maintain my relationship with each of the informants (even the one who I didn't know prior to starting the project and therefore didn't have as much of a vested interest in). This was very important to me because most of the informants were my friends and I never wanted to say or do anything that might in any way jeopardize our relationship. I mention this because there is a possibility that by putting the maintenance of my relationship with the informants as a priority, I may have avoided asking 'the tough questions' or prying further on a particularly sensitive topic.

Discourse Analysis

In keeping with the advice that Cohen et al. (2008) give when deciding on what data analysis method to use, I used discourse analysis. "In abiding by the principle of *fitness for purpose*, the researcher must be clear what he or she wants the data analysis to do as this will determine the kind of analysis that is undertaken" (p. 461). I used discourse analysis to analyse my data because of what I want it to do: to inform public educational marketing campaigns and programs (set in informal places such as sports venues and homes) aimed at Canadian fathers to be more proactive regarding their behaviours towards climate change. These campaigns would be the "applied area" that Gee (2005) refers to when elaborating on the ultimate outcome of conducting discourse analysis.

A discourse analysis must have a point. We are not interested in simply describing data so that we can admire the intricacy of language.... Rather, we are interested... in two things: a) illuminating and gaining evidence for our theory of the domain, a theory that helps to explain how and why language works the way it does when it is put into action;

and b) contributing, in terms of understanding and intervention, to important issues and problems in some “applied” area. (p. 8)

Based on my professional experience of working in marketing and communications for over 10 years, suffice it to say that I predict that the conclusions drawn from this research about the thoughts, language, and, more specifically, emotions of these seven informants will be very helpful in informing the golden rule of designing any marketing campaign: knowing your audience. Discourse analysis is a very good analysis method for this end goal because of its strong emphasis on, what Gee (2005) calls, “language-in-use” (the language used by people depending on what particular context they find themselves in). The “theory of the domain” mentioned by Gee in the last block quote has language-in-use as its core. My theory is that because of the in-depth understanding of the nuances of the language that these seven fathers have used during these interview conversations—an understanding of their language-in-use—when an opportunity arises to be able to use this understanding and put it into action in an actual marketing campaign aimed at a demographic of similar fathers, it will be very well matched, and therefore work well to get the appropriate messages across. Analysing and understanding the language and conversation styles these seven fathers use when speaking on this subject ties-in with knowing your audience.

Gee (2005), who most influenced my thinking on discourse analysis, makes clear that he does not think of it as a firm method with a step-by-step approach, but rather that the method should be used as “sets of “thinking devices” with which one can investigate certain sorts of questions, with due regard for how others have investigated such questions, but with adaptation, innovation, and creativity as well” (p. 9). With this in mind, I read over what several authors (Cohen et al., 2008; Gee, 2005; Fulcher, 2005; Starks & Trinidad, 2007) had to say on how

discourse analysis works, and then settled on several points, outlined in this chapter, which I felt were most useful and relevant to my study.

The beauty of using discourse analysis is that it helps to get at the root of my research, which is analysing the conversations—the discourses—that Canadian outdoor hockey playing fathers had about the topic of how climate change affects pond hockey now and might in the future. The interviews consisted of many discussions about various facets on this topic and the informants revealed, primarily through language, aspects of their thoughts, feelings, passions, uncertainties, interests and beliefs.

The importance of language in discourse analysis, as its name makes clear, can not be overstated (Fulcher, 2005; Gee, 2005; Starks & Trinidad, 2007). Starks and Trinidad (2007) say that language “...serves as the primary means through which (individuals) enact their identities” (p. 1374), and Gee (2005), showing how important the choice of specific language is to the perception one has of the meanings behind it, says, “When we speak or write we always use the grammar of our language to take a particular perspective on what the “world” is like. Is this combatant a ‘freedom fighter’ or a ‘terrorist’?” (p. 2). Language helps to shape what each individual regards as the reality of each situation. The language that my informants used was specific to the interview situation of them talking to me about how the issue of pond hockey relates to the issue of climate change. As a result of each interview situation, the meanings that arose from these conversations—the language that was specifically used to convey the ideas about these issues, and in the setting we were speaking in—was specific to that situation. Had the same interviews be situated in other situations (with either, for instance, a different researcher, setting, or order of questions) then the answers and the language used would likely be quite different. Gee (2005), who refers to discourse analysis as the “analysis of ‘language-in-use’” (p.

5), refers to this phenomenon as *situated meaning* and thinks of it as one of the primary tools of inquiry of a discourse analysis. As far as how one gleans meaning from the language used, Gee (2005) goes on to say that there are two analysis methods. The first one is called *form-function analysis* and “is the study of rather general correlations between form (structure) and function (meaning) in language” (p. 54). The other, and the one that I've employed in this thesis, is called *language-context analysis*, and is “the study of much more specific interactions between language and context” (p. 54). “Context” refers to all of the factors leading up to and during the interviews, including, for instance, the interview setting, the literature I supplied the informants with about the project and interview, our relationship, and even, in light of climate change being central to the project, the particular temperature and weather patterns of the day/week/season that our interview took place in. To further clarify the notion of situated meanings, Gee (2005) adds that they “arise because particular language forms take on specific or situated meanings in specific contexts” (p. 57).

In regards to how I used discourse analysis to analyse my data, I began by conducting a comprehensive coding of all relevant data in my finished interview transcriptions using, as suggested by Miles and Huberman (1994), a simple two level coding system: general First Level Codes and more specific Pattern Codes. Please see Appendix B for codes. These codes helped to organize main themes which emerged from the interviews. The coding was based on one of the four methods of organizing an analysis, put forward by Cohen et al. (2008), which is by research question. “In this approach all the relevant data from various data streams (interviews, observations, questionnaires, etc.) are collated to provide a collective answer to a research question” (p. 468). Using this method, I used my 16 interview questions—geared towards answering my one research question—to organize my coding system. I began by going over each

of the seven informant's answers to each of the interview questions and applying First Level Codes when relevant. Once I had all of these codes in place for all informants on each question, I went over each question again and looked for patterns, or specific themes, across all seven informants and applied the Pattern Codes. The number of themes that emerged from each question spanned from two to eight and averaged four or five. The process of mining themes from all of the codes is, in essence, what Gee (2005) refers to when he says "(w)henever we speak or write, we always and simultaneously construct or build... areas of 'reality'" (p. 11). These areas of "reality", shared by several of the seven informants, are the foundation upon which the theory (s) of this thesis will be built upon

Gee (2005) lists seven building tasks of language that are used to create this "reality" and they are: Significance, Activities, Identities, Relationships, Politics (the distribution of goods), Connections, and Sign systems and knowledge (p. 11). We all regularly use these seven building tasks of language either alone or in conjunction with each other when we use language. His point about the use of these building tasks is that we use language for a reason; we always use it to "build" something. For instance, to build significance (for ourselves or others), or to signal that we're engaged in some sort of activity, or to build upon some sort of relationship.

Speaking on the function of the mind as "at root, a pattern recognizer and builder" (p. 68), Gee (2005) also discusses how we, as members of the human race, tend to seek social norms in our actions, and how we often do so unconsciously. These social norms are the patterns that one builds upon. Although he acknowledges that we each also have individual agency to act on our own, he concludes that if our actions stray too far away from those social norms that the mind will seek to "discipline" and "renorm" them to get them back in line. This is important to recognize in my study because it implies that my interview informants would likely not have said

things that they thought would stray too far from those social norms of which they and I are both a part of. “It (the mind) is social (cultural) in the sense that sociocultural practices and settings guide and norm the patterns in terms of which people think, act, talk, value, and interact ...” (Gee, 2005, p. 68).

Also of importance to this thesis in regards to discourse analysis is the notion, mentioned by Gee (2005), of “Discourse models”, which are

“theories” (storylines, images, explanatory frameworks) that people hold, often unconsciously, and use to make sense of the world and their experiences in it. They are always oversimplified, an attempt to capture some elements and background subtleties, in order to allow us to act in the world without having to think overtly about everything all at once. In this sense, they are like stereotypes.... (p. 61)

This is important to discuss in relation to this thesis because all of the informants were given the interview questions several days in advance of the interviews and therefore they had time, if they chose to, to rehearse what they wanted to say during the interview, and, in effect, speak in the “Discourse model” of the pond-hockey-playing-Canadian-dad-who-is-concerned-about-climate-change. Of course there were many times when the conversations deviated from the set interview questions, which would mean that the informants would not have had an opportunity to ‘rehearse’ their answers, but generally speaking all of the interview conversations never really strayed too far off course of the spirit of the interview questions. This dynamic is worth mentioning because it brings up the possibility that the informants may have provided mostly pat answers that fit within that “Discourse model”; their answers may not have been wholly authentic, which might not have been the case had they had much less awareness about the questions beforehand. Based on my earlier reasoning of why I supplied the questions to them in advance (to make them feel at ease with the whole process, thereby providing more truthful

responses), I conclude that there was no way around this issue. Having said this, and as a final thought on this subject, never during any of the interviews did I get a sense that any of the informants were speaking insincerely. On the contrary, I always had a sense that they cared about the subject matter, had given it some forethought before the interviews, and wanted to help me in the research for my project by providing genuine responses.

The last important aspect of discourse analysis that needs discussing is its end result. Cohen et al. (2008) states that “Theory is the end point of the research, not its starting point” (p. 173). With other types of analyses, the researcher has a hypothesis—a theory—that he/she is setting out to prove or disprove by analysing the data. However, with discourse analysis the researcher sets out with a blank slate and arrives at a theory or theories only at the end of all of the data analyses. In order to arrive at a theory(s) from analysing the interviews, the analysis was carried out using the technique known as Progressive Focusing (Parlett and Hamilton, 1976, cited in Cohen et al., 2008).

Progressive focusing... starts with the researcher taking a wide-angle lens to gather data, and then, by sifting, sorting, reviewing and reflecting on them, the salient features of the situation emerge. These are then used as the agenda for subsequent focusing. The process is akin to funneling from the wide to the narrow. (p. 462)

Cohen et al. (2008) elaborate on this:

... (researchers) should then assemble blocks or groups of data, putting them together to make a coherent whole.... Then they should painstakingly take apart their field notes, matching, contrasting, aggregating, comparing and ordering notes made. The intention is to move from description to explanation and theory generation.... (p. 462)

As a ‘last sober word’ about generated theory(s), Gee (2005) reminds all of us budding social (and, indeed, any kind of) scientists that, ultimately, what matters more than arriving at

any sort of “definitive proof” using discourse analysis, which really doesn’t exist in empirical inquiries, “is about formulating and gaining some confidence in hypothesis which must be further investigated”, and further that “We must always be open, no matter how confident we are in our hypothesis, to finding evidence that might go against our favourite views” (p. 13). For me this means constantly learning about new aspects of my research and trying to be open to all viewpoints about it.

I will now discuss three areas in relation to how they work within a discourse analysis:

Transcribing, Role of the researcher, and Informants.

Transcribing.

After all the interviews were completed, I transcribed the video and audio recordings. In light of the fact that this was my first major transcribing task, and so lacked experience doing so, I chose *relevance* as the overarching guideline to follow, as put forward by Gee (2005).

A discourse analysis is based on the details of speech (and gaze and gesture and action) or writing that are arguably deemed *relevant* in the situation *and* that are relevant to the arguments the analysis is attempting to make. A discourse analysis is not based on *all* the physical features present, not even all those that might, in some conceivable context, be meaningful, or might be meaningful in analysis with different purposes. Such judgments of relevance (what goes into a transcript and what does not) are ultimately theoretical judgments, that is, based on the analyst’s theories of how language, situations and interactions work in general and in this specific situation being analyzed.... (p. 106)

Throughout the transcription process I adhered to the guidance from Gee (2005) and Cohen et al. (2008) to be as detailed as possible, but always having in the back of my head what features were most important as far as the main issues or questions I was concerned with; in other words, “how a transcription is useful for the research” (Cohen et al., 2008, p. 367).

Transcriptions included each informant’s personal verbal idiosyncrasies, including word

repetitions, pauses, “Ummms”, “Ahhhs”, and so on. Also in keeping with what Gee (2005) just mentioned in the block quote above, non-verbal language (“gaze and gesture and action”), along with tone, speech speed and volume were “watched” for and also included in the transcripts whenever they were relevant in order to try and represent the interviews as accurately as possible. As Cohen et al. (2008) point out, “Indeed, it is frequently the non-verbal communication that gives more information than verbal communication” (p. 365). Perhaps due to my inexperience of ‘picking-up’ on non-verbal language, or perhaps simply because I didn’t see or sense much of it, there are few mentions of non-verbal language in the transcripts.

Transcribing was undertaken with the understanding that, despite my best efforts, the transcripts would be unable to perfectly represent the interview. As Cohen et al. (2008) make clear, by virtue of the fact that the researcher is essentially translating from one set of rule systems (oral and interpersonal) to another rule system (written), there is bound to be lost data. As Kvale (1996, cited in Cohen et al., 2008), points out “the prefix *trans* indicates a change of state or form; transcription is selective transformation” (p. 166).

Once the transcripts were finished, all seven informants were contacted via email and asked to verify their transcript to make sure they thought that it represented what they said in the interviews. This occurred approximately 8 to 12 weeks after the interviews were conducted. Each was given the opportunity to add to or subtract from the transcripts as they saw fit. Besides a minor correction regarding the age of one of their children, none of the informants asked that the transcripts be changed.

Role of the researcher.

Another aspect of discourse analysis that needs addressing is that of the role of the researcher, and of the myth of the researcher having an objective viewpoint. Cohen et al. (2008) address this by speaking about *Reflexivity*.

Reflexivity recognizes that researchers are inescapably part of the social world that they are researching (They) are in the world and of the world. They bring their own biographies to the research situation and participants behave in particular ways in their presence. (p. 171-172)

Reflexivity means that the researcher has to acknowledge and try to understand his or her part in the research, which means disclosing anything that the researcher does to influence the process or outcome of the research. In keeping with this notion of disclosing myself and my role in the research, it's worth mentioning that all of the informants knew to a greater or lesser degree before embarking in the interviews that I generally had a pro-environmental disposition. Even the one informant who I didn't know prior to conducting the research would have been able to easily ascertain this by virtue of the fact of me taking a Masters-level course in this area of study. This is important to acknowledge because they may have tempered their responses to my questions in order not to 'rock the boat' and upset me with any answers that they thought I may not have approved of. Like me, they may have valued their relationship with me more than they valued any absolute truth in their answers about the subject matter. I tried to alleviate the likelihood of this happening by not overtly making my environmental beliefs and values known when we were together, nor bringing up specific environmental issues outside of the topic of the interviews. I also tried being non-judgemental during the interviews about anything they said regarding their environmental beliefs or values. Although it was always my intention as the

interviewer to elicit truthful answers from the informants, it is beyond the scope of this research to determine to what extent they may have tempered their answers.

It is inevitable that all researchers bring personal biases to their work. Prior to beginning the research some of my biases included hoping that my informants would have strong emotional reactions when discussing how they felt about climate change's effect on pond hockey. This would have made my analysis very engaging and probably easier to arrive at strong conclusions. I also had to be careful not to be critical when certain informants expressed indifference about climate change's negative effects, or, even more troubling to me, if they expressed scepticism about climate change or held beliefs that contradicted the scientific consensus expressed by leading authorities such as the IPCC. In the same way that I tried to alleviate the likelihood of my informants tempering their answers to be 'greener', I also tried to guard against showing any bias by conducting myself in a similar fashion, i.e. not overtly making my environmental beliefs and values known when we were together, nor bringing up specific environmental issues outside of the topic of the interviews. I also tried to be non-judgemental about anything they said regarding their environmental beliefs or values.

Informants.

In regards to Gee's (2005) concept of *situated meaning*, I think it's worthwhile to mention my relationship with each of the informants, since the social relationship in each interview situation plays a part in the context of the meanings that arise out of those situations. I use the word context in the way that Gee (2005) refers to it here.

The word "context" here refers to an ever-widening set of factors that accompany language in use. These include the material setting, the people present (and what they know and believe), the language that comes before and after a given utterance, the social

relationships of the people involved... as well as cultural, historical, and institutional factors. (p. 57)

Biographies.

In order to give some context to each of the informants' answers, I have included brief biographies about them which include where they grew up, where they're now living, the genders and ages of their children, and their ages. The following names are pseudonyms, which have been given to the informants in order to attempt to protect their privacy.

Ben was born and spent his early years in Scotland, where both of his parents are from. His family emigrated to Toronto when he was four, and shortly after they moved to Guelph. Several years later the family moved to Vancouver for a short while, and then moved again at age 12 to the small town of Rock Creek, British Columbia, which is in the Southern Interior. He stayed there at least until age 16. He now lives in Kamloops where he's been for at least 10 years, and has two daughters (ages 16, 14). He's 43.

Calvin was born in Edmonton and moved to Kamloops at age 4 where he stayed until age 18, at which point he left for university. He returned to Kamloops around 13 years ago where he is now living. He has four children (three girls: 12, 8, 6; and one boy: 10), and is 48.

Craig was born and grew up in Chauvin, Alberta, where he stayed until age 19, at which point he left to go away to school and to travel. He now lives in Kamloops where he has been for the last 18 years. He has one son (age 13), and is 43.

Ed grew up on Cape Breton Island, Nova Scotia where he stayed until he left as a young man. He is now living in Kamloops where he's been for the last four years. Prior to Kamloops, he lived in northern Alberta for four years, and prior to that in Nanaimo, BC. He has one son (10) and one daughter (approximately 8) and is around age 40.

Jay was born in Winnipeg then moved to Melita, Manitoba at age 5, where he stayed until he left as a young man. He moved to BC 13 years ago and is now living in the community of Whitecroft, which is 45 minutes north of Kamloops. He has one son (12), and is 39 years old.

Jeremy was born and grew up in Montréal. He went away for his final year of high school and again for university and lived on and off again in the city for several years until he finally settled back there permanently approximately 13 years ago. He has one daughter (13) and one son (11), and is 46

Ken grew up in Kamloops where he has been back living for the last four years. Prior to that he was in Edmonton for four years and prior to that lived in Vancouver for 20 years. He has two sons (approximately 23, 15) and one daughter (approximately 13). He is approximately 45 to 49 years old.

Chapter 4: Findings

This chapter is divided into three sections. The first section explains how the chapter is structured; the second section is a series of eighteen video YouTube clips of the Study Findings; and the third section is a table outlining the Main Themes in the Findings. The table is designed to assist the viewer while watching the YouTube clips.

At the end of the first section the reader will be prompted to view the YouTube clips. Since this thesis deals with fathers' feelings, I chose to include video clips which I feel is a better way to convey these feelings than just writing about them. The video clips consist of the seven informants talking in the interviews, along with text slides which introduce and add context to the video clips. Six of the seven interviews are video-based and the seventh is the phone interview which is audio-based. The clips of the phone interview will appear as still images of the informant's face, while hearing his voice. As a note to the listener, due to the different technical aspects of the recording of phone interview, the volume while this informant speaks is slightly less than the other six.

There are two types of text slides that appear before each video clip. The first are the interview questions, and the second outline the main themes that arise from the analysis of the informants' combined answers to each interview question. Not every informant will speak about each question, but rather only those whose answers best represent the main themes to each question. For instance, one question may have only three of the seven informants who speak about the main themes to that question in their interviews, and therefore only they will appear in the video clips in relation to that particular question. In keeping with the importance of *relevance* (as outlined in Methodology), I have sometimes included more than one informant speaking on

the same main theme within a question if I thought there were relevant variations on the theme that warranted elaboration.

For the sake of simplicity, the informants will always speak about each question in alphabetical order based on their first names. The listing of the main themes on the text slides will also be in alphabetical order, since they are not considered more or less important to each other, unless this is specifically stated.

Here is an example of the order of text slides and video segments on the YouTube clips, along with a description of what the slide acronyms stand for.

Slide for interview question #1 (Q1):

You've said that you love the game of outdoor hockey, please tell me why?

Slide for main themes from question #1 (T1):

Fun

Simple

Unregulated

Video Segment 1.1

First informant talking on Question #1

Video Segment 1.2

Second informant talking on Question #1

Video Segment 1.3

Etc. for each informant who speaks on Question #1

Slide for interview question #2 (Q2):

Describe your most memorable experiences of outdoor hockey?

Slide for main themes from question #2 (T2):

Community

Friends

Identity Forming

Outdoors

Video Segment 2.1

First informant talking on Question #2

Video Segment 2.2

Second informant talking on Question #2

Video Segment 2.3

Etc. for each informant who speaks on Question #2

Slide Acronyms

Slide Q1: stands for Interview *Question # 1*. Q2 is for Interview *Question #2*, etc..

Slide T1: stands for Main *Themes to Question #1* (the main themes that arose from the analysis of Question #1). Slide T2 stands for Main *Themes to Question #2*, etc..

Video Segment 1.1: stands for the first video clip on Question #1. Video Segment 1.2 stands for the second video clip on Question #1, etc..

Video Segment 2.1: stands for the first video clip on Question #2. Video Segment 2.2 stands for the second video clip on Question #2, etc..

The following table (Table 1) is designed to help the reader/viewer interpret the findings on the YouTube clips. Once the first YouTube clip has started and as soon as the first slide appears, the viewer can pause the clip to review the table and look up the main themes from each interview question and which informant will be speaking about which of the themes. Once the viewer is satisfied with the information on the table they can press *Play* to resume the clip.

Study Findings YouTube Clips

Please download the first YouTube clip. The first visual to appear should be the light blue introductory text slide titled “Pond hockey dads and climate change...”. Once the first YouTube clip is complete, download the second one, and so on until all eighteen clips are viewed. Times are given for each clip and the total time for all eighteen clips is just over ninety three minutes.

- Introduction & Question 1: <http://www.youtube.com/watch?v=ImDHCzsends>
 - 2:37
- Question 2: <http://www.youtube.com/watch?v=g21yLLNfy5U>
 - 4:29
- Question 3: http://www.youtube.com/watch?v=m7RTmWc_0Lk
 - 4:06
- Question 4: <http://www.youtube.com/watch?v=vtuFKE9fRNI>
 - 5:18
- Question 5: http://www.youtube.com/watch?v=_htT3ibQ1vk
 - 2:58
- Questions 6 and 7: <http://www.youtube.com/watch?v=pdVNdYpB08E>
 - 0:29
- Question 8: <http://www.youtube.com/watch?v=LBvp6iSiE6s>
 - 3:45
- Question 9a: http://www.youtube.com/watch?v=nhO6WjAPQ_8
 - 4:38
- Question 9b: <http://www.youtube.com/watch?v=ZItvPAQieeM>
 - 3:08
- Question10: <http://www.youtube.com/watch?v=CSpFrXIOpUE>
 - 4:04
- Question11: <http://www.youtube.com/watch?v=zmkBwti5URA>
 - 5:30
- Question 12: <http://www.youtube.com/watch?v=Mvm6MAkrCTU>
 - 14:02
- Question 13: <http://www.youtube.com/watch?v=UOfHc9hT4-I>
 - 15:04
- Question 14a: <http://www.youtube.com/watch?v=SiiAsAMwfrQ>
 - 3:29
- Question 14b: <http://www.youtube.com/watch?v=8waPCONd5zE>

- 1:05
- Question 15a: http://www.youtube.com/watch?v=ohgoSa_Tnsg
 - 6:46
- Question 15b: <http://www.youtube.com/watch?v=NkdtFXbHZsk>
 - 2:12
- Question 16: <http://www.youtube.com/watch?v=hSmrS5FLrF8>
 - 9:26

Table 1. Main themes.

Interview question and main themes that arose from each question	Main theme(s) that individual informants speak about on each question
<p>1. You've said that you love the game of pond hockey. Why is that the case?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Fun • Simple • Unregulated 	<p>Themes:</p> <ul style="list-style-type: none"> • Craig: Simple • Ed: Fun; Unregulated • Ken: Fun; Unregulated
<p>2. Describe your most memorable experiences of outdoor hockey?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Community • Friendship • Identity Forming • Outdoors 	<p>Themes:</p> <ul style="list-style-type: none"> • Ben: Friendship; Outdoors • Jay: Identity Forming • Jeremy: Community; Identity Forming; Outdoors • Ken: Friendship; Identity Forming
<p>3. Describe your outdoor 'home rink' growing up?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Build own rink • Community • 'Open' all the time • Something special 	<p>Themes:</p> <ul style="list-style-type: none"> • Calvin: Something special • Craig: Build own rink • Jay: Community • Ken: 'Open' all the time; Something special

<p>4. What do you think your early experiences of outdoor hockey taught you about hockey, and about life in general?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Character Builder • Importance of Community • Love of the game • To have fun 	<p>Themes:</p> <ul style="list-style-type: none"> • Ben: To have fun • Jay: Love of the game • Jeremy: Importance of community • Ken: Character-builder
<p>5. What does outdoor hockey mean to you?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Community • Family/Kids • Fun • Outdoors 	<p>Themes:</p> <ul style="list-style-type: none"> • Calvin: Family/Kids; Community • Ed: Community • Jeremy: Outdoors • Ken: Fun; Family/Kids
<p>6. Do you have a favourite outdoor rink these days, and if so please describe it?</p> <p>Themes:</p> <p>There were no main themes identified</p>	
<p>7. Approximately how many times a winter do you play outdoor hockey?</p> <p>Themes:</p> <ul style="list-style-type: none"> • 2 to 20 times/year • This year not so good, which has prevented more outings. 	<p>Themes:</p> <ul style="list-style-type: none"> • Craig: 2 to 20 times/year; This year not so good, which has prevented more outings.

<p>8. Have you noticed any differences in the outdoor hockey season from when you were a boy to now (i.e. the quality of the ice, length of playing season, etc.)? If so, describe it/them.</p> <p>Themes:</p> <ul style="list-style-type: none"> • Inconsistent / Undependable • Negative effect on community • Shorter season <p>* It is worth noting in this question that several informants mentioned that they were basing their answers on their memories from when they were boys, which they admitted may not be totally reliable.</p>	<p>Themes:</p> <ul style="list-style-type: none"> • Ben: Negative effect on community • Ed: Shorter season • Jeremy: Inconsistent / Undependable
<p>9a. How do you think climate change will affect outdoor hockey in Canada in the future, if at all?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Need to adapt • Move up in elevation • Organized family outings • Cooled rinks • Shorter season • Some communities will loose 'rinks' 	<p>Themes:</p> <ul style="list-style-type: none"> • Calvin: Need to adapt: Move up in elevation; Organized family outings • Craig: Shorter season; Some communities will loose 'rinks' • Jeremy: Need to adapt: 'Cooled' rinks
<p>9b. If you think it will affect it, how does this make you feel?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Feeling of loss for kids and next generation • Loss of Canadian culture • Sad 	<p>Themes:</p> <ul style="list-style-type: none"> • Ben: Loss of Canadian culture • Craig: Feeling of loss for kids and next generation • Jay: Sad

<p>10. Do you play outdoor hockey with your children and, if so, describe what it's like and if it's important to you?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Being outside • Family time • Fun for everyone • Kids love it • Pass on love of game • Time to socialize 	<p>Themes:</p> <ul style="list-style-type: none"> • Ben: Family time; Being outside • Craig: Pass on love of game; Fun for everyone • Ed: Kids love it • Ken: Time to socialize
<p>11. Do you consider yourself an environmentalist? If so, please elaborate on what this means to you. If not, please explain why not?</p> <p>Themes:</p> <ul style="list-style-type: none"> • 'Change tune' (i.e. from saying no to yes) • Define via 'nature' / 'green' actions • Feel like a hypocrite • In a lot of ways, yes • No • Responsible "to a certain degree" 	<p>Themes:</p> <ul style="list-style-type: none"> • Ben: Feel like a hypocrite; No • Calvin: In a lot of ways, yes • Craig: Define via 'nature' / 'green' actions • Ed: Responsible "to a certain degree" • Jay: 'Change tune' (i.e. from saying no to yes)
<p>12. Do you think Climate Change is currently happening? If, so please explain what this means to you.</p> <p>Themes:</p> <ul style="list-style-type: none"> • Absolutely / Indisputable / Yes • Change is inevitable • Climate is changing • Very well debated subject • Weather is affected • Yes and No 	<p>Themes:</p> <ul style="list-style-type: none"> • Calvin: Very well debated subject; Weather is affected • Craig: Yes-No; Change is inevitable • Ed: Yes; Climate is changing • Jeremy: Absolutely; Weather is affected • Ken: Yes; Weather is affected

<p>13. Do you have any concerns about climate change? If so, please elaborate.</p> <p>Themes:</p> <ul style="list-style-type: none"> • Collapse of humanity unless things change • Generally very concerned • Kamloops getting hotter and drier • Loss of winter activities • Planet can't manage everyone consuming all of the 'stuff' 	<p>Themes:</p> <ul style="list-style-type: none"> • Ben: Loss of winter activities; Generally very concerned • Calvin: Planet can't manage everyone consuming all of the 'stuff' • Craig: Collapse of humanity unless things change; Kamloops getting hotter and drier • Ed: Loss of winter activities • Jeremy: Collapse of humanity unless things change
<p>14a. Do you currently engage in any behaviour to help combat it?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Actions are money driven • Do the best we can • Greater awareness • Keep home heating at reasonable level • Limit driving • No / Less Idling • Recycle • Renovate with energy efficiency in mind • Using CFLs 	<p>Themes:</p> <ul style="list-style-type: none"> • Ben: No / Less Idling; Renovate with energy efficiency in mind • Calvin: Greater awareness; Actions are money driven • Craig: Do the best we can; Recycle; Limit driving • Jay: Greater awareness • Ken: Using CFLs; Keep home heating at reasonable level
<p>14b. Besides what you're currently doing, do you have plans to engage in any other measures to help further combat it?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Buy fuel-efficient car • Part of problem is not really knowing/being educated enough about what we can do • Solar 	<p>Themes:</p> <ul style="list-style-type: none"> • Earl: Buy fuel-efficient car; Solar • Ken: Part of problem is not really knowing/being educated enough about what we can do

<p>15a. If your child/children asked you about what you think about climate change in general what would you say?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Adapt • Be honest with children • Climate change is happening • Climate change is part of natural process/cycle (maybe) • Discussion and dialogue needed • Educational process needed 	<p>Themes:</p> <ul style="list-style-type: none"> • Ben: Adapt; Be honest with children; • Calvin: Discussion and dialogue needed; Educational process that needs to happen • Earl: Climate change is part of natural process/cycle (maybe) • Jay: Adapt; Climate Change is happening • Ken: Children need to be aware; Educational process that needs to happen
<p>15b. If your child/children asked you about how you felt about climate change in general what would you say?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Climate change is happening • Everyone needs to do their part 	<p>Themes:</p> <ul style="list-style-type: none"> • Jeremy: Climate change is happening; Everyone needs to do their part
<p>16. How do you feel, as an outdoor hockey playing father, about the threat of losing the game of pond hockey to climate change?</p> <p>Themes:</p> <ul style="list-style-type: none"> • Don't feel very good about it / Worrisome / Concerning • Feel badly for next generation of kids / families who may not have opportunities to play and have fun outside • Feeling of wanting to preserve pond hockey • Feelings are awakened by considering the implications of climate change on pond hockey • Loss to Canada / Loss of Canadiana • Sad • Symbolic recognition of frightening changes 	<p>Themes:</p> <ul style="list-style-type: none"> • Ben: Sad; Feeling of wanting to preserve pond hockey; Loss to Canada / Loss of Canadiana; Feel badly for next generation of kids / families who may not have opportunities to play and have fun outside; Don't feel very good about it / Worrisome / Concerning • Calvin: Feelings are awakened by considering the implications of climate change on pond hockey • Craig: Don't feel very good about it / Worrisome / Concerning; Sad • Ed: Feel badly for next generation of kids / families who may not have opportunities to play and have fun outside; • Jay: Feel badly for next generation of kids / families who may not have opportunities to play and have fun outside • Jeremy: Symbolic recognition of frightening changes • Ken: Sad; Feelings are awakened by considering the implications of climate change on pond hockey

Chapter 5: Discussion

So, how do Canadian outdoor hockey playing fathers feel about the threat of losing the game they love to climate change? Twelve points emerged about the fathers who participated in this study:

- Fathers are willing to share their feelings about climate change
- Fathers feel sad about the possibility of losing pond hockey to climate change
- Fathers expressed a belief that they were generally ill-equipped to be able to really do anything substantial about climate change
- Fathers believe people, especially children, require more education to be able to properly deal with climate change
- Fathers consider climate change a significant concern but don't really do much to combat it
- Fathers are concerned about the welfare of their children and future generations with respect to climate change
- Pond hockey is a means of nurturing community and family
- Fathers equate pond hockey with their Canadian identity
- Fathers do not readily identify with the term "environmentalist"
- Fathers became more engaged with climate change through conversation
- Fathers recognize the intrinsic value of spending time outdoors and that pond hockey facilitates this

- Educational approaches attempting to alter behaviours towards climate change to be more pro-environmental should link with the nostalgic feelings fathers have about pond hockey.

Fathers Are Willing to Share Their Feelings About Climate Change

The fathers in this study, with only a minimum amount of prompting, told me about a variety of feelings they had. In keeping with the literature on the subject of men expressing their feelings (Bowlby, 1980; Martin & Doka, 2000; Parkes, 1996; Thompson, 2001), these fathers were not very emotive about their feelings but instead explained them in analytic terms, and did so in ways that were very appropriate to the situation, i.e. in ‘manly’ ways. For example, many of them talked about feeling sad but I only noticed slight evidence of them ever appearing to actually be sad. Similarly, some fathers talked about being scared, but they never appeared scared.

Some of the fathers expressed more intense feelings of grief around present, but more so future, losses due to climate change than others. The two most important aspects of constructively dealing with loss run counter to how many men have historically dealt with grieving. They are (a) to seek out the support of others (whether that’s just one other person or through organized group-work), and (b) to actually let oneself grieve the loss and not suppress it, no matter what shape that grief comes in (whether cognitive, activity-oriented, or affective). Men must recognize that taking these steps has the potential to have profoundly positive outcomes in dealing with what may be a profoundly difficult loss to handle.

Fathers Feel Sad About the Possibility of Losing Pond Hockey to Climate Change

When asked how they feel about the possibility of losing outdoor hockey to climate change, the most common emotion described by these fathers was sadness. Feeling sad—even

“really sad”—was mentioned by six of the seven fathers. They were sad for four reasons: (a) because they're losing something from their childhood that means so much to them: “the boy inside the man” (Earle, 1995, p. 5), (b) they're losing a present-day experience which they still adore for many reasons, chief amongst which is that they can share it with family, friends and the community at large, (c) because of what their and other people's children and grandchildren will miss out on by not being able to play it very much, or at all, and (d) because it means losing something that defines Canada and being Canadian.

According to Hamilton and Kasser (2009) and Randall (2009), by acknowledging and expressing their feelings of sadness and loss—by engaging with these feelings—these fathers have taken an important step to be able to deal with climate change in a constructive manner. Conversely, withholding these types of feelings can be debilitating and lead one to feeling apathetic and resigned (Hamilton & Kasser, 2009). “(U)nfinished grieving”, as Randall (2009, p. 121) elaborated on earlier on in this thesis, can also lead to depression, which several of the fathers in the interviews alluded to feeling. In order to avoid depression, besides expressing one's feelings of sadness and loss, it is recommended to seek out the support of others, and to take active steps towards mitigating against that which is causing the sadness (Hamilton & Kasser, 2007). Even if certain actions are very small and can sometimes seem futile, doing them and believing that they are having an effect is paramount to maintaining hope and staying free of depression (Frankl, 1946).

In contrast with the evidence that participating in small pro-environmental actions can stave off depression, there are those authors (CRED, 2009; Hamilton & Kasser, 2009; Norgaard, 2009) who argue that although taking such actions might help with depression and will also relieve feelings of guilt (because one feels by taking such actions that they are ‘doing something’

for the environment), this commitment to action is actually displaced (Norgaard, 2009). These authors argue *single action bias* activities actually divert people's attention away from where it's really needed in order to have significant meaning to help the environment, which is in relation to much more significant lifestyle changes (for instance, driving a lot less, or abdicating airline travel).

I believe the CRED (2009) guide offers the best solution to this dilemma, which is to acknowledge that it's human nature for people to want to stave off depression and guilt around an issue like climate change, and therefore it's likely that people will often only participate in the amount of actions necessary to relieve those ill feelings. Once you can accept this, then the guide recommends three steps to counteract it: (a) make your audience aware of the single action bias phenomenon; (b) ask them how many actions they participate in (and offer a list of options); and (c) provide a convenient checklist that encourages them to take incremental steps and adopt a diversified approach with many energy-saving actions along the way to bigger, more substantial environmental changes. Taking incremental steps may also help form new environmental habits, which is so important in the development of long-term pro-environmental behaviour (Kolmuss & Agyeman, 2002). The logic, which the CRED guide (2009) refers to, is that taking incremental steps will lead to pro-environmental habits and to the bigger lifestyle changes that are really needed to combat climate change.

Fathers Expressed a Belief that They Were Generally Ill-equipped To Be Able To Really Do Anything Substantial About Climate Change

Three fathers in this study expressed the notion that they were ill-equipped to be able to really do anything about climate change. One said he didn't have enough education to know what to do; the second didn't really know what the implications of climate change are; and the

third didn't know what the answer is to deal with CO₂ levels. Based on what these fathers have said, combined with what several authors have found (Hoggan, 2011; Lorenzoni et al., 2006; Sterman & Sweeney, 2007), it seems clear that climate change is still “an area of confusion and uncertainty” (Norgaard, 2009, p. 27). It's not overly surprising then that there has still been relatively little public action on dealing with an issue as big and complex as climate change. Until there is certainty about an issue and an outline of clear solutions, the public is typically not going to mobilize en masse to deal with it (Krosnick et al, 2006; Norgaard, 2009; Sandvik, 2008). As one way to get greater participation in combating it, Norgaard (2009) and CRED (2009) confirm that, all other factors being equal, having accurate information will likely lead to greater support for climate change measures.

Fathers Believe People, Especially Children, Require More Education To Be Able To Properly Deal with Climate Change

Many of the fathers in my study believe that people require more education to be able to properly deal with climate change. When the term “education” was used, they did not specifically say how they were referring to its meaning and I did not ask. I assume they were referring to it in the traditional notion of schooling; specifically as passing information from a ‘teacher’ to a ‘pupil’.

Yet, as several authors have outlined, more information is unlikely to motivate behaviour change. What is really needed in order to affect pro-environmental behaviour towards climate change is greater emphasis on reaching people through their emotions.

Fathers Consider Climate Change a Significant Concern But Don't Really Do Much To Combat It

Fathers in this study considered climate change to be a significant concern. Some even went so far as to talk about it in apocalyptic terms (“we’re doomed”; “devastating... population collapse”; “implications are horrific”). This is in keeping with what many authors discussed in my literature review (Boyce, 2008; CRED, 2009; Hamilton, 2010; Norgaard, 2006a; Randall, 2009; Running, 2007). Randall (2009) sums up the extent of some people’s worry when she says “about the problem of climate change, loss features dramatically and terrifyingly” (p. 118). These fathers and many other people around the world are very worried, and yet neither they nor many of these other people are really doing anything significant about it. Of the seven fathers, none but one was planning to undertake any but standard household ‘green’ actions (e.g. recycling or switching to CFLs) to do anything about the issue of climate change. Some went further than these standard actions and undertook more substantial household greening actions (such as installing more insulation or better windows), but these, as the fathers admitted, were done first of all for personal financial gain and were often initiated as a result of a government incentive, with the secondary benefit of also being good for the environment. Being concerned about climate change yet doing relatively little about it is in keeping with what Norgaard (2009) found in her study of citizens of a Norwegian town, and she refers to this dynamic as living a “double life”.

The reasons given by the fathers for not doing more to combat climate change are:

“not enough time”	“doing what I can/doing my part”
“do everything (our family) can”	“part of problem is not really knowing/being educated enough about what we can do”

<p>“The problem is, I don’t think we don't really know what the concern is (about climate change)... I don't think we really understand what the implications are... yet. I don't think we really get it. I don't get it”.</p>	
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From Norgaard’s (2009) perspective, there may be psychological reasons why these fathers are not taking action. They may have unconsciously decided not to do very much to combat climate change as a way to protect themselves from feeling overwhelmed with feelings of either fear, guilt and/or helplessness. Also, they may have wanted to follow cultural norms. There is a strong desire in society to ‘get along’ and not ‘stand out from the crowd’ (Gee, 2005). Finally, doing something about climate change means admitting to the some of the grave predictions about it, and this can be hard to take. “At the deepest level... global warming threatens people’s sense of the continuity of life” (Norgaard ,2009, p. 26-27). An issue as massive as climate change can be extremely frightening in fact, and can render someone feeling powerless to act. People want to know that they can make a difference when tackling an issue, or they may not even try to affect it at all (Norgaard, 2009; Milton, 2008).

Despite describing themselves as “very concerned” about climate change, most of the fathers cited financial incentives “first and foremost” as their motivation for green practices. This is in keeping with the 2011 survey by Borick et al., which found that 80% of Canadians who were polled believed there to be “solid evidence of global warming” (p. 3), and 91% of those believed it was either a serious or very serious problem. Despite these facts, however, only 19% of Canadians were willing to pay even the small yearly fee of \$50-\$99 for increased renewable energy production in Canada (and only 13% were willing to pay \$100-\$249/year). This

dichotomy between words of concern and unwillingness to pay for action is a case of wanting to have your cake and eat it too. The public talks of wanting a better tomorrow, but right now they're not willing to pay much for it. Short-term economic issues still seem to easily trump longer-term security issues around possible outcomes from climate change.

Fathers are Concerned About the Welfare of Their Children and Future Generations With Respect to Climate Change

Several fathers were concerned about the welfare of their children, other people's children, and future generations. Sometimes this concern was very serious. "I can't imagine grandchildren, of what their life will be like. I don't think they'll play pond hockey.... They'll be battling diseases.... it's going to be grim!". Another father said "(M)aybe our population collapse is going to happen in (my son's) lifetime". These concerns point out the worry that these fathers have and underline that they really just want their kids/grandkids to be ok.

Despite concerns--even serious concerns--about the welfare of children and grandchildren, the level of action to try and deal with climate change seems lacking. The reasons outlined in the last section for this inaction can also apply here. Another reason may have to do with how we in the Western world perceive time. Talk of your children's or grandchildren's future welfare is a relatively long-term concern, and so this inaction could be attributed to Western cultural norms around the perception of time (Norgaard, 2006b). This means that because Western people are so focused on the present and near-future, it's hard for them to be able to imagine what the long-term future will look like. Despite thousands of mostly elderly and infirmed people dying in recent Summer heat waves in mostly large urban centres (Kool, 2011), climate change, for all intents and purposes, has not really affected Western citizens that much in the present, nor is predicted to in the near-future. Many westerners still don't really concern

themselves too much with it. It's predicted to affect us 'in the future' and because it's not our cultural norm to really think long-term, we don't worry about it that much, nor take action.

Perhaps climate change public education marketing campaigners could take a page from the anti-drinking/smoking/drugs campaigns aimed at pregnant women to protect their babies. These campaigns are framed in such a way that expectant mothers certainly understand how 'going without now' will safeguard their 'future outcomes'. Although the duration of time one must "go without" during a pregnancy is limited to the nine months of pregnancy, rather than the lifetime of change required to deal with climate change, the message it conveys is still relevant.

Pond Hockey Is a Means of Nurturing Community and Family

It was surprising to me how often the subjects of the importance of family time and community were in relation to outdoor hockey. The whole experience of hockey is very important to fathers for a reason well beyond the playing of a fun game. "(F)amily and community is a big thing. That's kind of what it's (outdoor hockey) become to mean for me". "(I)t's the whole family thing; it's not just the kids, it's the family feeling. Cheeks are rosy... like, everybody's rosy, and they love each other, man. That's what I love about it". Several fathers talked at length on this subject and touched on several areas: bringing neighbours together; offering a place for youth to hang out; interacting with complete strangers; helping to bridge language and geographic boundaries; working together for a common purpose; youth and adults (often unrelated) interacting together; and building social skills.

A strong community is important to get through tough times. Pond hockey players who have nurtured a sense of community through playing this game may have to search elsewhere for strong community bonds if current trends continue in regards to the pond hockey season. And seeking out other means of gaining community ties may become more and more important if

some current predictions about climate changes effects on the planet come to fruition (Fritze et al., 2008; George, 2010; Inglis, 2008; Orr, 2007; Thompson, 2009). Having a strong community will be vital in order to maintain a sense of hope in the future (Wheatley, as cited in Boyce, 2008), and so pond hockey fathers would be wise to keep this in mind if ‘the ice keeps melting’

Fathers in this study believed strongly that outdoor activities like playing pond hockey are wonderful and very important ways to nurture family ties, both with immediate and extended family. I was unable, however, to read any literature on this subject and so have no authors I can quote to comment on this fact. In the absence of these other expert opinions, I will assert that since the family unit is a fundamental building block of community, that everything that I’ve just stated about the importance of community can also apply to families.

Fathers Equate Pond Hockey With Their Canadian Identity

Along with the maple leaf, beavers and Mounties, hockey is one of Canada's iconic symbols. Several of the fathers in this study also mention how important hockey--and pond hockey in particular--is to the health and importance of Canadian identity. “It's a great part of Canada, right, pond hockey?... So you don't want to see that go away!” Another father states: “It's a part of what defines us if we knew; if we... brought it to people’s attention that... not only is this a diminishing or endangered activity, but it's also something that is... uniquely Canadian”.

For many Canadians, hockey represents a land of stoic, courageous, physically dominant males who value “individualism, flair and, most of all, character” (Robidoux, 2002, p. 221). This “character” is often mentioned in hockey ‘circles’, especially during the NHL playoffs, when it is described as one of the key ingredients necessary for the winning team to possess. Several of the fathers in my study also allude to its importance. “(H)ockey... it's a team game, but it's also an individual game where sometimes you find out what you're made of ...” Another father states:

(Y)ou get a real good glimpse into who's who and what's what when you're out goofing around and when mum and dad or a coach aren't watching, right?... You learn a lot about yourself and you learn a lot about other people.

Since hockey is tied so closely to Canadian identity, and pond hockey is the genesis of the game and considered by many its purest form, the very real possibility of pond hockey's slow demise may take a toll on a portion of the collective Canadian identity. Outdoor hockey needs "special places" in order for it to happen (i.e. continuous sub-zero days), and, according to Thomashow (1995) (discussed in the first section of the Literature Review), if those special places vanish (as a result of climate change), the people who hold them most dear—typically those who grew up with them as kids— will express "feelings of loss, despair, and frustration as their special places are irrevocably changed" (p. 9). If pond hockey ceases to happen, a long and cherished piece of our Canadian identity will also likely disappear.

The likelihood of this happening brings up the issue of how losing outdoor hockey could be a blow to our ontological security (Giddens, 1991). Giddens discusses various issues of what happens when one's ontological security is threatened. In general terms, he discusses how globalization, due to the very nature of its massive global reach, has consequences on individual countries, the individual citizens of which who are often left with very little control of things which may affect them (i.e. Chernobyl's fallout affecting neighbouring countries, or climate change's cause, whereby a handful of countries with excessive CO₂ emissions adversely affects less polluting nations). As a result of these global pressures, one's sense of security and stability is greatly compromised and this has a correspondingly destabilizing effect on one's individual identity. One has a sense of the 'earth shifting underneath you', and with no way to control it. As was stated earlier, "Outdoor hockey players are the canaries of climate change" (Koehl, 2005, no

page number). In other words, we can only react to the pressures around us. Unlike canaries, however, we can use our voices and take action to try and reverse the causes our environment's demise.

Fathers Do Not Readily Identify Themselves With the Term "Environmentalist"

When asked directly if they considered themselves to be environmentalists, none of the fathers definitively said yes. One unequivocally stated that he was not, and his reason for thinking of himself this way, despite plans for a fairly in-depth pro-environmental public project with his daughter, is he believed he was "more of a part of the problem than... the solution". Two of the other fathers answered, in essence, that they 'sort of' thought of themselves as environmentalists: "I do and I don't"; and "I try to be.... I might see myself somewhere in the middle.... I try my best"). They involved themselves and their families in certain environmental practices but not enough that they considered themselves as environmentalists.

The other three fathers all began by answering the question in the same vain as 'sort of' ("In a lot of ways I do"; "I like to be in the middle"; and "I'm a convenient environmentalist"), but as we discussed the subject further, before long they all came around to concluding that they were environmentalists. I propose that there are two reasons for this. (a) These fathers may have needed to 'talk things through' on this subject to realize that, in fact, they do think of themselves as environmentalists--that this is something that is a part of their identity. As Starks and Trinidad (2007) note, language "...serves as the primary means through which (individuals) enact their identities" (p. 1374), and Gee (2005) states how important the choice of specific language is to the perception one has of the meanings behind it. Language helps to shape what each individual regards as the reality of each situation. Maybe these fathers had to say the word

“environmentalist” during the interview situation in order to judge its appropriateness; to consider whether it fit with their identities or not.

The other reason (b) is that it is also possible that these fathers may have wanted to appear to me to be an environmentalist because they may have thought it was important to me, i.e. they wanted to ‘get along’ with me and not ‘rock the boat’ of our relationship (as discussed under Delimitations). This concept is also in keeping with what I discussed under Discourse Analysis when I described Gee’s (2005) idea that as members of the human race, we tend to seek social norms in our actions, and that we often do so unconsciously. Maybe by ‘coming around’ to deciding that they did consider themselves to be environmentalists, these three fathers, because of their love and concern for the game of pond hockey, were in effect saying “I will be your brother in arms in this fight to save this game”; “I am an environmentalist in this situation”. Perhaps if we were discussing another environmental issue that they didn’t feel as passionate about, then they would not come around to thinking of themselves as environmentalists. Also in regards to Gee’s (2005) ideas, since the situation of the interview between us had to do with a significant environmental issue, Gee says that if actions (the informants words) stray too far away from the social norm (which in this situation is the interview about an environmental issue) then the mind will seek to “discipline” and “renorm” the individual to get them ‘back in line’ (which, in this case, is to admit to being an environmentalist).

Fathers Became More Engaged With Climate Change Through Conversation

The majority of fathers in this study discussed the importance that conversation has to awaken thoughts of the implications that climate change is having and may have on various environmental issues, pond hockey, of course, being the most obvious one. One father put it very well:

(C)limate change, I think for the most part, is something that just needs to be in dialogue about, very much like politics; very much like... you know, who's going to win the Stanley Cup?. If it becomes part of our discussion and... our knowledge, our terms, our, our way of looking at change, as it relates to the environment--environmental changes, climate—... then we can get activated. So, I think if we're not talking about it; if we're not... open, umm, then we're going to try to hold the status quo.

Of these fathers, most also directly attributed a portion of their awakening to being involved in the interview process of this study. They became more concerned about climate change and more cognizant of how it might affect not only pond hockey but their life in general. “(G)etting your... invitation to become part of this, it's actually made me think a lot more about what's going on out there, and how... climate change is affecting everything that we do”.

Another father states: “(S)ometimes it just takes somebody to ask you a question for me to really consider it... it's really made me highlight to go ... “Shit... what if (pond hockey) doesn't exist!?... It's made me want to preserve it”. These examples point to the importance of conversations in building relationships and as a means of affecting change.

Language has the power to influence one's identity (Gee, 2005; Starks and Trinidad, 2007). The fact that these fathers became more engaged as a result of the conversations they had speaks to the need for more and better conversations on issues around climate change as a way to engage more fathers. One of the difficulties of engaging fathers in conversation about a troubling topic such as climate change, however, is that men often typically shy away from dealing with issues around loss in a sharing, communal way, but instead tend to want to deal with it alone. This was elaborated on earlier in the section *Men's emotions around loss*. Several authors (Bowes et al., 2008; Martin and Doka, 2001; Parkes, 1996) point out the value of various forms of support from other people/groups as an important strategy for men to be able to better deal

with the inherent difficulties associated with issues that deal with loss, as is the case with many facets of climate change. Anderson (2001) believes that there are many ways to grieve and places particular emphasis on the value of group work amongst men.

(Men) have been silent sufferers because no other way has been modeled to them; no other way seemed safe. Men can and do help other men through grief, given the opportunity. A men's group with grief as its focus is a helpful tool for men who wish to break the silence for themselves and for the ones they love. (p. 324)

Giving men the tools to be able to set-up and run support networks to talk about climate change may facilitate the process of talking about it.

Fathers Recognize the Intrinsic Value of Spending Time Outdoors And that Pond Hockey Facilitates This

Six of the seven fathers in the study talked about the value of the “outdoor experience” in relation to playing hockey outside. In one form or another, they discuss how the outdoors aspect of outdoor hockey--or any outdoor sport or activity-- has particular importance to them in and of itself. One father in particular goes on at length about this: “I love the winter.... you have to embrace (it).... I like to get out and feel winter.... Gotta be outside, man!” Another father talks about the value of being outside in relation to how it affects all of his senses--his whole person:

(A)ll of those sensory things that... you don't think about that much; that's all a piece of the game. That's all part of the outdoor experience. It's all part of... where you develop your fondness, right? And ... I can come back to a rink... --it doesn't have to be the same rink--but, you know, ice has a certain sound... sliding, all those kinds of things, and, you know... I think I can enjoy it... as much as I did as when I was nine.

Most of the literature on hockey in the Canadian context does not specifically discuss the notion of being outside. The outdoor game was certainly discussed often by authors, but they didn't elaborate on the outdoor experience aspect of it in detail. Perhaps as Canadians, with such

a vast natural heritage, we simply take the outdoors for granted and overlook the incredible value it has in our lives. Even our national anthem, as an example of something which is fundamental to our Canadian identities and which we therefore might take for granted, speaks to the strong value of the outdoors—and the cold outdoors no less!: “the true north strong and free”.

The province of Quebec, where the game of outdoor hockey has been strongly debated to have originated in (in Montreal of course!), heartily appreciates the value of the outdoors in Winter. The unofficial Québécois anthem, *Mon Pay*, by Gilles Vigneault, speaks perfectly to this: 'Mon pays, ce n'est pas un pays, c'est l'hiver' ('My country is not a country, it's winter').

Some authors did, however, mention the value of the outdoors. McSorley (1999), using justifiably 'chilly' language, describes hockey as “an icy repository of individual and collective memory played and replayed in endless variation, inscribed by generations on the frozen landscape of the very nation itself” (p. 151).

Educational Marketing Approaches Attempting To Alter Behaviours Towards Climate Change To Be More Pro-Environmental Should Link With the Nostalgic Feelings Fathers Have About Pond Hockey.

The reason that large, well-financed Canadian companies like Canadian Tire and Tim Hortons keep placing hockey-playing children in their commercials is because the sentimental impact they have on a lot of Canadians make them pay attention, which then must lead to satisfactory sales (or they wouldn't keep airing them). The reason the commercials choke-up so many Canadians is because hockey means so much to so many citizens. The commercials remind everyone about what it means to be Canadian and also how much value they place on their children. Since pond hockey played a strong, sometimes even central, role in the development of these seven fathers' identities when they were children, the prospect of losing it is like stripping

them of that part of their identity, which is “the boy inside the man” (Earle, 1995, p. 5). These fathers continue to play the game today and recognize its vital importance in their lives and the lives of many Canadians; of “it’s central role in the social life of so many Canadians” (Arena, 2008, p. 26). And who doesn’t get emotional considering the well-fare of their children? We want them to enjoy the same benefits of living in Canada that we enjoyed as kids, and when those benefits and that safety are in doubt it can make us very emotional.

In regards to this thesis, it’s important to recognise the effectiveness that combining sentimentality with hockey/outdoor hockey can play when trying to sell things to certain Canadian audiences. “Selling things”, however, can be more than just selling coffee and pick-up trucks; it can also be the selling of ideas and causes. Selling people on the idea that they have to take action to preserve the game of outdoor hockey— that they might be able to do something about a shrinking winter season—can also use the proven tactic of using sentimentality to strong effect. In fact, it was my intention from the start of this thesis to try and tap into father’s sentimental feelings around pond hockey as a way to engage them in the issue of doing something about climate change. Based on my personal experience of being a Canadian outdoor hockey playing father and feeling very sentimental about the thought of losing a game I adore, I suspected that other dads would also feel sentimental about this subject, and I knew from feeling sentimental about this and other situations over the course of my life that it can be a very strong emotion. I thought I could tap into this powerful emotion in order to try and get fathers to change their behaviours to be more pro-environmental.

Chapter 6: Conclusion

This is the first study to explore how fathers feel about the threats posed by climate change and has shown that when fathers are specifically asked how they feel about the threat of losing a cherished outdoor activity to climate change, they openly share those feelings. Similar to Anderson's (2008) description of the dynamic in her men's grief support group, when these seven fathers were in an appropriate situation and were asked about their emotions, they talked about them honestly and freely. These fathers are concerned and care about the ill-effects of climate change and its future path. This particular pan-Canadian study uses a distinctive cultural icon--pond hockey--to help these fathers to open up about their feelings. Since pond hockey harbours so many strong, enduring and positive emotions for a great many Canadian dads, and is also a 'canary in the coal mine' for climate change's effects on this country's winter activities, it is ideally suited to be used as a discussion topic in order to understand how fathers feel about this subject area. Based on the twelve findings just outlined, I will discuss three study implications, and make three recommendations.

Study Implications

These include the following: understanding men's emotions, avoid emotional numbing, and seek the truth.

Understanding men's emotions.

The implications for society if changes are not undertaken to mitigate against the effects of climate change are, as one of the fathers in the study states, "horrific". We must as Canadians try to do more to avoid this horror. The results of this study offer one possible tool to help deal with the mess we all find ourselves in. That tool is a better understanding of how fathers feel about losing a cherished activity. By understanding this, we can then use this emotion-centric

information, in balance with analytic-centric information, to inform public educational marketing campaigns aimed at getting Canadian fathers to change their behaviour to be more pro-environmental. Climate change may present the perfect opportunity for men to take a cue from women and try to be more emotionally engaged; they may then reconsider the obvious risks associated with it and act accordingly. As Kolmuss and Agyeman, (2002) outline, being emotionally engaged seems to work when it comes to women being more environmentally responsible, maybe the same could work for men.

Avoid emotional numbing.

Another implication from this study is that being emotionally engaged in climate change can, however, be very taxing. I can attest to this because of the emotional rollercoaster ‘from hell’ that I’ve been on over the course of researching this topic. By extensively reading, pondering and writing about all of these emotions, I have immersed myself in the ‘belly’ of most of them and because of this, have had many dark days thinking about the what-ifs of climate change’s threat. As the CRED guide (2009) makes clear, becoming emotionally numb is not uncommon when dealing with climate change. One must heed the guide’s recommendations to steer clear of doing so. Because of my need to be ‘in my head’ a lot in order to be able to write this thesis, I was not able to be as active as I normally would be. Being active—especially with others--is a simple solution to avoid becoming numb.

Seek the truth.

Finally, the last implication from this study is what several authors allude to, which is that we must seek the truth about climate change. I am convinced that most people are engaged in wilful blindness (Heffernan, 2011) because they can’t handle the truth about climate change; as Hamilton (2010) states, “to a greater or lesser degree, we are all climate deniers” (p. 4). But as

O’Gorman (cited in Heffernan, 2011) so perfectly states: “When we turn a blind eye, what we do... is we deny the best of ourselves, which is our capacity to respond” (p. F4). It is this response to climate change that is missing in order to deal with climate change, and which I believe can be overturned by seeking the truth about it. The findings from this study can help with this quest since exposing individuals to emotional aspects of climate change, in balance with the analytic side of the issue, can engage the whole person. Seeking the truth with all of your senses is certainly better than only using some of them. As is stated in the New International Version of the bible (1982), “Then you will know the truth, and the truth will set you free” (John 8:32).

Similar to Orr (2001), I am often not optimistic about the prospects for a ‘normal’ climate in the future. As a father of young children, this worries me greatly. Also similar to Orr (2001), I believe his opinion on the necessity of seeking the truth is very accurate. “We have it on high authority that the truth will set us free from illusion, greed, and ill will, and perhaps with a bit of luck it will save us from self-imposed destruction (p. 1395).

Recommendations

My three recommendations are: create a pilot program, undertake similar studies, and create men’s climate change discussion groups.

Pilot program.

Based on the findings from this study, I recommend creating a pilot program of a public educational marketing campaign aimed at Canadian fathers to get them to change their behaviours around climate change. The campaign would use a balance of emotion-based and analytic-based information to get its message across. Using venues where hockey playing fathers and fathers of hockey-playing children regularly frequent would be an ideal place to locate

aspects of the campaign. These might include hockey arenas, outdoor rinks and sports stores. Other aspects of the campaign may take place online, so that fathers can access it when they have private time on their own. This is important since they may not want to expose certain aspects of climate change to their children, for instance, frightening scenarios (Hamilton, 2010) or issues of ontological security (Giddens, 1991).

Using imagery that evokes strong emotions, as outlined by Sheppard (2005), would be a good place to start when deciding on key visuals for the campaign, which are always very important (keeping in mind Sheppard's cautions around ethical considerations). Using sentimentality is also recommended, since it's been shown to be an effective tool to sell things to Canadian men (MacGregor, 2011), and it's in keeping with a tradition of using hockey/pond hockey in Canadian marketing. Attempting to get fathers to initially change simple behaviours (for instance, getting them to stop/reduce vehicle idling), and then, with the help of a check-list, providing them increasingly more demanding behaviours for them to change, is also recommended. This is in keeping with the concept of the *Single Action Bias*, as discussed in the CRED (2009) guide.

Also of vital importance to the design of such a campaign is to use language appropriate to the target audience (Gee, 2005). This can easily be done by analysing the seven interview transcripts and the corresponding codes. Reviewing the Main Themes can also help in the campaign design since this will reveal the fathers' major thoughts and feelings.

All of the statistical information discussed earlier in the second part of the literature review can help to anchor much of the analytic-based information for the campaign.

Taking a cue from the David Suzuki Foundation's lead, it would be a real coup to partner with one or more professional hockey player(s) to help as either a spokesperson or at least to

offer testimonials in the campaign. This would likely help to draw attention and offer credibility to the campaign. This tactic is also used by Tim Hortons, who has used NHL superstar Sidney Crosby in their ads. In light of the fact that this is only a pilot program and not a full-fledged campaign, attracting such stars might be wishful thinking.

No one wants to lose something they care deeply about. Most people generally take strong action to avoid this. If Canadian fathers believe they are losing pond hockey, and, by extension, other aspects of their way of life, to climate change, I believe that if they are made aware of it and if their emotions are awoken in relation to it, they will likely be open to doing something about reversing this trend. This is especially true if the following three conditions exist: (a) they are presented with a variety of tasks to follow which they believe will have an effect to counter the situation, (b) they believe these tasks are achievable, and (c) they are given an opportunity to take action on these tasks in social groups. (Notice that I say “given an opportunity” since some fathers may prefer to act on their own and/or at their own time). This is in keeping with what is spelled out by Norgaard (2006a): sometimes it takes someone or something to make you aware of something that’s important to you before you react and take action. This is also stated by one of the fathers in the study.

You know, sometimes it just takes somebody to ask you a question for me to really consider it, and so, since you've started on this (study), it's really made me highlight to go, “Oh, yeah”; it's one of those things to go, “Shit, what if, what if that doesn't exist?”, and, you know, blindly going about my job and my family and my life, and, you know, it might one day dawn on me to go “How come I haven't gone to play pond hockey?” It's made me want to preserve it.

In order to further validate the effectiveness of campaigns utilizing a combination of both analytic-based and emotion-based information, versus only using analytic-based information, an

additional way to structure this pilot program would be to actually create two identical campaigns with only this factor differentiating them. Doing so would add to the knowledge-base of the effectiveness of appealing to emotions in conjunction with the intellect.

Undertake similar studies.

Another recommendation is to undertake other similar studies that seek to understand how fathers feel about the threat of losing other cherished activities/things to climate change. Doing so would provide further information to the knowledge-base that this study is adding to, as well as offer findings that could be compared against the findings in this study. Conducting studies using other winter sports would be appropriate. Obvious winter sports with large demographics of Canadian fathers suitable for such studies are alpine skiing, Nordic skiing, tobogganing or ice fishing.

Create men's climate change groups.

Generally speaking, all people need support to be able to properly deal with grief, and this fact highlights a major short-coming with how most western men currently deal with grief which is in isolation. By explaining to men how to seek support, how to set-up support networks, and generally what support looks like and is all about, there will be a far better chance that they will be able to more constructively deal with the grieving process, and thereby 'come out the other end' in better shape to deal with the future, than if they try, as men have been socialized to, and grieve in private. Taking a cue from the success of the Australian Men's Shed Movement (AMSA), I recommend forming men's climate change discussion and action groups around Canada. There are four aspects of a 'shed' that make me believe that they would also work well in the context of men wanting to deal with climate change: (a) at their core, they're about 'doing

something meaningful’, (b) they work best with a capable coordinator, (c) they believe in a healthy social atmosphere; and (d) they offer a forum for men to discuss issues.

(a) The popularity of the Men’s Shed movement in Australia leads me to believe that men, particularly older men, are looking for places to go in a social setting with other men that are safe, welcoming and where they can perform needed community tasks. In the case of the Men’s Shed movement, these usually center around handyman type tasks like woodworking or other household duties. One of the pillars of this type of work is men wanting to do something of value for others; where they can use their skills in meaningful and appreciated ways. As is stated in a page from the Australian Men’s Shed Association website (2009), “the bond that unites them is that they are men with time on their hands and they would like something meaningful to do with that time” (AMSA, 2009, para. 4). Instead of woodworking, why can’t that “something meaningful” be performing tasks centered around mitigating against or adapting to climate change? We know from this study that men are concerned and care about climate change and that, in general, they want to do something about climate change, and if an opportunity presents itself, I believe that men will answer the call and participate. In light of the nature of climate change, which often has negative associations for people, a key consideration in order to make the group a place where men want to keep coming back to, is to try and keep the focus of the climate change issues on the positive side. If there is too much focus on the ‘doom and gloom’ side of climate change, then members might find the group depressing and not want to get involved for very long. (b) Having a coordinator with both technical and social skills is highly recommended for the operation of a successful men’s shed (AMSA, 2009). This is also recommended by Anderson (2001) in her recommendations of how to successfully set-up a

men's grieving group. I also recommend doing so with men's climate change discussion and action groups.

(c) This study has found that men are experiencing grief associated with a sense of loss as a result of climate change. Since it's known from the literature review on how men cope with grief that there are proven benefits for them dealing with their grief in socially supportive situation, and the fact that men often deal with grief in cognitive and/or action oriented ways as opposed to more female-centric emotive ways, I believe that the model of a men's shed has real advantages when it comes to men trying to take action against climate change. It offers a strong socially situated setting where men can discuss issues and then take action on them.

(d) The issue of providing a forum for men to discuss a complex issue like climate change leads to my last reason for advocating for the set-up of men's climate change discussion and action groups. As was stated earlier, one of the father's commented on the benefits of opening up dialogue about climate change, and how doing so results in people being more comfortable with "the knowledge... terms... way of looking at... environmental changes, climate". Once this happens then people will then become active. I believe the formation of 'shed-like' climate change groups would help open up the dialogue, which would then lead to action on the issue.

Call For Action

For this last section of the Conclusion, please go to the following link for a six and half minute YouTube clip: http://www.youtube.com/watch?v=fL4t7DVAP_E

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* Although no credit was given to the author of this text, Googling it revealed that it was written by Heinz Ross (July 10, 2010).

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Appendix A: Interview Questions

1. You've said that you love the game of outdoor hockey, please tell me why?
2. Describe your most memorable experiences of outdoor hockey.
3. Describe your outdoor 'home rink' growing up.
4. What do you think your early experiences of outdoor hockey taught you about hockey, and about life in general?
5. What does outdoor hockey mean to you?
6. Do you have a favourite outdoor rink these days, and if so please describe it?
7. Approximately how many times a winter do you play outdoor hockey?
8. Have you noticed any differences in the outdoor hockey season from when you were a boy to now (i.e. the quality of the ice, length of playing season, etc.)? If so, describe it/them.
- 9a. How do you think climate change will affect outdoor hockey in Canada in the future, if at all?
- 9b. If you think it will affect it, how does this make you feel?
- 10a. Do you play outdoor hockey with your children and, if so, describe what it's like?
- 10b. Is this important to you, and if so, why?
11. Do you consider yourself an environmentalist? If so, please elaborate on what this means to you. If not, please explain why not?
12. Do you think Climate Change is currently happening? If, so please explain what this means to you.
13. Do you have any concerns about climate change? If so, please elaborate?
- 14a. Do you currently engage in any behaviour to help combat it?

14b. Besides what you're currently doing, do you have plans to engage in any other measures to help further combat it? If you don't, please explain why you don't?

15a. If your child/children asked you about what you think about climate change in general what would you say?

15b. If your child/children asked you about how you felt about climate change in general what would you say?

16. How do you feel, as an outdoor hockey playing father, about the threat of losing the game of pond hockey to climate change?

Appendix B: List of Codes for Transcription Analysis

Codes for Transcription Analysis

General First Level Codes: 21 (listed alphabetically)	Code Acronyms	Number of times each code appears in all seven transcripts
Canadiana	CAN	40
Climate Change/Global Warming	CC	132
Community	Comm	71
Environmental Action	EA	133
Education	Ed	10
Emotions, Feelings	Ef	96
Family Experiences	FE	62
Friends	Fr	30
Father Experiences	FthE	72
Fun	Fun	31
Grandchildren	GC	7
Hockey as Unique	HU	144
Identity Forming General	IFG	58
Identity Forming Hockey	IFH	55
Loss	L	108
Love Of Game (of hockey)	LOG	71
Money Driven/Related	M	27
Outdoors	Out	15
Tradition	Tr	8
Unstructured (play)	Un	3

Second Level Pattern Codes: 5 (in bold)

- under them are the First Level Codes
that constitute each Pattern Code

Environmentalism: CC: Climate Change EA: Environmental Action Ed: Education	E	275
Feelings/Emotions ef: emotions, feelings Fun: Fun L: Loss Out: Outdoors	F	250

Hockey Related	H	263
CAN: Canadiana		
LOG: Love of game (of hockey)		
HU: Hockey as Unique		
Tr: Tradition		
Identity	I	143
IFG: Identity Forming General		
IFH; Identity Forming Hockey		
M; Money Driven/Related		
Un: Unstructured (play)		
Relationships	R	242
Comm: Community		
FE: Family Experiences		
Fr: Friends		
FthE: Father Experiences		
GC: Grandchildren		