

**Immersive Outdoor Education and Mental Health in Youth:
Comparing Norway and Canada**

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Abstract

This research explores how immersive outdoor education contributes to positive mental health in youth. As sustainability and environmental protection become more essential with a changing climate in the Anthropocene, society must adapt by instilling said values in their younger populations. Considerations of immersive outdoor educational experiences are explored through interviews with key representatives of this educational sector in both Norway and Canada. Results in this research contribute to the Canadian efforts to mandate outdoor educational experiences in public schools by indicating which mental health developmental needs are met through outdoor educational experiences. Interviews with outdoor educational experts from both countries indicate which of these needs are met through outdoor activities. Interviewees express the relation between a connection with nature and sense of self and community. Students are exposed to challenges and whole-body experiences during immersive outdoor education that may introduce them to aspects of life that they might otherwise lack within a classroom setting. By understanding the role of the Norwegian cultural phenomenon of *friluftsliv* (literally free-air-life, but more commonly the Nordic celebration of the enjoyment of the outdoors in everyday life) and the differences in approaches and perceived results in such Norwegian approaches to immersive outdoor education in Canada, Canadians can mirror and modify educational efforts for a sustainable future.

Keywords: immersive outdoor education, sustainability, mental health, psychological development, youth, Norway, Canada

Table of Contents

<i>Abstract</i>	2
<i>List of Figures</i>	5
<i>Dedication</i>	6
<i>Acknowledgements</i>	7
<i>Chapter 1: Introduction</i>	8
The Inspiration	8
Wild Pedagogies	11
Concerns Leading to This Study.....	14
Outdoor Education Defined	16
Aspects of this Study	18
<i>Chapter 2: Literature Review</i>	21
Environmental Crisis & The Benefits of Nature.....	22
Mental Health.....	25
Norwegian Outdoor Education & <i>Friluftsliv</i>	27
Canadian Outdoor Education.....	29
Norway versus Canada: A Similar Story of Outdoor Educational Roots.....	31
Perceived Interpretations by Educators	32
Literature Review Summary.....	33
<i>Chapter 3: Methodology</i>	35
Interviews.....	35
Coding.....	37
Sample Population	39
Participant Recruitment	41
Participant Profiles.....	42
Choosing an Approach.....	45
Ethics Review	46
Data Analysis	48
Limitations of Research	49
<i>Chapter 4: Results</i>	50
Mental Skills	53
Social Skills	59

Connection	63
Development	69
Joy/Immersion.....	75
Hard Skills	80
Understanding These Results.....	86
<i>Chapter 5: Discussion & Conclusion</i>	90
Discussion.....	90
In Conclusion	93
<i>References</i>	99
<i>Appendix A</i>	106

List of Figures

Figure 1: Gilbertson's model of outdoor education (as cited in Ewert & Sibthorp, 2014, p. 7 and Maher, 2016, p. 474)	16
Figure 2: Code Groupings - Far left is the major groups, in the center is the codes included in those groupings, and to the right is a vague definition of each code. Codes were assigned to quotations within transcribed interviews and the arranged accordingly.....	37
<i>Figure 3: Distribution of sample interviewee population demographics based on Country, Age Range, Gender Identity, and Years in Field</i>	40
Figure 4: Linear Process for Qualitative Research (Williams & Moser, 2019).....	45
Figure 9: This figure outlines the distribution of Social Skills by age range of instructor. The results indicate varying differences in perceived Social Skill development in the youth in which these instructors worked with.	61
Figure 10: This figure illustrates the distribution of social skill coding responses by the type of self-reported immersive outdoor education program interviewees instructed in.	62
Figure 11: Coding category "Connection", the sub-categories of connection, and the definitions used to identify said coding categories.	64
Figure 12: Major factors leading to employment in immersive outdoor education versus rate of coding (Connection with Nature, Connection with Place Connection with Self, and Connection with Community).	67
Figure 13: Development in this study is coded into subcategories for Conservation Interest and Responsibility. Definitions above help to qualify which aspects of interviews fit into these coding categories.	69
Figure 14: When looking at the development of Conservation Interest and Responsibility, there is a significant difference between age of interviewees and frequency of responses. Middle of the age range posed fewer responses for recognizing the development of Conservation Interest and Responsibility.	71
Figure 15: Rate of Response: Development of Conservation Interest.....	73
Figure 16: Witnessed development of responsibility has a significantly higher rate of mention in public education and friluftsliv education sectors.	75
Figure 17: Joy/Immersion, a series of codes outlining this area of investigation involving a student's experience of joy or full immersion into their experience in outdoor education.	76
Figure 18: This graph illustrates the response rates to Comfort in Nature and Exposure to New Environments based on the age of the interviewee.	78
Figure 19: Joy/Immersion codes distributed by program type: friluftsliv education, public education, summer camp, and wilderness therapy.....	79
Figure 20: Program type looking at various aspects of survival skills (fire building and plant identification), physical literacy, physical health, and self-management in an immersive outdoor educational experience by frequency of mentions during interviews.....	84

Dedication

This thesis is dedicated to the field of outdoor and environmental education – a field that has saved me many times and continues to inspire myself, along with many others, to fall deeply in love with the natural world. The fleeting nature of the world as we know it and future generations are included in this.

Thank you to the falls I have taken and the Wild Pedagogies community for picking me up, amid glacial fields, as I fumbled with one of the many traumas involved with the human experience.

Thank you to my parents, friends, and the many dogs I have encountered for being there with me as I grew to love the dirt and my scraped knees in childhood, for this has given me the foundations of the tools I have needed to thrive as an adult.

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To the Wild Pedagogies community, thank you for the inspiration and challenge to see beyond the anthropocentric world into the more-than-human world.

Forever grateful.

Chapter 1: Introduction

The Inspiration

The idea for this research came to me while on a hike with a group of ten high school-aged adolescent students beneath a large grove of Aspen trees in the Uinta mountains in Northeastern Utah, USA. The topic of metaphor came up in discussion; how the mountains are shaped by rivers, storms, glaciers, how each of us develops within our own unique set up of circumstance. We all come from different places and have to make a series of choices, using different factors, in order to become who we feel we are meant to be.

Now this type of conversation was not unique for the population I was working with. The students were sent to the program on their parent's volition based on inappropriate behavior and a tendency to choose maladaptive coping mechanisms that have led to near self-destruction. Many of these thirteen- to seventeen-year-olds spent the first week or two of their stay in the backcountry high desert of Utah adjusting to sleeping, eating, and going to the bathroom outside (not to mention coming to terms with the overwhelming emotions that stem from feeling abandoned by their parents). Their emotional maturity and dependence on assertive communication grows exponentially due to the intense programming and therapeutic interventions. They have no choice but to come to terms with this reality of endless nature and lack of modern comforts, such are the conditions of Wilderness Therapy.

Wilderness Therapy is best described as a psychological treatment for at-risk adolescents who are unaffected by typical forms of psychological treatment. It is a type of

therapy that aims to supplement the healing qualities of nature in combination with structured and intentional one-on-one and group-based therapeutic work (Davis-Berman & Berman, 1994; Davis-Berman & Berman, 2008; Fernee et al., 2015). This type of treatment program is performed in the backcountry and facilitates individualized treatment goals. Through evidence-based clinical practices including “client assessment, individual and group psychotherapy conducted by independently licensed clinicians, and the development of individual treatment and aftercare plans” (Fernee et al., 2015; as seen in Russell, Gillis, & Lewis, 2008, p. 60). Working within a program like this was enticing to me due to the beautiful work setting, incorporated lifestyle of spending most of my time outdoors, and the opportunity to change lives. I have lived through my share of emotional turmoil and have found that what soothes me the most can be attributed to the natural world – whether a patch of grass or expansive wilderness. I have grown up with the natural world as my teacher and therapist and wanted to share this experience and wisdom with others.

As a field instructor I was able to get into all sorts of deep conversations in intimate group settings. The students learn a lot about each other, and the group dynamic depends heavily on vulnerability. This leads to many deep and intimate moments among staff and students alike. We share the same harsh backcountry setting of juniper, pine, and sandstone. Our meals are cooked in collaboration over a fire that is started with a bow and drill. We have no choice but to get along with and depend on one another, and if conflict arises, we must deal with it immediately. There is no expense lent to incomplete conversations and unresolved tension.

In addition to the harsh and natural setting in which we spent all of our days and nights – staff for one week at a time and students for up to sixteen weeks – the cyclical

cycle of the sun and the moon became our major source of time management. Students were not permitted to have any future information or the ability to tell the time. Food was eaten on the ground or on meager stools. There was absolutely no comfort of the indoors. As such, the immersive nature of this outdoor experience was inevitable. The only time in which a student entered an established building was under emergency medical proceedings.

Our curriculum was structured around the natural cycles experienced and witnessed in this outdoor setting; monitoring the rapid weather changes at 9,000 ft above sea level, breaking down and setting up camp with the rise and fall of the sun, and managing our own survival with managing food and water supplies. There was an educational curriculum managed by an external instructor which provided students the opportunity to gain high school credit for subjects such as English, Science, and Physical Education. Additionally, there were ample teachable moments in which students were taught plant identification, how to start a fire, shelter building, spoon making, astronomy, physical literacy through hiking, empathy, interpersonal skills, etcetera. The teaching opportunity expanded so far beyond just exposing these student's experience of communication skills and healthy coping mechanisms into such in depth social-emotional learning and a physical understanding of place and their own bodies.

The students I had been working with, for the most part came from wealthy families in which they may not have been given ample emotional support or attention from their parents. Those who were not from wealthy backgrounds received financial support to attend such a program. The distribution of where students came from ranged from all fifty states, Canada, India, and beyond. Thematically the students tended to lack emotional maturity and instead opt for childlike behaviors as a means to get attention. Their inability

to communicate is most evident when they feel emotional or vulnerable. That is when it is up to staff to practice de-escalation techniques and reach a rapport-based solution with the students. When these efforts work, it generally leads to intimate discoveries about personal development and identity.

I became quickly aware while working as a Wilderness Therapy Field Instructor of the appalling lack of identity, self-efficacy, confidence, and cooperative social skills in these students prior to their arrival in the program. It was as if they had been failed by their previous educational experiences – as adolescents they should have a basic understanding of what it means to be human in a group setting (whether with their peers or family systems) and what it means to be unapologetically themselves.

The time I spent in this environment further validated my belief in the renegotiating needed in understanding what it means to be human in relationship with the world, especially through the prolific influence of educational practices. Experiencing this level of deep and transformational change with nature guiding us through each painstaking process, the spontaneity of each day, and alliances built through a tight knit community led me to seek a larger community of those who are passionate about education and the opportunity available to create real socio-cultural change.

Wild Pedagogies

Much of this thesis is inspired by the pedagogical approach to environmental and outdoor education known as “Wild Pedagogies”. This pedagogy is represented in this thesis through the expanded understanding of educational systems that move beyond the four walls of a classroom. As mentioned in the anecdote of my experience working in Wilderness Therapy, I observed a contagious lack of support in typical educational

experiences. In *Wild Pedagogies*, what lacks in the current approaches of education is brought to life in a dynamic understanding of the connection that we share with the more than human world.

There are six touchstones of Wild Pedagogies that will be essential in the deep understanding of this research and the complex benefits of immersive outdoor education that are experienced by the educators with whom I had the chance to sit. These six touchstones taken from *Wild Pedagogies: Touchstones for Re-Negotiating Education and the Environment in the Anthropocene* (Jickling et al., 2018) are briefly described below:

- 1. Nature as Co-Teacher** – “*We believe that education is richer, for all involved, if the natural world and the many denizens that co-constitute places, are actively engaged with, listened to, and taken seriously as part of the educative process.*” (Jickling et al., 2018, p. 79) – The natural world and the more-than-human entities that make up nature are included as opportunities to learn from a non-anthropocentric perspective.
- 2. Complexity, the Unknown, and Spontaneity** – “*Wild Pedagogues believe in re-negotiating educational practices to open possibilities for embracing complexity and spontaneity. We believe that education is richer for all involved if there is room for surprise.*” (Jickling et al., 2018, p. 84) – Immersive outdoor education requires a level of spontaneity and the unknown. There are many aspects of immersive outdoor experiences that are dependent on things, such as the weather, which we cannot control.
- 3. Locating the Wild** – “*We believe that the wild can be found everywhere, but that this recognition and the work of finding the wild is not necessarily easy.*”

The wild can be occluded, made hard to see; by cultural tools, by the colonial orientation of those doing the encountering, and, in urban spaces, by concrete itself” (Jickling et al., 2018, p. 88). – The reality is that we are living on the same earth that is shared by millions of other species, however, we have adopted a worldview that puts humans at the center. By remembering that wildness exists everywhere is an essential and inevitable aspect of immersive outdoor education – whether stated explicitly or not.

- 4. Time and Practice** – *“We believe that building relationships with the natural world will, like any relationship, take time. We also believe that discipline and practice are essential to learning this practice (Jickling et al., 2018, p. 92) – Deeply examining one’s culture and self comes with the experience of an environmental relationship formed with the deep and immersive experiences spent outside.*
- 5. Socio-Cultural Change** – *We believe that the way many humans currently exist on the planet needs changing, that this change is required at the cultural level, and that education has an important role to play in this project of cultural change. We believe that education is always a political act (Jickling et al., 2018, p.97) – This touchstone indicates the level of importance of immersive outdoor education for the future of humanity and the long-term changes that must be made to reduce the impacts of human-induced climate change.*
- 6. Building Alliances and the Human Community** – *“Wild pedagogues seek alliances and build community with others, not only in the environmental world but across all people and groups concerned with justice. In the context of wild*

pedagogy, democracy of this type helps us remember that there are communities, made up of humans and more-than-humans, affected by all decisions, and that all involved ought to have a say, in whatever language, voice, and form is their own” (Jickling et al., 2018, p. 102). – “As much as community is everywhere, it can often be forgotten or neglected in a culture that is profoundly individualistic” (Kazi, 2021). By fostering community with the natural world and the members of the educative group, educators are opposing the innate individualistic culture that many of their students are raised with.¹

Concerns Leading to This Study

Our school systems are fundamental to the future of our economic growth and to societal stability as a country. The United States of America (USA), as a world leader in the capitalist culture of economics, as well as a strong democracy, guides many of the global efforts in education. As a dual citizen of the USA and Canada, I see such vast differences between these two countries and their attempts to educate their youth. During my time studying at Cape Breton University, I was able to delve into the concept of the mental health (and subsequently social health) that develops in immersive outdoor

¹These Six Touchstones are also available on wildpedagogies.com: a website utilized for collaboration within this sphere of research. This website is maintained and edited by Erika Kazi, 2021.

educational experiences, such as the wilderness-therapy program I worked for in Utah.

I was so very fortunate to be invited to attend the Wild Pedagogies conference in Norway by my advisors, Dr. Pat Maher. The ability to travel to Norway and learn more

about the culture, and subsequently be invited to yet another conference with the Trans-Atlantic Outdoor Studies Collaboration created a deep interest in understanding the Norwegian methods of creating an incredible culture of experiencing and appreciating the natural world.

The learning experience I had at Cape Breton University and in Norway not only led me to a deeper understanding of Canadian educational systems, inevitably I became aware of how influential the Norwegian and Scandinavian culture has been in the foundation of immersive outdoor education in Canada (Gelter, 2000). Norwegians have been known for having a great deal of happiness, mental health awareness, and a deep connection with the natural world – all of which this thesis will examine in greater detail. I decided to use this research opportunity to better understand the two cultures, both their differences and their similarities, how they approach immersive outdoor education, and the themes existing in mental health changes of participating youth. I view this thesis as an opportunity to further the field of immersive outdoor education and utilize socio-cultural qualities to inspire greater change.

I believe that the depth of connection to the natural world that both Norway and Canada possess make them prodigious candidates for mandated immersive outdoor educational experiences in their public-school system. Both countries have a legacy of connection to wilderness and outdoor education and, even greater, a curriculum more centered around the development of self-knowledge, self-efficacy, and community building. If our schools fail to put in the time and energy to develop a generation of well-rounded individuals capable of making informed decisions and managing their emotions, I am afraid that there will be consequences such as continued social unrest, endemic

ignorance, and an increased presence of mental health issues – inevitably contributing negatively to the destruction of our natural world due to human-induced climate change.

Outdoor Education Defined

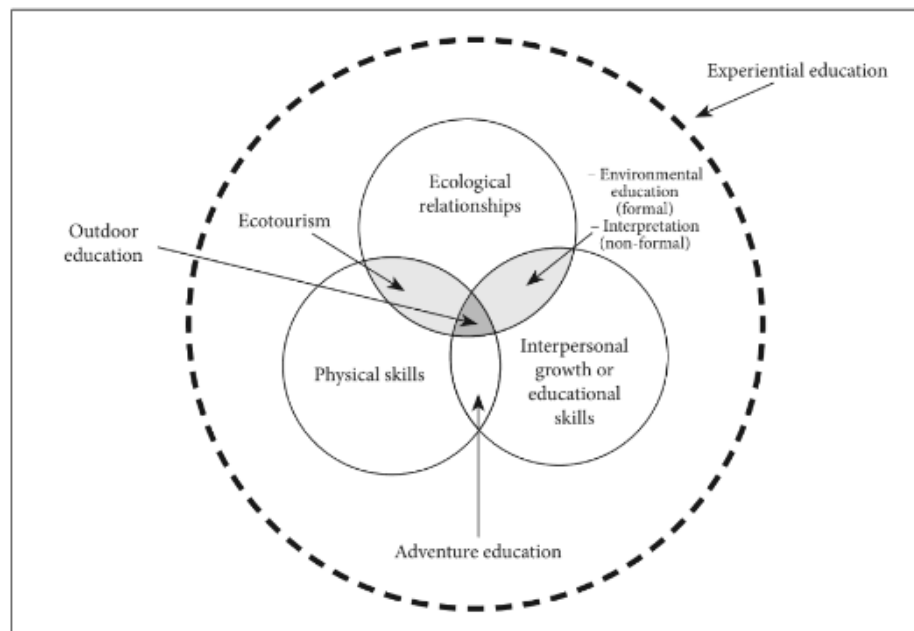


Figure 1: Gilbertson's model of outdoor education (as cited in Ewert & Sibthorp, 2014, p. 7 and Maher, 2016, p. 474)

Outdoor Education can be described as an effort to, “animate the often-abstract concepts of the scientific disciplines and thereby create[s] a local historic, ecological, and social sense of place amongst children and young people,” (Dahlgren & Szczepanski, A., 1997; Szczepanski, 2001). What this entails is an education that centers around the development of the student not through lecture, but instead through spending time outdoors. The considerable benefits of education of this sort are further outlined in this thesis but include health, creativity, motor-skills, attendance, and the ability to concentrate (Szczepanski, 2001).

In the figure above, Gilbertson's model of outdoor education illustrates the combination of skills and relationships that make up outdoor education. Within the definition of experiential education, lies many different learning points including physical skills, ecological relationships, and interpersonal growth or educational skills. While adventure education, ecotourism, and environmental education and interpretation all share similar qualities to outdoor education, outdoor education incorporates all.

“Outdoor education is an experiential method of learning with the use of all senses. It takes place primarily, but not exclusively, through exposure to the natural environment. In outdoor education, the emphasis of the subject of learning is placed on relationships concerning people and natural resources,” (Priest, 1999, p. 111). In this thesis, “outdoor education” acts as an all-encompassing term and is further indicated using “immersive outdoor education” to further specify that the included educational opportunities are not simply amid the outdoors, they are fully immersive and interactive. Such programs include wilderness therapy, public education (specifically programs that have the qualifying activities in Gilbertson's model such as physical skills, ecological relationships, and interpersonal skills), *friluftsliv* education, and summer camps.

To further explain the inclusion of *friluftsliv* education, *friluftsliv* must be further expanded. *Friluftsliv* (pronounced “free-loof-ts-liv”), translates roughly to “open-air living” and is a cultural identity that is deeply engrained in the Norwegian heritage. It is “often identified as a ‘simple way of life’ and as exemplary of green life-philosophy and environmental practices” (Gurholt, 2008, p. 55). This way of life is typical for nearly all Norwegian citizens and is a dynamic and complex socio-cultural phenomenon and key cultural symbol (Gurholt, 2015). The concept is to spend as much time outdoors in the

nature enjoying oneself (Gurholt, 2008). Activities include hiking, backpacking, mountain biking, skiing (Nordic and alpine), sea kayaking, and more. It includes any type of activity in which you deeply engage with the physicality of using one's body and spending time outside with those you love (Nikel, 2021). During my time in Norway, it came to my attention that much of this heritage stems from the history of Norway. Much of their cultural pride stems from the beautiful landscape they live in, but more importantly it comes from a history of explorers and Vikings who used their knowledge and strength in the wilderness to overcome odds and establish themselves as an independent country in 1814 (The Royal House of Norway, 2022).

Friluftsliv Education is an essential component in the analysis of Outdoor Education, specifically the immersive type of Outdoor Education, because it is so inherently engrained in the experience of this cultural phenomenon. I was curious to see how Norway's educational heritage is compared to that of Canada's. This thesis will include *friluftsliv* opportunities for learning as a means to gauge the similarities and differences of variations in culture between Norway and Canada.

Aspects of this Study

This study focuses on the perceptions of outdoor educators on how immersive outdoor education experiences influence youth mental health and well-being through asking the question: how do outdoor educators in Canada and Norway perceive the effects of immersive outdoor education on the mental health development of youth? Or what are the perspective changes based on gender, program type, age, and country of origin? There are many factors considered within this research question, including themes within what is

perceived based on gender identity, type of program, age of interviewee, and nation of origin. The themes that emerged are based on the coding groups that were preselected in the analyses of the interviews. These coding helped indicate aspects of mental health and well-being that may be connected to the immersive educational experiences. This will be further explained in the methodology section of this thesis.

This thesis will further investigate the perceived benefits of immersive outdoor education in youth within the countries of Norway and Canada. The outdoor educators' responses will be investigated under various aspects of their qualifications and demographics such as: gender, nationality, age range, what led them into employment within the immersive outdoor educational field, and the program type with which they worked. The connections they had with students are investigated for the perceived changes and development of these connection over the participants' years of experience. The results of this research provide a more detailed image of the essential qualities and experiences of this type of education furthering the effort to include more youth in such experiences within Canada, and Norway – despite Norway and Canada being world leaders in this effort already.

For this study, there are a few terms that I'd like to define. Youth in this thesis is defined as those 13-19 years of age. This breadth of age distribution is important to consider as these years make up essential portions of development in a growing individual. Immersive outdoor education is considered a program or field of educational experience in which students spend more than 10 hours a week outdoors. Thus, the programs investigated in this report include Wilderness Therapy (as aforementioned in my anecdote), *friluftsliv* education (the Norwegian approach to educating youth and immigrants to the

culture of enjoying open air), summer camps (a summer-time based program in which youth spend their days in the outdoors participating in various activities), and finally public education (which specifically includes Norwegian interdisciplinary education in which educators take their students on single or multi-day educative experiences in the outdoors).

Through comparative analysis and an investigative approach, the interviews conducted among Norwegian and Canadian outdoor educators illustrate the perceived mental health development with the youth with whom they worked. The research conducted for this thesis is supported by a plethora of research indicating various attributes of immersive outdoor education. The time spent outdoors as well as the activities in which students are engaged paint a vivid image of a future in which citizens of the world can interact with one another and the natural world in a non-exploitive, affirmative way.

Chapter 2: Literature Review

“When we are not taught in this way, drawing on all four areas of knowledge, we become spiritually, emotionally, socially, physically, and environmentally impoverished. We become narrow in our views and cannot see the connection between all knowledge. We wind up perpetuating the imbalance within and between ourselves, other people, and the natural world.” (Batiste, 2010, p. 16)

In modern society, more and more people who live apart from nature have a vague sense that something is missing from their lives (Dahle, 2003). They might not have a deep sense of place or an understanding of their role within nature. They may fear the outside world. They may be caught up in the mental stress of social media and performing for others. They may not know how to take risks or have healthy relationships. By not developing resilience or critical thinking skills necessary for becoming competent or independent, there is an increased risk of physical danger (Malone, 2007) along with an incompetence that may lead to further experiences of lack of confidence.

Our society is on uncomfortable precipice of change. We are facing extreme human induced climate change, political uprisings, and economic inequality. In addition, as I write this thesis, we are encountering a global pandemic of COVID-19. Challenging this destructive discourse requires a type of risky learning, as proposed by Newbery (2012, p. 39), a type of learning that “risks the loss of certainty, simplicity, and innocence; it risks unwieldy affect in the face of the suffering of others: it risks the self”. This is classified as “difficult learning” (Simon, 2005, p. 102), as a provocation of necessary rupture that productively challenges current ways of thinking and doing and “that will hold open the present to its insufficiency,” (Simon, 2005, p. 102). Students will have no choice but to question that which has been normalized by their caregivers.

Environmental Crisis & The Benefits of Nature

Much of what has led Western society onto the brink of ecological collapse and the devastatingly apparent and appalling economic inequality is the settler and colonial approach to the natural world and life itself. “Unlike Native Americans who believed that land could not be owned, the settlers believed that owning land, making a mining claim, or starting a business would give them stake in the country” (Calderon, 2014, p. 32). The unquestioned acceptance of this philosophy could be deliberate miseducation or perhaps an excusal of the historical wrongs that led to the violent and illegal acquisition of land by settlers (Calderon, 2014).

The environmental crisis of the 20th century has arisen due to certain unspoken philosophical presuppositions and attitudes within modern Western developed societies that have ultimately remained unacknowledged (Jickling & Naess, 2000). Whether engaging in a more “free” learning experiences in school or learning in a more eastern based education, learning “more in terms of personal relations... [and trying] to make [students] see things they have not seen before” (Jickling & Naess, 2000, p. 54).

“Critical pedagogy makes clear the need for an investigation of the extent to which belief systems have become internalized” (Dion, 2007, p. 332). Current educational systems do not dismantle the presuppositions that come with dominant discourses as they even fail to adequately address them. Through immersive outdoor education, for instance, a true understanding of nature gives rise to a point of view that appreciates the value of ecological diversity and an understanding that each living thing, including humans, is dependent on the existence of other creatures in a complex web of life (Jickling & Naess, 2000). “Environmental educators have long known that knowledge alone is insufficient

for cultivating flourishing natural and human communities” (Russell & Oakley, 2016, p. 13).

The immersive outdoor educational experiences that are in question in this study are described as able to “provide participants with opportunities to achieve personal goals, gain self-confidence, be more independent, and ... build warm relationships which [contribute] to a sense of community and a sense of belonging” (Goldenburg, McAvoy, & Klenosky, 2005; as cited in Opper, 2014, p. 2;). “Faced with burdensome tasks that demand psycho-motor, cognitive and socio-affective effort, students may become more deeply and meaningfully engaged with the people, physical objects, and concepts with which they are interacting,” (Beames, 2017, p. 6).

Furthermore, immersive outdoor educational experiences are located within “nature” – which is seen as “including, but not limited to, environments encompassing general outdoor settings that are not under constant human surveillance and control, and where non-human life continues somewhat unhindered” (Smith 2007; as cited in Zeivots, 2019, p 200). The living and non-living elements that exist within physical and perceptual levels are also included in this definition. “Nature” generally encompasses a realm of “more-than-human” with aspects of “wilderness” and thus acts as a place to be explored and as a challenge for individuals to achieve in conquering (Christian, 2017).

These spaces have long been used in ways that go beyond cultural boundaries, socioeconomic status, age, state of health, and other demographics. It seems to be innately human to enjoy the benefits of “nature”, especially “natural environments that do not threaten the individual and comprise peaceful, beautiful nature scenes can help to alleviate stress and restore optimal cognitive functioning” (Hurly & Walker, 2019, p. 1). This time

spent in nature, as long as the time spent feels safe, is “an antidote for stress: it can lower blood pressure and stress hormone levels, reduce nervous system arousal, enhance immune system function, increase self-esteem, reduce anxiety, and improve mood,” (Robbins, 2020).

The benefits of “nature” are so great that there are visible differences in the ability to process stress between individuals from urban environments and their rural counterparts (Lederbogen et al., 2011). In classrooms, students have improved grades and college attendance with nature views from their classrooms (Hurly & Walker, 2019). In pan-Scandinavian and Norwegian culture, sixty percent of *friluftsliv* (the immersion of oneself in nature for the purpose of enjoyment of place) studies indicate benefits for mental, physical, or social outcomes (Mygind, et al, 2019). Children’s mood is improved more over the course of five hours in the forest than during a regular day (Roe & Aspinall, 2011). Cortisol levels decrease during a day of education spent outside the classroom in nature (Dettweiler et al., 2017). One’s psychological well-being can be associated with their proximity to green space – whether a tree-lined street or a private garden (Bratman et al., 2019). “Learning to regulate emotions in natural areas can increase children’s sense of comfort, trust, autonomy, self-awareness, self-confidence, and environmental competency” (Green, 2016; as cited in Russel & Oakley, 2016, p. 17).

Many of these such benefits can be explained under the umbrella of Emotional Intelligence education – an essential aspect of development (Humphrey et al, 2007) – which is best achieved in outdoor educational experiences (Opper et al., 2014). Whether in group settings or having solo experiences where participants/students “feel more independent and self-reliant, which [is] associated with gaining knowledge and enhancing

personal awareness” (Goldenberg, McAvoy, & Klenosky, 2005, p. 129), one’s capacity to navigate personal and social experiences is improved.

Moreover, it is essential to consider one important aspect of immersive outdoor educational systems: that of the physical literacy and competency. For example, “youth from the US and Canada who participated in physical activity reported higher levels of positive health indicators like self-image, physical health status, quality of life, and quality of family and peer relationships,” (Iannotti et al., 2009; as cited in Bless, 2015, p. 516). Youth also experience higher levels of positive health indicators, like self-image, self-worth, physical health, and quality of family and peer relationships when engaging in physical activity outdoors (Bless, 2015). “In nature children learn to take risks, overcome fears, make new friends, regulate emotions, and create imaginary worlds,” (Hanscom, 2016, p. 3). Green exercise (or physical activity in the presence of nature) has been shown to generate positive health (Ulrich et al, 1991; MIND, 2007; Pretty et al, 2007; Van den Berg et al, 2003), ecological knowledge (Wells et al, 2007; Hartig et al, 1991; Pilgrim et al, 2007; Pretty, 2007), foster social bonds (Kawachi et al, 1997), and influence behavioral choices (Hartig et al, 2003; MIND, 2007; Pretty et al, 2007; Van den Berg et al, 2003; Kuo et al, 1998; Maas et al, 2006).

Mental Health

What role does an immersive outdoor educational experience play in the development of youth mental health? What are the differences between Norwegian and Canadian based immersive outdoor educational programs? What do educators from different age ranges, programs, and genders recognize in their students? When investigating the background for this study, we must consider the definition of a state of

positive mental health. As such, “good mental health” can be described as “the embodiment of social, emotional, and spiritual well-being, not simply the absence of mental illness,” (Maller & Townsend, 2006, p. 1448). It is not only greater than a lack of mental disease.

The definition of “good mental health” can be taken a step further to explain that it “comprises a balance between self-satisfaction, independence, capability and competency, achieving potential, and coping with stress and adversity. Both self-esteem and mood are short and long-term determinants of mental health: both are commonly assessed in green-exercise research. Self-esteem is an evaluation of a person’s sense of worth or value, and there are strong positive correlations between self-esteem and health ... High levels of self-esteem are associated with healthy behaviors, such as healthy eating, participating in physical activities, not smoking, and lower suicide risks,” (Bird, 2007; Blascovich & Tomaka, 1991; Bernard et al, 1996; Pretty, 2007; as cited in Barton & Pretty, 2010, p 3947).

This study investigates mental-health development, as described by educators, in youth of Canada and Norway, and perhaps subsequently the world. This development is essential because of the influx of mental illnesses and research that has indicated that the prevalent “disconnection from the natural world negatively effects the well-being of children,” (Wells & Evans, 2003, p. 315). Children function better cognitively and emotionally when in green environments (Maller & Townsend, 2006). There are improvements in their interpersonal relationships and attitudes towards school just by being near a window or in a school garden (Waliczek, 2001; Maller & Townsend, 2006). In fact, most of the benefits of human health when interacting with nature has to do with mental health and well-being (Maller & Townsend, 2006; Seymour, 2003; Maller et al, 2002;

Frumkin, 2001, Rohde & Kendle, 1994). “If children build skills that can protect against mental illness in youth, they are more likely to use such skills throughout their life and into adulthood.” (Bless, 2015, p. 37).

A culmination of being amid great environmental destruction at the hand of human development and an extremely potent prevalence of mental illness, it is imperative to advance our educational systems to mirror the future needs of our populations. We must develop critical hope which “...requires attention to both cognitive and emotional elements as well as working with learners to envision and move towards their preferred futures” (Russell & Oakley, 2016, p. 15). We must work with students to cope with the extensive emotionality of life in the next 100-200 years, “when humanity will be in the midst of dealing with the effects of climate change and the struggle against capitalism,” (Lakind & Adist-Morris, 2018, p. 38). With a newly imagined future through reimagined and immersive outdoor education, students can develop essential skills for managing their mental health as they advance into adulthood, and they can also foster the essential skills and creativity that will be necessary to combat the results of stasis and individualism (Lakind & Adist-Morris, 2018).

Norwegian Outdoor Education & *Friluftsliv*

“Friluftsliv is about experiencing nature. People may become connected to nature through experiences, creating a feeling of belonging in nature and creating a passion for the intrinsic value of free nature. It is argued that the approach of friluftsliv towards nature fulfils a basic human need and thereby creates a sensation of wholeness. Through direct contact with nature, people get the opportunity to connect with nature and feel a certain closeness to nature; for instance, to feel snow, to listen to silence, to meet wildlife, and, generally, the smell of nature. This can be described as nature

awareness...participants are encouraged to take care of nature, value nature, and increase their nature awareness,”

– (Hofmann et al., 2018, p. 195)

Norwegian outdoor education systems have been engaged in the social and cultural practices of *friluftsliv* for generations. These culturally valued outdoor experiences have become central to the comparative analysis in this study. The Norwegian culture’s intentional interactions with nature are made to be purposeful and meaningful (Hofmann et al, 2018) and have been integrated in school curricula since the 1970’s (Sætre, 2016) as a form of outdoor guidance.

Outdoor guidance in Norway is a “development-oriented activity... [which aims] to contribute to reflection, afterthought, and to assist in making qualified choices, which will lead to change and improvement. Outdoor guidance should be carried out in an atmosphere of reciprocal trust and is characteristically supportive and challenging,” (Høigaard & Mathiesen, 2004; as cited in Gundersen et al., 2007, p 68). The foundation of this type of guidance began in the 1970’s as part of the Norwegian Mountain School with whom the pedagogical approach was designed by Nils Faarlund in 1967. Since then, the impacts of Nils Faarlund’s pedagogy regarding immersive outdoor guidance has created ripple effects on the Norwegian outdoor educational approach in *friluftsliv* education (Gundersen et al., 2007).

In 1992 in Norway, the curriculum for teacher education introduced a mandatory cross-curricular subject called “Natur-Samfunn-Miljø” (NSM, or in English: Nature, Society, Environment). “The main goal of the subject was to teach trainee teachers about environmental education and sustainable development, and consequently make stronger

commitments to education for sustainable development in Norwegian schools,” (Sætre, 2016, p 66). Though this program was removed in 2002, the curriculum in Norway has continued to be interdisciplinary with respect to the socialization of children through traditional *friluftsliv* (Dahle, 2003) thus yielding perpetual outdoor environmental educational opportunities for the youth of Norway.

Canadian Outdoor Education

Canada, like Norway, has exceptional resources of expansive swaths of wilderness. This creates a “myth of the wilderness”, a Canadian identity drawn out of the “untouched” wilderness landscape (Joyce, 2011). This draws its power from an imagined landscape devoid of people. “Canadians can...[acknowledge] the interconnections of the national landscape,” (Joyce, 2011, p. 29) by having familiarity and strong connections with this land. Canada is the second largest country in the world by area, it has two official languages, and borders three oceans. It is so large that it spans six time zones. There are an estimated 1,500 summer camps in Canada (Marsh, 1988). The root of outdoor education comes from a strong summer camp culture, centered mainly in Ontario (Asfeldt et al., 2013).

Around the same time as outdoor education was forming in Norway, it also began to develop in Canada. The first survey on outdoor education was conducted in 1969 by the Canadian Education Association. Influenced by teachers who “dared to be different”, the development of outdoor education pedagogy in Canada was widely influenced by day camps. “Outdoor education is learning in and for the outdoors,” (Passmore, 1972, p.14). “Concern for the destruction of the natural environment was a key motivator for the

development of early outdoor education programs in Canada,” (Passmore, 1972; as cited in Asfeldt et al., 2013, p. 3).

With a diverse set of geophysical features and a small population, relatively, Canada is a mecca for all types of those who enjoy the outdoors. This creates a unique opportunity for outdoor education, including the Canadian outdoor educator’s “tendency to integrate the curricular aspects of environment and adventure education,” (Potter & Henderson, 2004, p. 69). The strong connection of these curricular myths and stories are deeply engrained in the experience of immersive outdoor education in Canada as well as the experience of enjoying the natural world.

In the 1972 overview of the Canadian Education Associations 1969 survey written by Passmore, outdoor education in Canada is described as a program which can:

1. “Offer meaningful learning situations...
2. Stimulate student’s curiosity...
3. Enable pupils to develop new interests and skills...
4. Help them discover the important relationship that can and exist between classroom instruction and outdoor learning.
5. Give them a much broader knowledge of ecological principles and their relationship to our quality of life.
6. Provide excellent opportunities to examine through personal experience many of our present social and cultural values.
7. Help pupils to develop a better understanding of themselves, their teachers and their total education.” (Passmore, 1972, p.16)

When more than 80% of Canadians live in urban areas, there are very few opportunities for daily interactions with nature (Joyce, 2011). The development of outdoor education in Canada stemmed not from innate cultural values, but instead out of a necessity to address many important issues. Bob Henderson and Tom Potter (2001) suggest five characteristics and influences that make Canadian Outdoor [Adventure] Education: “geography, a blended pedagogical approach, curricular integration, the travel experience, and non-professional status,” (Asfeldt et al., 2013, p. 6). These characteristics are generally pedagogically blended versions of people and self and nature and place – a culmination of outdoor adventure education and environmental education.

Norway versus Canada: A Similar Story of Outdoor Educational Roots

Though there may not be notable differences in the recreational preferences of those from Norway and other countries (Henderson, 2007), I will inquire into the potential differences of Norwegian and Canadian immersive outdoor educational experiences taking into account the origins and cultural influences driving outdoor education within these two countries. With improved understanding of effective outdoor educational practices provided by study, Canada may be better able to educate their students for a sustainable future.

Though *friluftsliv* is a societal construct with a solidified name in Scandinavian countries like Norway, “Canadians may undertake very similar activities, but have no terminology for it – it’s simply a rural Canadian lifestyle,” (Maher, 2018, p. 259). Across the Atlantic, there are similar ways of expressing one’s connection and dependence on the natural world. And on both sides, outdoor education does a fantastic job at utilizing these preferences to enrich the experience and subsequent passion for the outdoors.

Perceived Interpretations by Educators

Through interviews of firsthand experiences of the developmental properties of outdoor educational experiences in the youth of Norway and Canada, the findings from this Literature Review can be supported. Subsequently, the concept of *friluftsliv* can be compared in a larger context to the efforts of enjoying nature within the Canadian sphere of outdoor education. Thus, the interviews took what has been a significant part of the pedagogical development of outdoor educational theory and applied it to the real-life experiences of interviewees.

The research approach of perception is a means of understanding reality and one's experiences through one's senses. This enables an individual to express a discernment of form, figure, behavior, language, and action. One's own perception can influence their opinion and create a judgement of a person, meaning of experience, or their judgement (Given, 2008). Gregory and Gombrich found in 1973 that we can regularly find that our perception is not only very reliable but can also be objective (Carbon, 2014). By speaking with educators and asking their perception of their student's experiences, we are bound to face subjectivity as the passion for outdoor education lies so heavily within the hearts of these educators.

In looking into previous studies that utilized the perceptions of educators to understand the benefits of outdoor education, there is limited resources available outlining their actual perceived outcomes of the curriculum they implement, especially in immersive outdoor education. Looney (2015) described the inconsistencies between the adoption of outdoor education as a theory and the actual practice conducted by teachers. Factors that influence the practice of outdoor education are indicated in this study, such as "teacher

self-efficacy, school philosophy, and administrator support”, (Wen et al., 2011; as seen in Looney, 2015, p. 11). This specific study does not, however, go into detail on the outcomes for the students experiencing outdoor education. Instead, the focus and research questions remain limited to “the experiences of fifth grade teachers that contribute to the implementation and persistence of using outdoor educational activities,” (Looney, 2015, p. 22). This opens up opportunity to look into the youth participant experiences and their mental health development, as is done in this thesis.

Other studies, such as one conducted by Manni et al. (2013), explores perceptions of learning experiences related to outdoor education by students. Manni et al. in particular alludes to a substantially more detailed illustration of the cognitive, emotional, and social learning experiences. When taking into consideration the study conducted by Looney and this one conducted by Manni and her colleagues, there is a clear gap presented. How do we interpret the perceived benefits of outdoor education while considering the aspects of this interpretation that lead to a lifetime of work within the field? Thus, Manni et al. can differentiate aspects of outdoor education and its instructors and their perceived understanding of the various benefits of their students’ learning experiences – while focusing heavily on mental health. There is a definite need for this type of research as it calls into question how outdoor education is being used to address one of the most pressing concerns of our time – mental health issues in youth.

Literature Review Summary

The unique aspects of this study fit into a research gap where parts of the immersive outdoor education experience in youth is investigated at a deeper level. This literature review outlined existing research as it pertains to the environmental crisis, benefits of

nature, mental health development in youth, Norwegian and Canadian immersive outdoor education and its history, and an outline of existing research that presents a comparison of these two countries.

What this research addresses is a gap in the literature. There is no research outlining the mental health benefits of immersive outdoor educational experiences in youth, let alone one that investigates the differences between Norway and Canada – two of the world's foremost leaders in immersive outdoor education. The research conducted in this thesis address this gap and create a deeper understanding of the benefits of such educational experiences and the importance thereof.

Chapter 3: Methodology

In this study, the research question is the perceptions of outdoor educators on how immersive outdoor education experiences influence youth mental health and well-being. What are the benefits of immersive outdoor education experiences in the mental health of youth? What are the differences of these perceived benefits in Norwegian and Canadian educational programs? The study compares responses from educators from various types of immersive outdoor education programs, different age groups, different gender identities, and different countries of origin.

This research on the perceived mental-health benefits of immersive outdoor educational experiences in youth, I employed an investigative qualitative analysis by interviewing key representatives from Norway and Canada in order to discover their personal anecdotes and their experiences with youth in an outdoor setting. I began my sampling by reaching out to a community of scholars from the Wild Pedagogy Symposium (held in Finse, Norway - August of 2019; for more information check out the website: www.wildpedagogies.com). Through snowball sampling, I was then able to speak with a total of 6 individuals with varying levels of experience in immersive outdoor education. Through online video interviews, participants shared the story of what drew them into outdoor education and what themes they witnessed in the development of their students.

Interviews

The interviews were conducted in a casual atmosphere by using online video conferencing software (Zoom and Skype). Interviews were recorded, transcribed, and coded for themes. Each participant was asked the same list of questions designed to best understand the social-emotional and mental health development in students.

The questions were centered around broad topics that made open ended responses more available. The purpose was to guide the outdoor educators to share various aspects of their stories, both personal anecdotes and observations from the field of immersive outdoor education. The questions are available in **Appendix A**.

Once transcribed, the interviews were placed in Dedoose (version 8.3.45) coding software where codes were assigned to various aspects of the interviews. The following is a list of codes assigned to the data to aid in the understanding of themes, co-occurrence of data, and aspects of each program, as outlined in Figure 2.

Code Group	Code Name	Description
Connection	Connection with Community	Connecting to the community in which one lives through outreach and involvement
	Connection with Nature	Developing a relationship with the natural world through exposure and experience. Nature as teacher.
	Connection with Place	Understanding one's place and role within that place.
	Connection with Self	Learning about oneself through obstacles and activities designed to increase self-awareness.
Development	Conservation Interest	The extent to which students involve themselves with protecting the natural environment.
	Responsibility	The student's feeling of owning and caring for themselves, their environment, their family, and their peers.
Hard Skills	Self-Management	Being able to dress oneself and prepare for an outdoors experience by managing oneself and one's gear.
	Survival Skills	Foraging, hunting, shelter building, fire building, understanding weather patterns, orienteering, bathroom outside, plant identification, camping, etc.
	Physical Literacy	Disposition acquired by humans of motivation, confidence, physical

		competence, knowledge, and understanding of purposeful physical pursuits as an integral part of their lifestyle. (Physical Literacy, 2021)
Joy/Immersion	Comfort in Nature	Being able to relax within a natural setting.
	Exposure to New Environments	Experiencing an environment unlike that of their home life or city of residence.
	Freedom	A student's power or right to act, speak, or think as one wants without hindrance or restraint.
	Joy of Mastery	Experiencing joy after accomplishing a challenging task or activity.
	Risk Taking	Pushing one's body/mind past perceived limitations – challenging one's fears.
	Shared Interests/Experiences	Sharing interests and experiences with an individual or group.
Mental Skills	Confidence/Overcoming fear	Developing self-confidence through overcoming fears and anxieties. Being confident in one's abilities, thoughts, and experiences
	Mindfulness/Self-efficacy	One's feeling of being able to control their thoughts, behaviors and emotions through the use of mindfulness and grounding techniques.
Social Skills	Empathy	The ability of a student to understand the feelings of another.
	Interpersonal Skills	Cooperation, team building, etc.
	Leadership Development	A student's ability to lead.

Figure 2: Code Groupings - Far left is the major groups, in the center is the codes included in those groupings, and to the right is a vague definition of each code. Codes were assigned to quotations within transcribed interviews and the arranged accordingly.

Coding

These codes were intentionally divided into categories and subcategories of mental health. Please note that mental health, when understood in terms of good mental health

and well-being, can be described as “social, emotional, and spiritual well-being, not simply the absence of mental illness,” (Maller & Townsend, 2006, p. 1448). In this study, for coding and data interpretation purposes, mental health comprises the following categories: connection, development, hard skills, joy/immersion, mental skills, and social skills.

By separating the data into these six categories, I was able to develop a better understanding of the outcomes of students’ experiences in their mental health development during an immersive outdoor educational experience. These categories were further broken up to more specific attributes of student behavior or observations made by interviewees. This allows the reader to better understand the increased sense of connection a student experiences by understanding how they’ve increased their experience of connection with community, place, nature, and their own self. We can understand an observed level of development by distinguishing conservation and a student’s level of responsibility in taking care of themselves and their peers. To better extend the coding applications, descriptions of each subcategory were included so that additional attributes of the transcribed interviews could be included in the interpretation of various mental health observations.

I used the coding software available on Dedoose to understand the extent to which interviews covered the aspects of mental health development in students enrolled in immersive outdoor educational experiences. The software provided correlational relationships between codes and descriptors (or the sub-categories listed above), along with frequency of each category, the prevalence within each interview, and more specifically and applicably, the difference between the Canadian and Norwegian interviewees (the gender identities, age range, reason behind choosing this career, and program type included

in the differences analyzed in this study). The data analysis available with Dedoose was chosen because of its ease of use, inexpensive monthly fee, and breadth of qualitative analysis options.

Through speaking with knowledgeable individuals who have worked in the immersive outdoor education field for many years and have higher degrees in the field of environmental education, I was able to learn about a wider population of students and their mental health development. The interviewees I spoke to are members of a community of researchers, government employees, and field instructors who have a deep understanding of the current research on the topic of mental health in immersive outdoor education. This approach also aided in the ability for me to achieve the highest level of ethical protection for the youth being discussed. This was a third-party exposé of the mental health development achieved through immersive outdoor educational experiences, meaning my interpretations of the experiences of these youth was taken from the perceptions of the educators themselves. It allowed for increased anonymity of the students – who make up a vulnerable population – while also allowing for their experiences to be considered in research that could expand current resources available to immersive outdoor educational experiences.

Sample Population

This type of investigational study includes a small set of interviewees who were asked about their professional and personal experiences with mental health development in addition to other types of development in the outdoors. Because of this type of qualitative investigation, the scope of my conclusions can have relevance for the wider outdoor education communities in both Canada and Norway. The six individuals

interviewed for this study have taught cumulatively and had contact with approximately 500,000 students across both countries (this number is an approximation based on the interviews I had with participants and their description of the reach of students they have worked with during their careers).

Participant	Country	Age Range	Gender Identity	Years in Field	Self-Identified Area of Instruction
Participant #1	Norway	70+	Male	45	Public Education
Participant #2	Norway	30-39	Female	15	Summer Camp
Participant #3	Norway	40-49	Female	17	<i>Friluftsliv</i> Education
Participant #4	Canada	30-39	Female	20	Public Education
Participant #5	Canada	60-69	Male	36	Public Education
Participant #6	Canada	40-49	Male	23	Wilderness Therapy

Figure 3: Distribution of sample interviewee population demographics based on Country, Age Range, Gender Identity, Years in Field, and Self-Identified Area of Instruction. Public Educators work as teachers, Summer Camp as instructors, Friluftsliv Education as teachers, and Wilderness Therapy as field instructors.

Note that the interviews for this research were conducted during the global COVID-19 pandemic in which myself and the interviewees were all in various levels of lock-down. The interviews were not only conducted by video calls because of a lack of financial resources for in person interviews, but more importantly for the health and safety of all involved. This also limited the number of accessible potential interviewees. It did, however, permit an extended conversation with interviewees about the negative consequences of potential social and emotional ignorance sourced from less immersive forms of education.

However, by making the choice to have a small-scale set of interviews, I may have sacrificed important insights gained through a quantitative (and therefore generalizable) approach to inquiry. I hope to utilize the data gained from this small-scale qualitative analysis in order to explore in greater depth the field of immersive outdoor education to discover its mental health and psychological development benefits available to youth. This is an essential issue with the impending catastrophe of environmental destruction and climate change – in addition to the mental health crisis experienced in many modern societies. There is ample research showing that climate change will affect psychological wellbeing and ecologically driven grief (Cunsolo & Ellis, 2018 and Clayton, 2020).

Participant Recruitment

Participants come from a variety of backgrounds, age groups, gender identities, and program type. Participants come from either Norway or Canada due to the comparative aspect of this study. Figure 3 indicates the demographics of participants, yet due to the intimacy of this low sample size qualitative analysis, it's essential to learn the stories and individual characteristics of each participant. Pseudonyms will be used to maintain anonymity of participants.

As I begin sharing some stories of each participant, I would like to note the relationship we all share with the Wild Pedagogies Community. This community of academics was fundamental to this study. Snowball sampling began at a conference held in Finse, Norway in 2019. The research-driven Wild Pedagogies community is frequently cited within this thesis as many are the driving members of immersive outdoor education as it relates to the development of well rounded, mentally healthy, physically literate individuals and climate change understanding. Wild Pedagogues believe in the natural

world as a teacher and therefore wish to renegotiate what it means to be human within a more-than-human world.

This community presented an incredible opportunity for snowball sampling as many of the participating academics and teachers are deeply engaged in experience with youth that undergo an immersive outdoor educational experience. Through my connections within this community, I was able to meet and connect with each of the participants in this study. It was extremely convenient to have developed representation from Canada and Norway and to have experiences from these two countries.

Participant Profiles

1. Participant 1 – We'll call him "Sven" to help protect his identity. Sven is an older educator who describes the length of time he's been in education as "forty to forty-five years" – or "since the stone age". This kind tempered individual has worked in Norwegian public education for decades and was quick to elaborate on the amount of immersive outdoor education and interdisciplinary education that he participated in. Sven is very passionate about sharing his love of nature with students.

"That's the only way, I think, that you can do that evaluation of the world that you are living in, you have to see something else. A change in environment is one of the most important changes I think that I would like to stress."

2. Participant 2 – Let's name this participant Sam. Sam is a young woman residing in Oslo who is passionate about the environment and movement. She has spent time working within a typical urban classroom setting as well as working seven years within a summer camp. Sam is deeply engaged in educating others on climate

change and does so in an artistic manner. Her quotes outline an individual who finds solace and benefit – ecologically, educationally, mentally – in her students in her time spent together in a summer camp setting.

“I couldn’t be a normal teacher. There are a lot of restrictions and a lot of sets of rules and ways of working that don’t resonate so much with me – though I have the utmost respect for every single teacher in the world.”

3. Participant 3 – We shall name this participant Julie. Julie is a mother and educator who is deeply passionate about risk taking and *friluftsliv*. She is athletic, adventurous, and a natural leader. Julie is engaged in teacher education and provides opportunities to remind future educators the immense benefits of teaching and learning in the outdoors. She has been in this position for roughly 10 years.

“For many Norwegians because we have had so many friluftsliv experiences in our youth, we believe that a good childhood is outside.”

4. Participant 4 – Moving on, we will call the next participant Qaran. Qaran is an educator for the youth of Canada – centered mainly around 15–18-year-olds. Much of her education includes a community service aspect to the immersive outdoor educational experience. Instead of simply hiking, Qaran leads her group in activities such as invasive plant species removal, bird box building, and other engaging activities where these students can give back to the community. Her primary interests in her 20 years of teaching have been in outdoor education and youth service and leadership.

“Small steps can have an impact and we will show them something they can do to make a difference. And then they can feel not as anxious about the

big problems. Because they are having an impact in some way. That can be good for mental health as well.”

5. Participant 5 – We’ll use the pseudonym Ronald for this participant. Ronald is an older educator who has worked in the public education field in Canada for over thirty-six years. He is pursuing a PhD to better understand the phenomenon that he experienced with his students. He took students into the woods of Ontario and showed them the beauty and magnificence that comes with natural patterns and migrations. Ronald is extremely passionate about outdoor education and finds himself mesmerized by the smallest patches of grasses to expansive rainforests.

“There is some research that says that there are three things about immersive outdoor education that are really important. The first is that you must have daily access. Then, you must have easy access. And the third thing is you need someone to facilitate that learning.”

6. Participant 6 – This participant, with whom we will name Matt, is an engaging and charismatic leader who spent over twenty-three years working with at risk populations in a wilderness therapy setting. Matt claims that he has worked in almost every type of immersive outdoor education program and finds deep therapeutic value in challenging others in the outdoors. He is one of the most knowledgeable sources for information on wilderness therapy programs in North America and served for many years as a resource for said programs.

“I think we, the global we - specifically the western culture - have become so distant from the places we live and even the people we live with.”

Especially with the continued rise of social media, we really don't have the time to form community in the same way we used to."

Choosing an Approach

This type of qualitative analysis was chosen for the range of knowledge that could be achieved in a relatively small-scale set of interviews. The type of coding and thematic analyses chosen was based off research by Williams & Moser (2019) and Belotto (2018). More specifically, the Linear Process for Qualitative Research (Figure 4 below). This outline illustrates the way in which qualitative researchers can go about understanding their data. In this thesis, the data collection occurred, then I open coded, then axial coded (basically combining the open codes to find similarities). This granular coding continued until theories could be pulled from the codes and meaning constructed. The open coding identifies categories that can be used in axial coding and represent the development of the points of comparison utilized in this research.

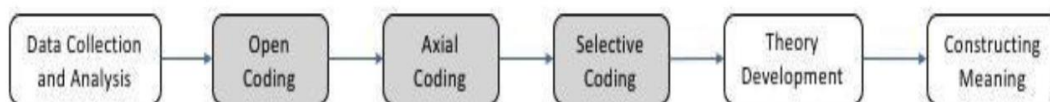


Figure 4: Linear Process for Qualitative Research (Williams & Moser, 2019)

Much of the research that I utilized to conduct my literature review included preliminary investigations of studies conducted prior to the qualitative analysis of available data. These papers acted as a conglomerate space for findings in an attempt to further research in this field. Following my investigation of said research are studies in which previous findings are built upon in innovative ways – through quantitative analysis, multi-

generational studies, and other such in depth interpretations of immersive outdoor educational experiences. To draw on a culmination of both types of data collection used in this paper (literature review and qualitative analysis and coding), I opted for a more grounded approach to understand what current practitioners and researchers were experiencing in their interpersonal experiences with students in an outdoor educational experience. This also allowed me to differentiate between how educators from Norway and Canada speak about the topic in similar and different fashions. This provided a level of data interpretation that is not available through analysis of previous studies nor through a quantitative analysis. This is the use of personal accounts through the eyes of trained professionals to investigate the development of youth outside of my own personal realm of experience across the ocean and across cultures. Then understanding these perspectives through coding to clarify the consistencies and interpretations (Stuckey, 2015).

Within the next section of this thesis, the results will be analyzed and discussed in a formal matter – including comparing themes and similarities among interview responses. Taking the phrases that were used in interviews to create the themes to which analyses and conclusions are formed allows us to gain a deeper understanding of the experiences (Belotto, 2018) the professional immersive outdoor instructors have with their students and their mental health development.

Ethics Review

Prior to beginning this study, it went through the Research Ethics Board (REB) process at Cape Breton University. In this setting, the methodology, consent forms, and abstract of this study were put under evaluation to ensure they met the standards of TCPS2 process for research with human participants. The REB requested a few adjustments to the

language within the consent form. Much of these language adjustments were in specifying help lines for any potential child endangerment that may be reported in the intimacy of the interview.

Upon approval from the REB, participants were given ample time to review the consent form and gain a comprehensive understanding of this study. We communicated by email to answer any questions or concerns the participants might have. It is essential to mention that the participant is the most important aspect of qualitative research such as this. The standards that this study operates by are set within the research community. Included in all of these standards is the high level of respect for participants that is paramount. Self-awareness in my own approach in writing this report, analyzing data, and conducting interviews provided a high level of sensitivity and ensured a high quality of experience and ethics for participants.

To further maintain proper ethics within this research, participant's consent was acquired prior to any participation in an interview. Participants were asked to review the consent form in their own time to ensure that they were not convinced to participate through coercion. Due to the close relationships had with participants or colleagues of participants due to the snowball sampling that took place in this study, coercion was a great ethical concern.

Additionally, this study made considerations to the research partners and the community commitment to social justice that exists within the global education field. The commitment and consideration entail open and transparent participation, respect for individual and shared knowledge, nonhierarchical practices, and positive engagement. Sensitivity was maintained for minority populations that may be underrepresented in

academia. Identities and the various aspects of demographics that were included in the participants information were open ended and left this way to encourage self-identity instead of expecting these participants to fit themselves into a pre-determined box.

Data Analysis

Themes were generated based off responses to questions asked in interviews. Questions were designed to provide an open space for observations and a discussion on themes experienced and witnessed in their teaching setting in outdoor education. Thematically, the questions based around witnessed mental well-being that might be indicative in outdoor educational experiences. Many of these questions were open ended. Their key aspect was to create an opportunity to discuss various potential indicators of mental well-being. Many were created based on my own experience working as an immersive outdoor educator and working very closely with other outdoor educators. Questions can be found in the Appendix.

Codes were then generated from these themes based on different aspects of the interview transcripts and how they corresponded with certain details. All codes and themes were included in this study based on their representation within interviews and in the discussion section, you will find that many themes and codes were found only in one interview, one country, one gender identity, etcetera. This represents unique findings in this small population based on one's individual experience within immersive outdoor education.

Limitations of Research

Due to the qualitative nature of this study, the choice to have just six participants was based on the goal to understand the individual experiences in each of these six educators. This study is meant to be qualitative, and the experiences of educators are compared relative to their teaching and views on mental health benefits for youth of immersive outdoor education.

This qualitative research with a small group of participants who are individuals first and therefore no generalizations can be made. To make research-based definitive and comprehensive generalizations, further study would be required in the form of a large-scale quantitative research. It's important to note that the objective and purpose of this study is not to draw conclusions. Instead, this research acts as a means for light shed on the experiences and the professional and personal understanding of immersive outdoor education relative to youth mental well-being by participants. The questions pulled from the comments received in interviews may indicate interesting themes across various countries, cultures.

Chapter 4: Results

What are the perceptions of environmental educators on the mental health benefits of youth in immersive outdoor educational setting? Are there differences in the perceptions of these educators based on their country of origin? Their gender? Does the time spent in immersive outdoor education impact their perception on the effects of mental health development? What about the educators' reason for working in immersive outdoor education? These research questions formulated the interview questions as outlined in Appendix A.

Upon reviewing the interview transcripts for this project, I became blissfully pleased at the array of similarities between the multitude of different programs and country-specific diversity that were shared. While many of the similarities were based on the inherent benefits of outdoor immersive education, the differences were that of different program or educational approaches to the immersive experience. Such differences can be used as feedback to enhance the experience for participating youth.

The prevalence of each of the codes is visualized using a packed code cloud (see Figure 5). The larger and more emboldened the phrase, the more often it was mentioned in interviews. As is evident from this display, self-management, connection with nature, conservation interest, and confidence are some of the most frequently used codes that emerged from the interviews. A word cloud was used as they "provide a novel and reader-friendly approach for analysis and presentation of qualitative data. They are useful for quality control to help ensure that the intent of the program is achieved," (Mathews, et al., 2015).



Figure 5: A packed code cloud from interviews illustrating themes and frequency of codes. The larger phrases are most prevalent.

To foster a sense of understanding for the reader, I have chosen to combine the findings and discussion sections in a single chapter to view the data in each coding group while also understanding the wider implications of the results. The major coding groups are as follows: Connection, Development, Joy/Immersion, Hard Skills, Mental Skills, Social Skills. Within each of these major coding groups are codes that fall into those categories. These will be followed by any other indicators of themes, prevalent differences, and an interpretation of the data collected. Additionally, quotes from participants and language preferences will be indicated.

First interpretations of the data indicate that there are some definite differences in prevalence of responses based on country of origin, age of interviewee, identified gender, major influence in decision to pursue a career in immersive outdoor education, and program type. It is evident that the limited number of interviewees left very basic

percentage distributions, as evident in the following results. This study is qualitative and therefore there are no real generalizable conclusions that can be drawn from this data. However, the data does provide suggestions of trends and insights relative to everyone's approach to immersive outdoor education.

Categories other than mental health are utilized to gain a better understanding of which type of program and the various program attributes contribute to mental health. As mental health is only one coding group, each other coding category will be related back to the mental health theme that is directing this research. Thus, the data and analyses provide a deeper understanding of how immersive outdoor education contributes to the mental health growth of youth while also providing a greater depth of learning in other ways – like physical literacy, social skills, and conservation skills. All of which can then be compared to what is necessary for a fully sustainable education and future for our society, whether Norway, Canada, or the United States is home.

The perceived experiences outlined by participants explained that the youth participating in these programs did experience various types of mental health and well-being improvement in the various types of immersive outdoor education studied. However, the perceptions of said results could have been influenced or interpreted differently by the various demographics of educators. Further study would be required to determine if these trends hold significant weight in the experiences of participating youth. Yet this discussion outlines the actual findings and describes the differences based on these demographics and interesting factors on the different coding groups – mental skills being just one indicator of mental health growth. The complexities of what goes into mental health are nicely laid out by the Mental Health Foundation: “the ability to learn, the ability to feel, express and

manage a range of positive and negative emotions, the ability to form and maintain good relationships with others, the ability to cope with and manage change and uncertainty” (Mental Health Foundation, 2022).

Mental Skills

“What nature allows but control removes is listening. If you have the need to control, then you’re not really listening to what’s going on around you because you are trying to control it. When you are in nature you are allowed the space where you can really listen. You’re engaging sensually in a different way. You can go through a trip or a camp without choosing to open up to the challenge, that’s up to the individual. As a person, whether you’re a child or an adult, you always have the choice of whether to open up to the experience. I think it’s easier to open up if there is no emergency exit.” – Sam, Participant 2

Mental skills in this research are defined as skills in which improves or contributes to mental health in students. This is different than mental health as these mental skills contribute to a lifetime of mental health through potential application in stressful and highly emotional situations. The coding groups investigated are confidence/overcoming fear and mindfulness/self-efficacy. These codes are combined in this way as developing self-confidence through overcoming fears and anxieties leads to increased confidence in one’s abilities, thoughts, and experiences. Meanwhile, mindfulness and self-efficacy codes are combined as they both are indicative of one’s feeling of being able to control their thoughts, behaviors, and emotions using mindfulness and grounding techniques. When mental skills were discussed and coded, all interviewees mentioned in their interviews that confidence and overcoming fear were important mental health changes witnessed in students. This

frequency of mentions indicates that immersive outdoor education does inherently include an aspect of overcoming fear and the fostering of confidence.

“For some young people it was the first time they had ever been camping. They may have gone for a hike before... You see how through the support of others and being in nature, and the calming effect that has, how they are willing to take some personal risks.” - Qaran, Participant 4

Canadian interviewees mentioned distress tolerance (a sub-set of overcoming fear), emotional regulation (a form of mindfulness), and self-efficacy while their Norwegian counterparts did not mention these as important aspects of witnessed development at all. Norwegian educators mentioned mindfulness more than Canadian educators. Overcoming fear and confidence was mentioned by Canadian participants less than by Norwegian participants.

When looking at the distribution rate of these coding categories when corresponding with the gender of participants, emotional regulation (a form of mindfulness), overcoming fear, and self-efficacy showed significant leaning towards one of the two genders identified in this research. Participants who identified as female were the only to mention overcoming fear as part of mental skill development observed in their students. Meanwhile, the participants that identified as male were the only to mention emotional regulation (a form of mindfulness) and self-efficacy. Figure 6 illustrates the distribution of coding groups mentioned in interviews: confidence, distress tolerance (a form of overcoming one’s fear), and mindfulness.

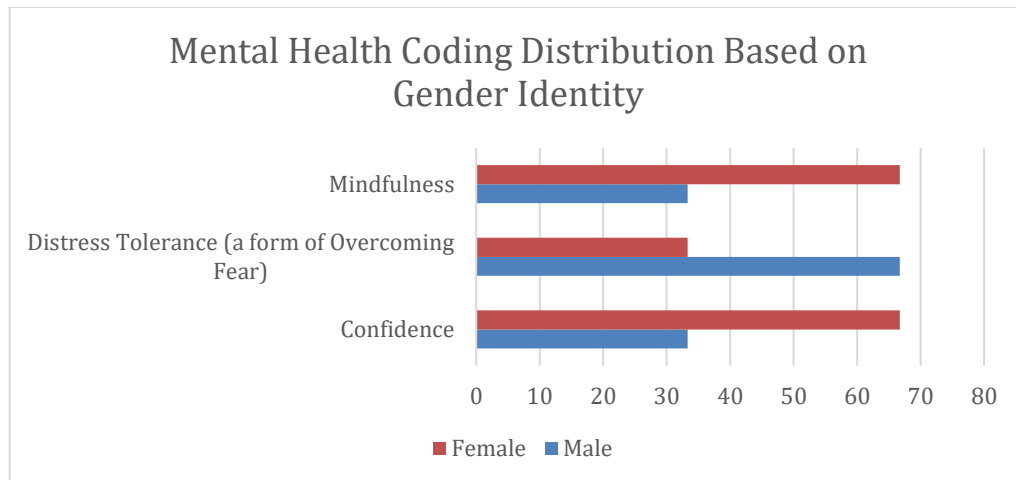


Figure 6 illustrates the distribution of percentage of response of the following categories of Mental Skills observed in participants experience instructing Immersive Outdoor Educational Experiences: Confidence, Distress Tolerance (a form of overcoming fear), and Mindfulness.

The learning of mindfulness, confidence, and overcoming fear to female identifying participants is an interesting finding indicating a higher observed rate of these types of mental skills developed in their students. The male participant's responses leaned more towards distress tolerance (a form of overcoming fear), emotional regulation (a form of mindfulness), and self-efficacy. These gender differences could be in part due to their own gender-based experiences in immersive educational experiences in the past, but ultimately should be taken with a grain of salt due to the small sample size and qualitative nature of this study. Instead of speculating on the major factors leading to career in immersive outdoor education and the code frequency for Mental Skills, let us look at the distribution rate of these codes in Figure 7.

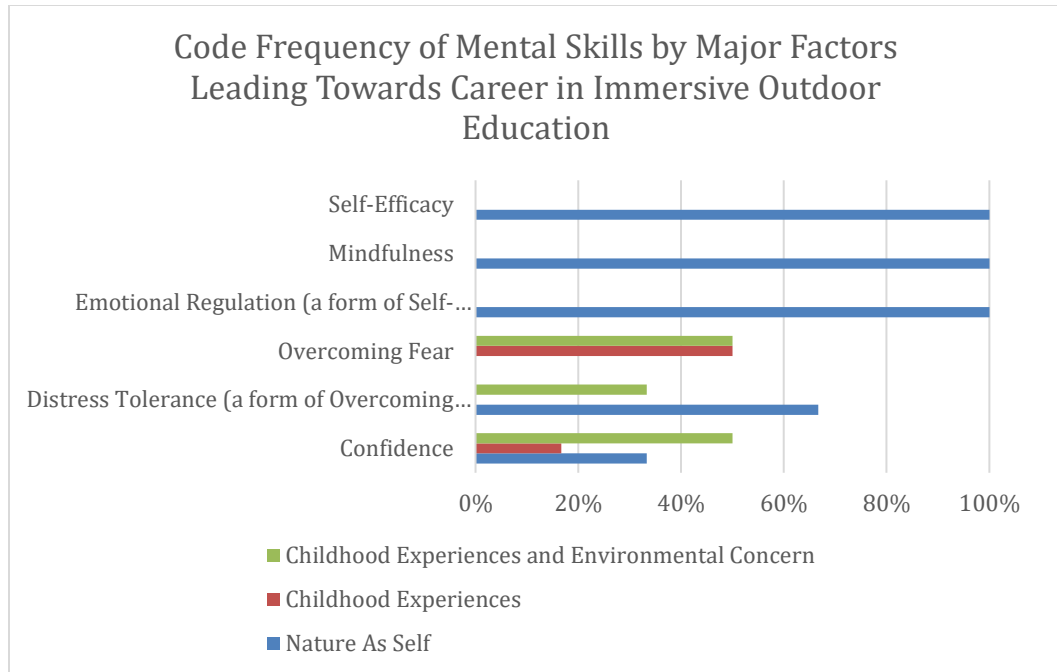


Figure 7: Graphic layout of distribution of Mental Skills coding based on the major factor(s) that dictated the interviewees choice of becoming an instructor for Immersive Outdoor Education.

The distribution of these codes based on the major factors that dictated the interviewees choice to work in Immersive Outdoor Education indicates a strong theme of those instructors who noticed the type of mental skills development in their students coming from a background of understanding Nature as Self – perhaps through how they were raised, or through their own educational experience. The only two coding groups that did not follow this theme would be Overcoming Fear and Confidence – an important finding as it indicates that educators with childhood experience as their biggest driving factor (with or without environmental concern) they are more likely to notice the overcoming of fear and development of confidence in the students with which they work. These findings could indicate that the ways in which an educator themselves has experienced immersive outdoor education could predict the type of mental skill development they find in their students. However, there is no indication as to a correlation

of gender to major factor leading to career choice and no real way to discover this without doing a more comprehensive quantitative analysis.

Another interesting distribution of codes can be found when looking at the program type versus mental skills noted in interviews. Emotional regulation and self-efficacy were exclusively mentioned by those interviewed with experience in Wilderness Therapy. This is most likely in part due to the emphasis such programs have on developing the skills necessary to have students able to navigate emotions and operate in a functional manner – much of which is the reasoning behind why they are sent to such a program.

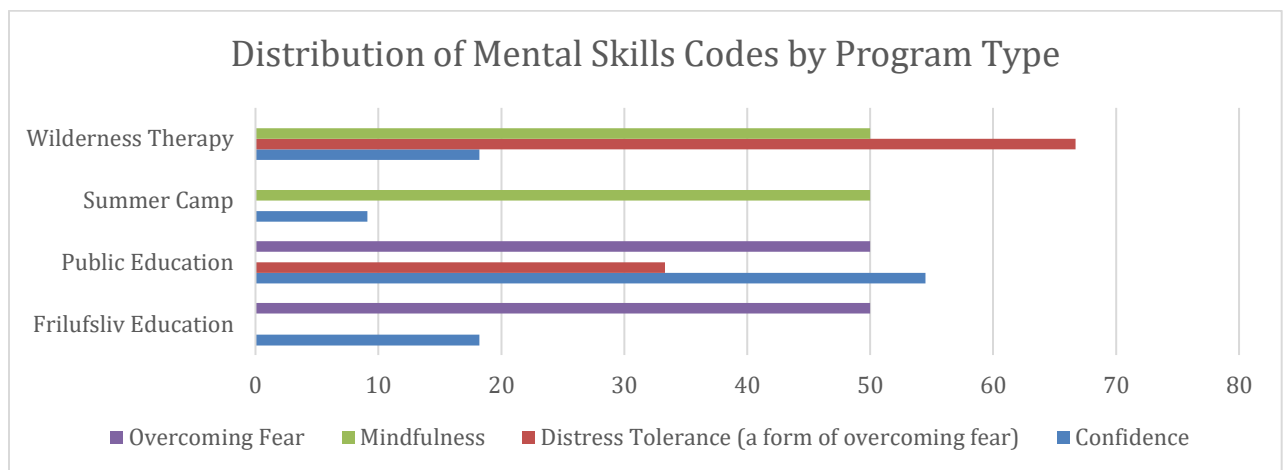


Figure 8: An illustration of code distributions of percent of response rate of Mental Skills code frequency by Program Type interviewee is involved in instructing.

Figure 8 outlines the distribution of codes among the program types in greater depth. As you can see, mindfulness is most prevalent in summer camp and wilderness therapy according to interviews. Confidence was mentioned across all program types. When looking at overcoming fear, there are two worth investigating on this chart: both Overcoming fear itself and Distress Tolerance. There's a notable difference between the two types of overcoming fear: overcoming fear was mentioned more in *friluftsliv* and Public Education versus Distress Tolerance having a higher prevalence within Wilderness

Therapy (primarily) and Public Education (secondarily). It's interesting that Public Educators mentioned all forms of overcoming fear more than the other forms of programming included in this study.

“I find at the university level working with college age students who have gone through some sort of immersive outdoor education experience in their training, they are better able to deal with stress. They may be more disillusioned about the state of the world because they see a better way of doing things. But they are just more comfortable. Whereas a lot of students who come from more standard classroom learning where all of that has been stripped out, for budgetary and other reasons, they are really anxious all the time. And it must be really challenging to be them in a post-secondary institution. It seems like they've never really had the chance to experience challenge or failure. So, when they are faced with that they don't know how to react.” – Matt, Participant 6

Ultimately this coding category yields the most significant indication of how immersive outdoor education experiences influence youth mental health and well-being as mental skills are the most indicative of said health and well-being. The perceived experiences of the youth participating in these programs did yield that mental health and well-being are improved upon in the various types of immersive outdoor education studied. However, the perceptions of said results could have been influenced or interpreted differently by the various demographics of educators. Further study would be required to determine if these trends hold significant weight in the experiences of participating youth. Additional ethical considerations and site visitations could allow the surveying of youth to determine the validity and differences of these mental health improvements between Norway and Canada and the different types of immersive outdoor educational programs.

Social Skills

In this study, social skills were investigated with three subcategories: empathy, interpersonal skills, and leadership development (as outlined in Figure 9). Social skills are of significant importance in childhood development and thus play an important role in the perceived benefits of immersive outdoor education.

Social Skills	Empathy	The ability of a student to understand the feelings of another.
	Interpersonal Skills	Cooperation, team building, etc.
	Leadership Development	A student's ability to lead.

Figure 9: Social Skills coding group and subgroups as investigated in this research.

Social skill development showed variations based on the country in which interviewees were reporting from. For example, when looking at general trends, Norwegian instructors interviewed in this project mentioned leadership development more than their Canadian counterparts. Additionally, Norwegian interviewees were the only ones to mention interpersonal skills as a witnessed form of social skill development. Empathy as a form of social skill development was mentioned equally by Canadian and Norwegian interviewees. There is a definite difference based on the country of origin for interviewees, with a higher rate of social skills being mentioned by Norwegian participants.

When looking at the gender identity of participants, there is a slight difference in the rate of mentions for aspects of social skill development. For example, empathy is mentioned more often by male interviewees compared to female interviewees. Meanwhile, leadership development is only mentioned by female interviewees and interpersonal skills is only mentioned by male interviewees. When looking at the definitions, where leadership development is defined as a student's ability to lead and interpersonal skills include

cooperation, team building, and other such skills, there is an interesting dichotomy between the gender identities included in this research. However, there are no concrete conclusions that can be drawn from this distribution due to the small sample size.

“You saw that they were able to cooperate working together when you were doing sort of practical things outside.” – Sven, Participant 1

“They are able to find youth that are interested in things like they are. They’re being exposed to new things, but they are doing it together. It does foster joy in that we do the team building exercises as well as going on the adventure to make it a more whole experience.” – Qaran, Participant 4

When we continue to investigate the distribution of social skills mentioned in interviews, the age range of the interviewed instructor brings up another interesting layout of data. Figure 9 illustrates the layout of the age distribution by social skills mentioned in interviews. It’s interesting to note that interpersonal skills were only mentioned by interview participants older than 70 years. Meanwhile, empathy was mentioned by 30-39 and 50–59-year-old participants. Leadership development was mentioned by 30-39 and 40–49-year-old participants. The age distribution in social skill development is fascinatingly different than other forms of witnessed development already investigated in this study because there is very little overlap or consistency in the age ranges of participants and what they had mentioned in their interviews.

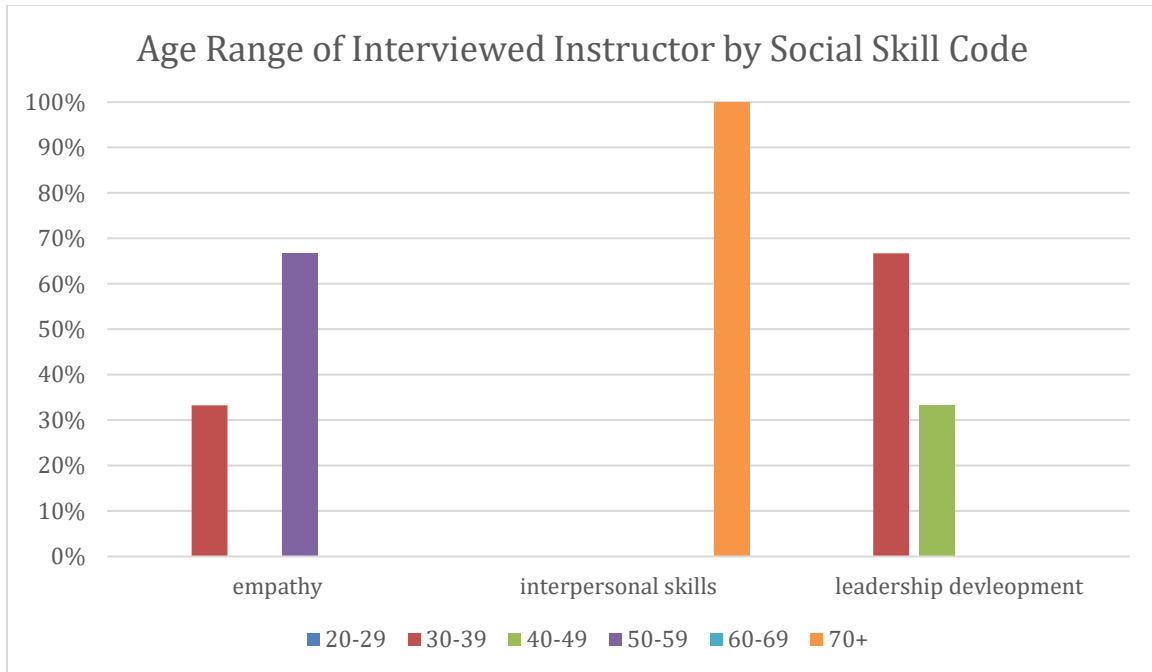


Figure 5: This figure outlines the distribution of Social Skills by age range of instructor. The results indicate varying differences in perceived Social Skill development in the youth in which these instructors worked with.

Additionally, it's important to explore the various program types and the distribution of codes among responses from *friluftsliv* education, public education, summer camp, and wilderness therapy. The distribution is illustrated in Figure 10 below. It is very interesting to note that Wilderness Therapy instructors did not mention any developed form of social skill in their experience with the youth in their program. Wilderness therapy is known for its centralized focus on implementing positive mental health through introspection, internal validation, and healthy coping mechanisms.

Within the public education spectrum included in this research, there was an extremely high prevalence of social skill codes included in the figure below. Public school and their immersive educational programs have a heavy focus on social skill development because of the need for assimilation to a culture of teamwork and relative dependence on social systems to function in a modern society.

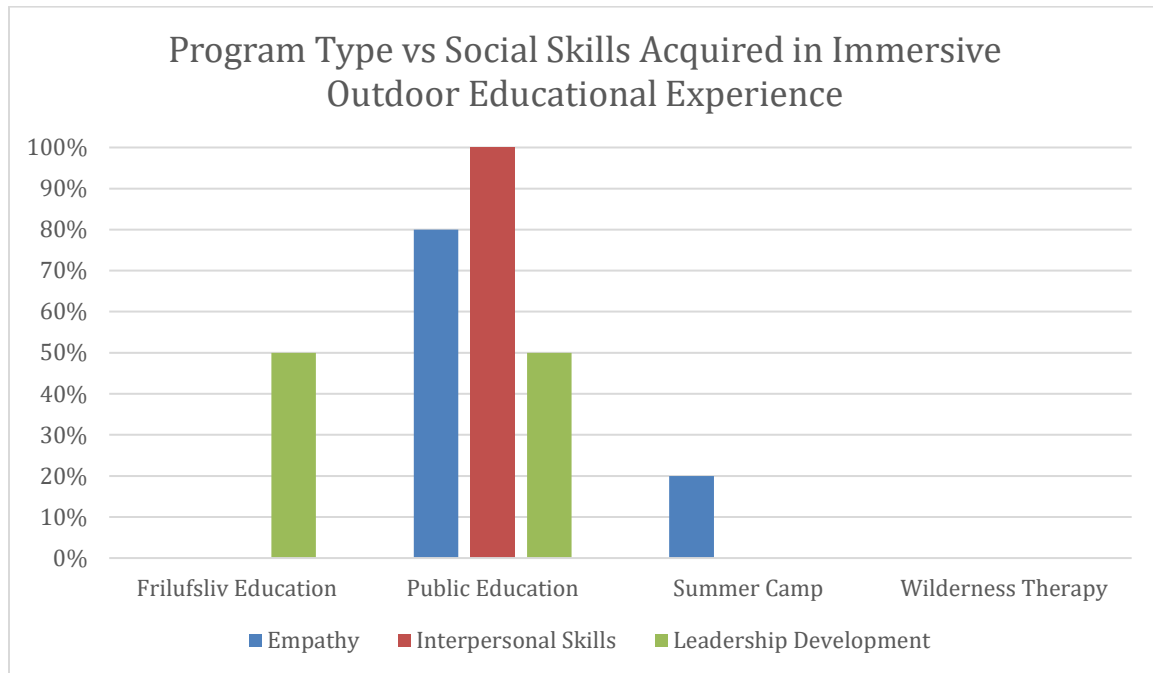


Figure 6: This figure illustrates the distribution of social skill coding responses by the type of self-reported immersive outdoor education program interviewees instructed in.

Upon looking into the major factors that led participants to a career in instructing immersive outdoor educational experiences there are also notable variations in the rate of code mentions for social skills noticed in immersive outdoor education participating youth. For example, when looking into empathy, most of the responses were made from those who indicate childhood experiences alone as the major factor contributing to them wanting to pursue a career in immersive outdoor education. Those who identified with nature as self-experiences (or moments in which they experienced a deep connection in which nature was understood as an extension of themselves) can claim the remainder of the responses involving empathy codes.

Leadership development was only mentioned by those with childhood experiences as a major influence in their decision to pursue a career in immersive outdoor educational

experiences (half of responses by those who identified childhood experiences alone, and half of responses by those who identified childhood experiences and environmental concerns as their greatest factor leading to a career in immersive outdoor education). None of those who indicated the experience of nature as self (as described above) mentioned leadership development in their interviews.

“It’s a combination of having to deal with things as they are happening because when you are in the nature you don’t have control. What it’s really about is to learn how to listen about what’s happening. And to learn the skills you need in order to take care of yourself and the people around you.” – Sam, Participant 2

Additionally, we will investigate the distribution of codes involving interpersonal skills. The only category of major factors leading to a career in immersive outdoor education that responded was from those who identified both childhood experiences and environmental concern. Sub-coding categories cooperation and team building follow this same distribution in which childhood experiences alone and nature as self experiences do not have any mentions of said codes. It would be interesting to investigate this with a quantitative analysis to determine the experienced cooperation and team building in students who have participated in an immersive outdoor educational program.

Connection

The connection coding group describes connection as a relationship with a person, thing, place, or idea. In this study, the interview coding focuses on the relationships students have with various aspects of program components and benefits. Most of the defined connections experienced within immersive outdoor education falls within

Connection with Community, Connection with Nature, Connection with Place, and Connection with Self. The relationships formed within these categories are very influential as part of said educational experiences. The codes and sub codes can be described as indicated below:

Connection	Connection with Community	Connecting to the community in which one lives through outreach and involvement
	Connection with Nature	Developing a relationship with the natural world through exposure and experience. Nature as teacher.
	Connection with Place	Understanding one's place and role within that place.
	Connection with Self	Learning about oneself through obstacles and activities designed to increase self-awareness.

Figure 7: Coding category "Connection", the sub-categories of connection, and the definitions used to identify said coding categories.

Connecting with Community looks like one engaging through outreach and involvement in a group greater than themselves or their families. Connection with Nature, on the other hand, involves students' developing a relationship with the natural world through exposure and experience – whether being outdoors in different settings, different weather patterns, or through having significant experiences. This type of connection can be facilitated and encouraged through appreciated nature as a teacher. Connection with Place involves understanding one's place and role within a physical environment or location. And finally, Connection with Self is the complicated process of learning about oneself through obstacles and activities designed to increase self-awareness. In an immersive outdoor education setting, fostering connection is an inherent experience and thus this coding category was mentioned by all participants.

When looking into the ways in which connection is enhanced (with nature, community, place, or self), both groups of interviewees from Canada and Norway

mentioned all forms of connection indicating connection as an important attribute to such an experience. However, the Norwegian educators interviewed mentioned these types of connection more. Norwegians mentioned connection with community, connection with nature, connection with place, and connection with self more than their Canadian counterparts. Nature as teacher was only mentioned by Norwegian participants – one level of connecting with nature.

*“When you are in the same kind of nature where you really experience it truly and bodily. That affects us all in different ways. That is what I like most about it and what caused me to apply to the job.” –
Participant 3, Julie*

Female identifying interviewees mentioned all types of connection more than the males that were interviewed. The interviewees between the ages of 30 and 39 mentioned connection more than their older colleagues. However, responses including a Connection with Self was only present in interviewees between the ages of 30 and 49.

And in regard to the different programs investigated (*friluftsliv* education, public education, summer camp, or wilderness therapy), summer camp had the highest prevalence of Connection with Place while the remaining categories remained equal between *friluftsliv* education, public education, and wilderness therapy. Public education interviewees mentioned Connection with Nature more frequently than *friluftsliv* education, summer camp, and wilderness therapy. Connection to Community followed a similar layout of responses with public education having most of the mentions.

Connection with Self was noted in an interesting way – public educators interviewed did not mention this aspect of their students’ development at all during their

interviews. On the other hand, *friluftsliv* education and wilderness therapy had equal response rates with summer camp interviewees holding a lower response rate. This finding could use additional research to potentially indicate that public education focuses less on individual student's connections with their own selves and more on big picture connections – with community, place, and nature. This finding could be investigated further to determine whether there are any long-term discrepancies in mental health and sense of self in students who do not have alternative forms of experience in which there is greater focus on connecting with oneself.

What we can derive from these findings is that there are differences in the reported observation of connection among different groups of instructors. Those who are younger, identify as female, and are from Norway were more likely to report on the connection with nature, place, self, and community. This is exemplified by a quote from the interview with Julie (Participant 3): *“If you are in nature, you learn about nature, you learn to take care of nature”*. I would thus infer that there could be a greater ability to recognize the connections developed during these experiences and more importance placed on deeper levels of connections across the spectrum from micro (self) connections to macro (nature) connections. This is confirmed when looking at the major factors that lead to the interviewees' choice in pursuing a career as an immersive outdoor educator, see Figure 12 for a visualization of these such factors and the distribution of codes for connection below.

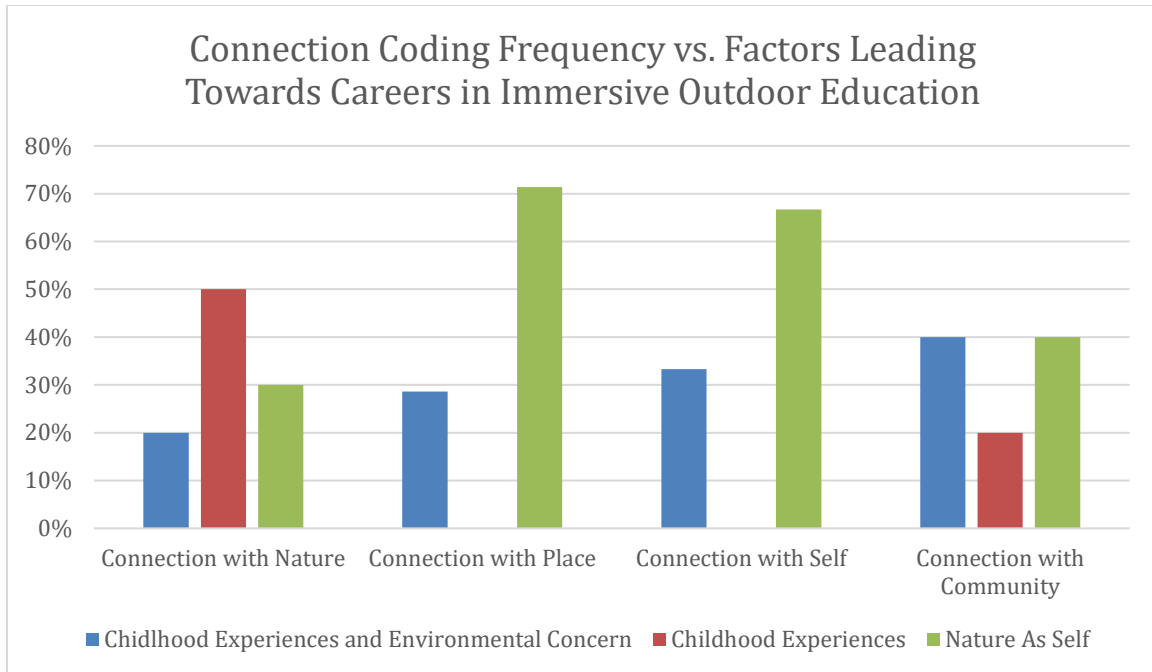


Figure 8: Major factors leading to employment in immersive outdoor education versus rate of coding (Connection with Nature, Connection with Place, Connection with Self, and Connection with Community).

The incorporation of the natural environment into one's life is indicated as "Nature as Self" – it is the belief that nature encompasses the greatness of one's soul (Rothenberg, 1989). "Our bodies contain the ashes of stars; human cell structure is shared with trees; we share our bodies with bacteria, fungus, insects, many of which are beneficial – and even those not considered beneficial may have positive effects on our health," (Wittbecker, 1989, p. 78). This belief would yield a higher rate of discussion of connection as it is inherent in this belief that there is deep connection between humans and the earth – and therefore between one another and a deeper sense of connection with oneself. In addition, having a history with the natural environment (through childhood experiences alone or childhood experiences with environmental concern) is not based on expanding one's personality to involve other things.

“I think that it’s helping you become who you are. It’s not just about learning a subject – which has changed over time in traditional schooling – which is more about learning certain facts about different subjects. Whereas in experiential learning you may be learning 3-4 different subjects – like learning about biology and personal development and social interactions etc. while camping. You’re learning about all sorts of different things at the same time. And you don’t even realize it! That’s an important thing that we do in in our program, but also in experiential education, that reflection and that looking back. You look back and think ‘oh, I learned that’ and ‘how can I use that going forward?’” – Qaran, Participant 4

By engaging youth in an immersive outdoor educational experience centered around expanding their sense of self and connection to involve a deeper sense of self along with an expanded connection to community, place, and nature the responses in this study that there is a higher chance that those who will turn around and act as instructors for a next generation of students engaged in immersive outdoor education will continue this experiential outdoor education in which deep types of Connection are taught.

“There’s something bigger than me, something that’s important and it’s not me. It’s not so egocentric. Hopefully if they see it in that way then they also see themselves connected to that non-human thing.” – Ronald, Participant 5

All in all, Connection was recognized by all interviewees as an essential component and a factor that has observable growth in youth to the immersive outdoor educational experiences. Though there was a higher prevalence within women between the ages of 20 and 29 from Norway for these connections formed through said experiences. Despite this, the data illustrates a portrait of this type of education and its importance for expanding a youth’s connection with the world around them and with their own sense of self. Without a sense of self and an understanding of how one relates to the world, positive mental health

cannot be established (Wisdom, Bruce, Saedi, Weis, & Green, 2008). Fostered within an immersive outdoor educational experience is a sense of connectivity to a world beyond one's own self – that of community, sense of place, pride in oneself, and a deep relationship with the natural world.

Development

When looking at the developmental gains in immersive outdoor educational experiences, the primary indexes for codes in recognizing development are Conservation Interest and Responsibility. These are both areas in which a person grows a sense of caring about themselves and the natural environment in a way where they feel they have the power to do something to further stewardship actions. Development of stewardship (or Conservation Interest) and personal responsibility is differentiated in this project as explained in Figure 13 below.

Development	Conservation Interest	The extent to which students involve themselves with protecting the natural environment.
	Responsibility	The student's feeling of owning and caring for themselves, their environment, their family, and their peers.

Figure 9: Development in this study is coded into subcategories for Conservation Interest and Responsibility. Definitions above help to qualify which aspects of interviews fit into these coding categories.

All interviewees expressed their witnessed experiences of conservation interest development and heightened responsibility, as defined above. Conservation interest was represented among Norwegian and Canadian interviewees 2-to-1. Meanwhile, responsibility was mentioned much more frequently among Norwegian respondents.

Presumably based on Norwegian *friluftsliv*, the enhanced recollection of perceived responsibility is gained through the development of pride in a place where outdoor immersive experiences are part of national culture, one being responsible for themselves, their time management, and caring for others is inherently valued among students. Meanwhile, in Canada, because there is no real basis of national pride within one being able to handle an immersive outdoor experience – educational or otherwise – therefore responsibility development is only increased at a more nuanced, individual level.

“You have to take care of yourself. If you get wet, you have to dry your clothes yourself. I just think that’s important because you strengthen your self-confidence. By being able to that you have to be responsible for yourself. No one else is helping you. You are the responsible person. I think that these processes are important for young people to learn that they that they are able to do that.” – Matt, Participant 6

It must be noted that although there were disproportionate response rates to conservation interest development, it is an important finding that every interviewee mentioned these aspects of student experience as it alludes to the fact that in both Norway and Canada educational experiences in the outdoors are essential to the continued stewardship of the natural environment. Immersive outdoor educational experiences are a major source of the development of conservation interest. A student developing responsibility – or the pride in which they take care of themselves, the environment, their family, and their peers – is additionally important as it alludes to empathy, which will be investigated later.

Meanwhile, female interviewees mentioned responsibility and conservation interest development twice as frequently as their male counterparts. Additionally, there was a

higher rate of responses among the 30-39 age range of interviewees. View Figure 14 for an illustration of this response layout.

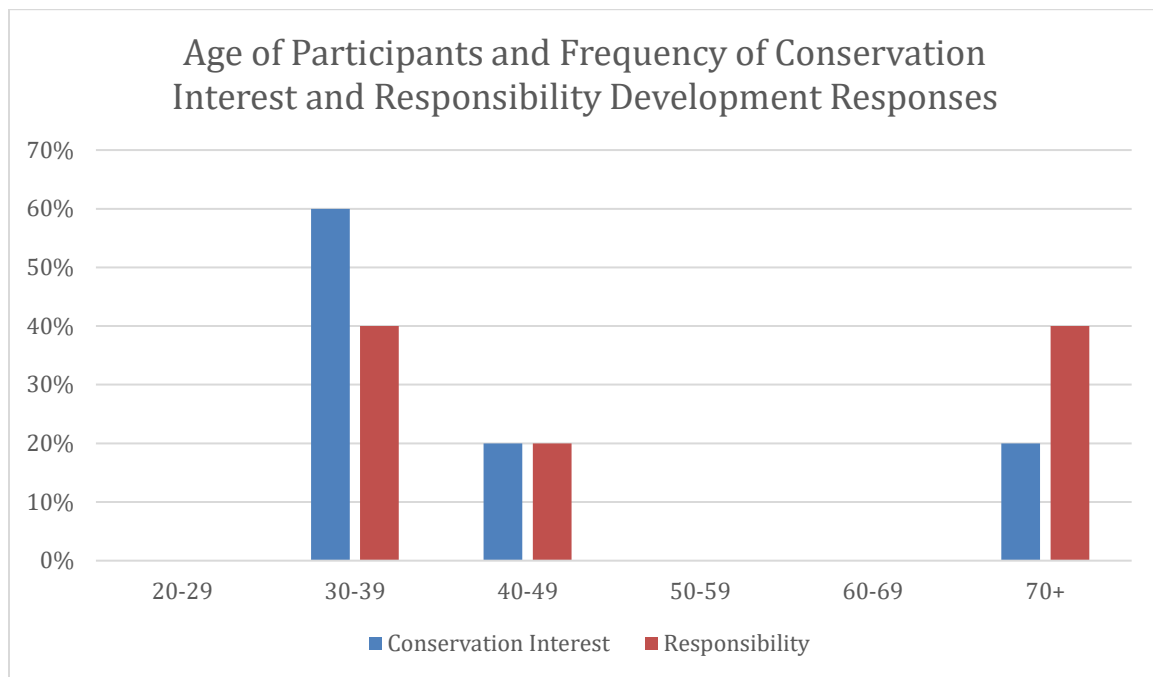


Figure 10: When looking at the development of Conservation Interest and Responsibility, there is a significant difference between age of interviewees and frequency of responses. Middle of the age range posed fewer responses for recognizing the development of Conservation Interest and Responsibility.

Based on the types of programs represented by the sample population in this study, there were various differences within responses on development. For example, when it comes to the development of conservation interests, more respondents involved in public education indicated student's experience of gaining such knowledge (half of responses were from the public education sector). Perhaps due to curriculum within the public education sectors in Norway and Canada, this indicates a high frequency of this experienced or witnessed among educators.

“Relationship to nature has always been so close to me. I wanted the young students, young peoples, to also have the same experience as I have had when I grew up. Then during my education, I learned more

about the philosophy of the relationship between man and nature and I, during my studies and life, knew that our planet is in danger. Or at least we think it is in danger, and so we have to do something. You must love nature in order to do something. It is so important to do something.” – Sven, Participant 1

Both wilderness education and *friluftsliv* education participants had shared responses of conservation interest development witnessed among participating students. In both wilderness therapy and *friluftsliv* education the central focus is on immersing students in the natural environment, though conservation education is not central to the curriculum. In wilderness therapy the curriculum centers around life changing therapeutic interventions using the natural world as a provider of consequences and metaphors. Developing conservation interest in students comes secondary and generally as a result of enhanced understanding and empathy from the natural world.

Meanwhile, conservation interest among *friluftsliv* educational experiences is also secondary to the experiences of enjoying the natural world and learning about one's place in it. *Friluftsliv* centers around enjoying open air and the beauty of the natural world without the distractions of technology and the busy-ness of life. A student experiencing the development of conservation interest comes as a result of enjoying the natural world and gaining deeper understanding of their place within it. They learn to conserve what they care about through deep enjoyment and recreative memories. This deep learning in a natural environment eases student's stress level and thus contributes to their mental health development (Urich, et al., 1991).

Summer camp educators only mentioned conservation interest 9.1% of the times that it was mentioned in interviews. Again, not central to the curriculum any significant development of conservation interest comes secondary to the primary focus of a program.

Summer camps central designation is as a place for youth to have fun, develop group cohesion skills, and get outside. Summer camps are a space for students to spend time outdoors, playing games, trying new adventurous activities while their parents work during the summer months the youth are not in school. One study from 2015 found that summer camp staff “observed the most significant improvements in children’s behaviors and relationships” (Buskirk-Cohen, 2015). The fostering of conservation interest would come, similarly to *friluftsliv* education, from students enjoying their time out of doors and establishing a connection to the outside world.

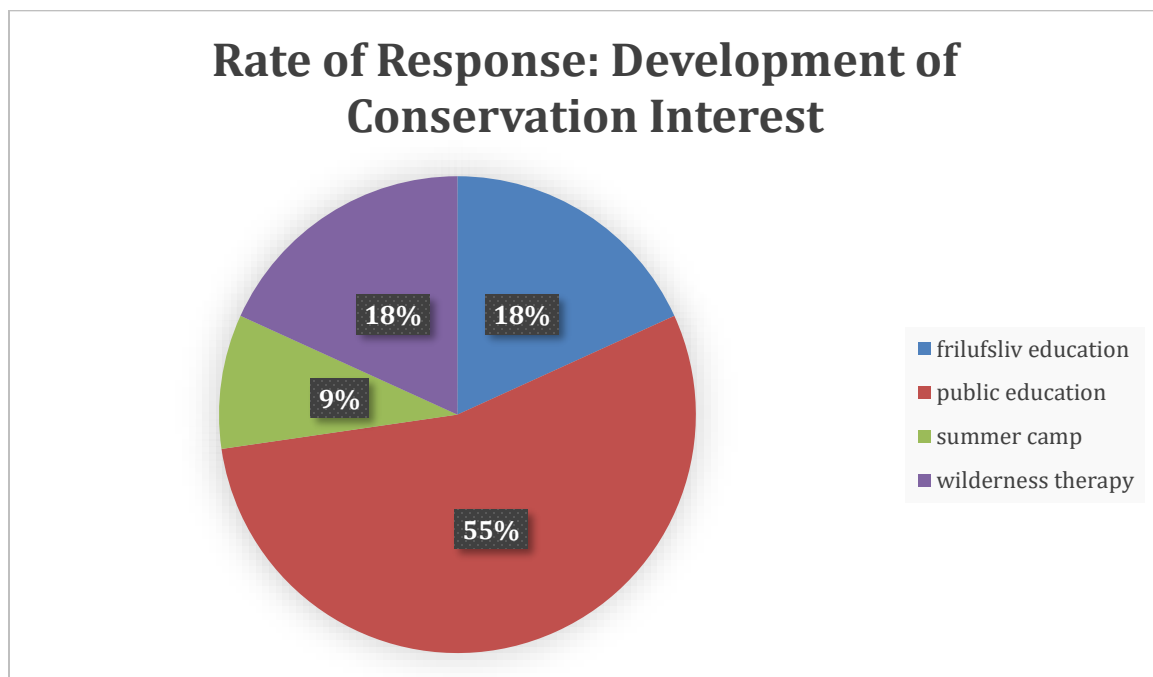


Figure 11: Rate of Response: Development of Conservation Interest

Figure 15 illustrates the percentage distributions of total code frequency for Conservation Interest in the different types of immersive outdoor education investigate din this study. Conservation interest is more highly represented in public education than in

other forms of immersive outdoor educational experiences. Above percentages are based on the total responses and the rate of response for each type of education program. Each time Conservation Interest Development was mentioned, it was coded and thus developed a distribution based on each program type.

Moving forward, the development of responsibility indicates an interesting opposite based on the type of educational experiences included in interviews. Public educators and *friluftsliv* educators were the only two classifications to mention responsibility development as something they witnessed among their students. Summer camps and wilderness therapy educators participating in this study did not mention it as an essential part of their witnessed development among the youth they worked with. While I view this as an odd finding, I think it indicates that there may perhaps be more nuanced development of responsibility in these heavily immersive and outdoor experiences. Generally speaking, the focus of summer camps and wilderness therapy are on hard-skills – such as physical literacy, survival skills, and self-management – which generate more specific types of responsibility, which we will investigate later.

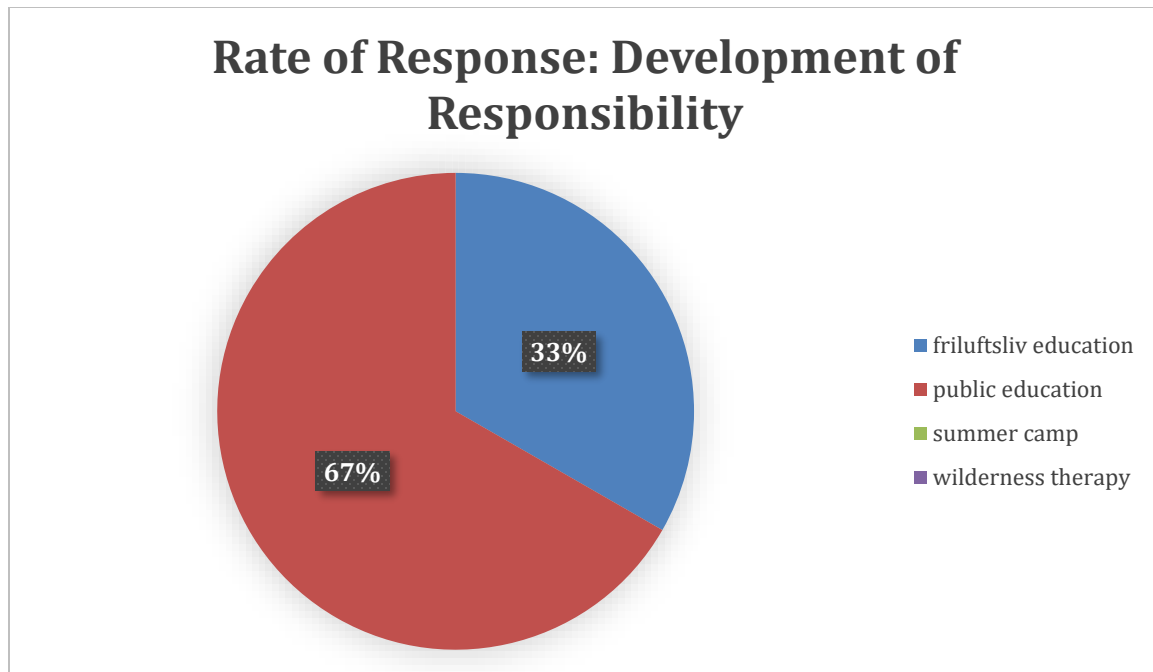


Figure 12: Witnessed development of responsibility has a significantly higher rate of mention in public education and friluftsliv education sectors.

The development of responsibility and conservation interest can indicate mental health changes based on the expanding of one's realm of care beyond just themselves. This form of responsibility yields to an individual who feels as though they can care for and want to care for that which surrounds them. With conservation interest, it means thinking beyond their own lifespan and generation to preserve resources for future humans. This level of selflessness is essential not only for societal functioning but also for the individual to not isolate and retreat inwards.

Joy/Immersion

Joy and Immersion are separate but equally important aspects of an immersive outdoor educational experience. These two codes were combined to illustrate the fact that immersive experiences are deeply engaging, as are joyful ones. The level of immersion

and the level of joy will indicate the level in which a participating youth is engaged within the experience. Within this broad category are many sub codes including comfort in nature, exposure to new environments, freedom, joy of mastery, risk taking, and shared interests and experiences. Based on interview coding, *joy* itself (or the feeling of happiness and euphoria one has in a positive experience) was mentioned only by those interviewed from Norway.

“We enjoyed being there and looking at the nature and feeling a kind of strong relationship with nature. To feel comfortable and to organize yourself so that you are able to feel comfortable while you are outside and focusing on how beautiful it is here or how wonderful it is that we can sleep down on the mosses and enjoy life. Don’t think about time or anything else. Just enjoying being there.” – Sven, Participant 1

Joy/Immersion	Comfort in Nature	Being able to relax within a natural setting.
	Exposure to New Environments	Experiencing an environment unlike that of their home life or city of residence.
	Freedom	A student’s power or right to act, speak, or think as one wants without hindrance or restraint.
	Joy of Mastery	Experiencing joy after accomplishing a challenging task or activity.
	Risk Taking	Pushing one’s body/mind past perceived limitations – challenging one’s fears.
	Shared Interests/Experiences	Sharing interests and experiences with an individual or group.

Figure 13: Joy/Immersion, a series of codes outlining this area of investigation involving a student's experience of joy or full immersion into their experience in outdoor education.

Let’s first look at the immersive attributes of the described educational experiences and how the interviewees country of residence differentiated their responses. In Norway, more emphasis was placed on exposing students to new environments, joy of mastery, and helping them to experience the outside world with their whole body. Norwegian

interviewees described more investment in helping students become comfortable in nature while Canadians mentioned it less. Canadian interviewees described greater emphasis on shared experiences and shared interests while Norwegian interviewees did not mention these at all. There were consistent responses to the presence of risk taking though Norwegian educators interviewed mentioned this more than the interviewed Canadians. Freedom was not mentioned in any interview as an essential part of student experiences. Immersing (or exposing) oneself to new environments was mentioned primarily from Norwegian Interviewees while shared interests and experiences was only mentioned by Canadian Interviewees.

Those interviewees who identified as female were the only ones to mention joy of mastery, risk taking, and shared interests/experiences. Exposure to new environments was mentioned more frequently by female responders than male. Meanwhile, comfort in nature saw a closer margin of responses based on the gender identities included in this study. The sub questions of this thesis center around how different demographics, histories, and identities may influence the perception of mental health development in youth immersive outdoor educational experiences. As outlined in Frumkin (2001), there are complex outcomes and a vast range of potentially healthful exposures outside.

“It doesn’t matter how much I teach them about what they can do, they must enjoy themselves. They have to like it.” – Julie, Participant 3

When taking into consideration the age range of interviewees and their responses to the perceived or noticed joy/immersion that their students experienced during their time in an immersive outdoor educational experience, joy of mastery was only mentioned once

by a responder between the age of 40 and 49. Meanwhile, shared interests and experiences was mentioned only twice by interviewees between the ages of 30 and 39. Let it be noted that comfort in nature and exposure to new environments had a significantly higher rate of mention than the aforementioned codes. The response rates by age group are graphed below in Figure 18.

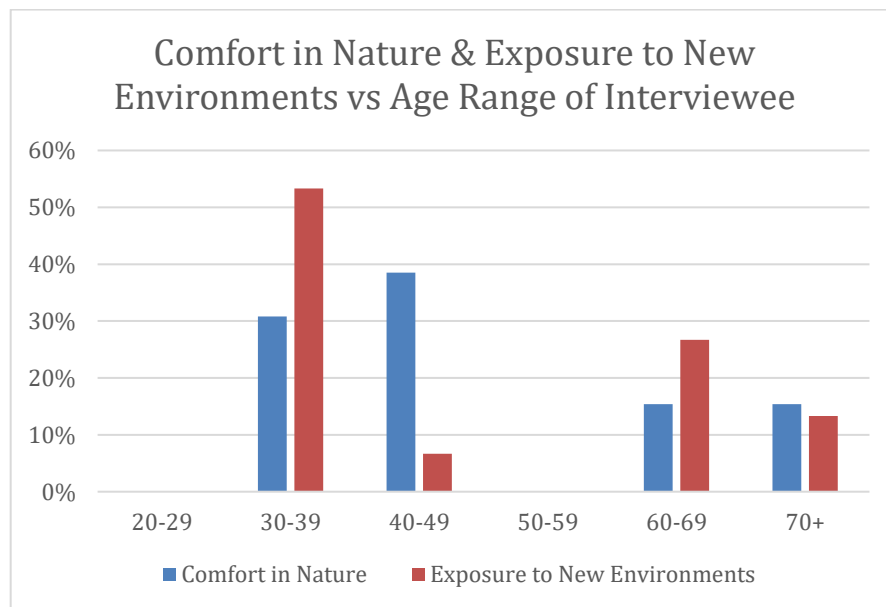


Figure 14: This graph illustrates the response rates to Comfort in Nature and Exposure to New Environments based on the age of the interviewee.

The layout of responses over the age range of interview participants is fairly spread out, but those between 30 and 39 have a higher response rate when discussing the importance of exposure to new environments. Interviewees between the ages of 40 and 49 mentioned exposure to new environments significantly less than they mentioned comfort in nature. Meanwhile, risk taking (not included in Figure 18) had a very high rate of response for the age group between 30 and 39 years old. The remaining responses were mentioned by interviewees between the ages of 40 and 49.

When investigating the differences in response rate for this category of codes and the program type, joy of mastery was only mentioned by those instructors who participate in *friluftsliv* education.

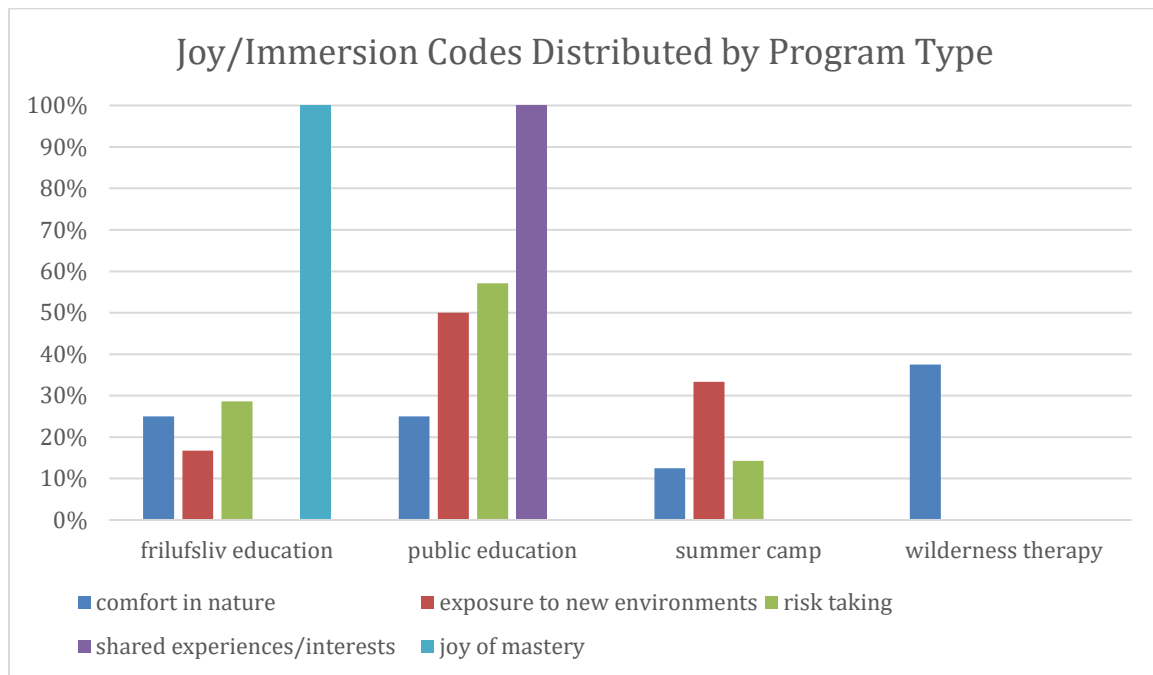


Figure 15: Joy/Immersion codes distributed by program type: *friluftsliv* education, public education, summer camp, and wilderness therapy.

Figure 19 outlines the very evident distribution gap between joy/immersion codes and the various types of programs investigated in this essay. It is evident that wilderness therapy instructors who were interviewed only mentioned comfort in nature. Meanwhile, public education seems to have a broad range of codes mentioned, excluding joy of mastery which was only found in interviews with instructors in *friluftsliv* education. Public education is the only program type whose interviewees mentioned shared experiences/interests. This illustrates a broad difference between the functionality and curriculum differences between public education, *friluftsliv* education, and wilderness

therapy. Additionally, summer camp interviewees mentioned comfort in nature, exposure to new environments, and risk taking. Risk taking itself is interestingly spread across program types with public education having the majority of mentions of this coding subcategory.

These results are indicative of a very interesting layout of program type specifically. Responses seem to indicate that depending on the field of immersive outdoor educational experience, instructors witness more emphasis placed on different levels of joy and immersion. For example, it is clear that *friluftsliv* education in Norway emphasizes a joy of mastery (or the feeling of accomplishment when one gains invaluable means of accomplishing a task) while public education in Canada emphasizes shared experiences and interests (or having memorable and shared experiences and similar interests with an individual or a group). Thus, it can be inferred that those interviewed who participate in Canada public education experience more group cohesion and reciprocated experiences in the youth which whom they work while Norwegian *friluftsliv* education focuses more on self-induced or experienced enjoyment of accomplishment of a challenging task or activity.

Hard Skills

Hard Skills in this research project are classified as self-management skills, survival skills, and physical literacy. These are skills that inherently lead someone to a deeper understanding of how to navigate the hard, physical world. For example, survival skills include foraging, hunting, shelter building, fire building, understanding weather patterns, etc. Self-management includes being able to dress oneself and prepare for an outdoors experience by managing oneself and one's gear. And physical literacy includes the disposition acquired that one has the motivation, confidence, physical competence,

knowledge, and understanding of intentional physical pursuits as an essential part of their lifestyle (Physical Literacy, 2021).

Hard skills are an essential part of immersive outdoor education as they represent the physical immersion into the natural world. Whether learning how to dress for the weather or learning about the edible plants that can be used to survive in an emergency situation, these practical skills are essential parts of the immersive experience. The physical literacy gained yields an individual who feels as though the physical activities performed amid their immersive experience are an essential aspect of their lifestyle – thus perpetuating the habits of outdoor experiences.

“They knew how to read maps and lead trips. They could cook in both front country and in back country. And they would help make important decisions on the mountains and felt like their opinions mattered. And even their posture had changed by the end of it, as if they clearly had something to be proud about.” – Matt, Participant 6

For the general coding category “hard skills”, Norwegians mentioned them more often than the interviewees from Canada. Neither group placed heavier emphasis on using the bathroom outdoors (only one aspect of self-management, one Norwegian interviewee mentioned this) as an impactful experience while Canadians emphasized hiking (Canadian interviewees were the only to mention hiking). Self-management in-and-of-itself was mentioned almost exclusively by Norwegian interviewees.

The Norwegian interviewees mentioned self-management and survival while the Canadian’s did not mention these aspects of hard skills gained in an immersive outdoor educational experience at all. Both groups agreed that physical literacy is an important aspect of immersive outdoor. Meanwhile Canadians focus more on the physical health

benefits (an aspect of physical literacy) and the Norwegians indicated that plant identification (an aspect of survival skills) was essential due to a majority of mentions being from the interviews with Norwegian educators.

Both groups agreed that orienteering, fire building, and camping (sleeping outdoors) are essential attributes to an impactful immersive outdoor educational experience (all coding categories followed the same distribution: Canadian responses represented 1 for every 3 Norwegian responses). The heavy emphasis on survival (a code that was only mentioned by the Norwegian interviewees) is evident in the uneven distribution of coding mentions within the broader “survival skills” category (including plant identification, fire building, camping, orienteering, and using the bathroom outside).

“I do see is their joy of mastering – when they are able to something that they haven’t done before. And that can either be large and important things or it can be smaller things that for them are very great. Being able to go to the loo in nature, which really can make a day for someone.” – Julie, Participant 3

It is important to note that the significant experience of using the bathroom outdoors was only mentioned by Julie, one of the female interviewees. Meanwhile, orienteering and camping (two facets of the coding group “survival skills”) were only mentioned by male interviewees. Fire building and plant identification did not have such straightforward distribution with majority of plant identification mentions coming from female identifying interviewees.

Interestingly enough, physical literacy was mentioned equally among these two gender identifications furthering the interpretation that physical literacy is an important

aspect of immersive outdoor education. Meanwhile, self-management was mentioned majority of the time by male identifying participants.

For the survival skills mentioned in interviews, bathroom outdoors, camping, and general survival were mentioned exclusively by interviewees between the ages of 40 and 49. Fire building mentions in interview responses were mentioned only by interviewees between the ages of 30 and 49. Orienteering was mentioned by 40- to 49-year-old participants and those interviewed who were over 70 years of age. Plant identification had an equal distribution across all participant age ranges.

When investigating the frequency of codes mentioned by program type (*friluftsliv* education, public education, summer camp, or wilderness therapy) there was very interesting distributions of codes. For example, hiking was only mentioned by interviewees who instructed within the public education sphere and bathroom outside was strictly mentioned by Julie who works in *friluftsliv* education. The distribution of camping (again, more specifically sleeping outdoors) was split equally between *friluftsliv* education and wilderness therapy. Orienteering was split equally between public education and wilderness therapy.

Other survival skills, like fire building and plant identification, had different distribution patterns. Additionally, physical health, physical literacy, and self-management also had variable distribution patterns. These are graphed below in Figure 20 below.

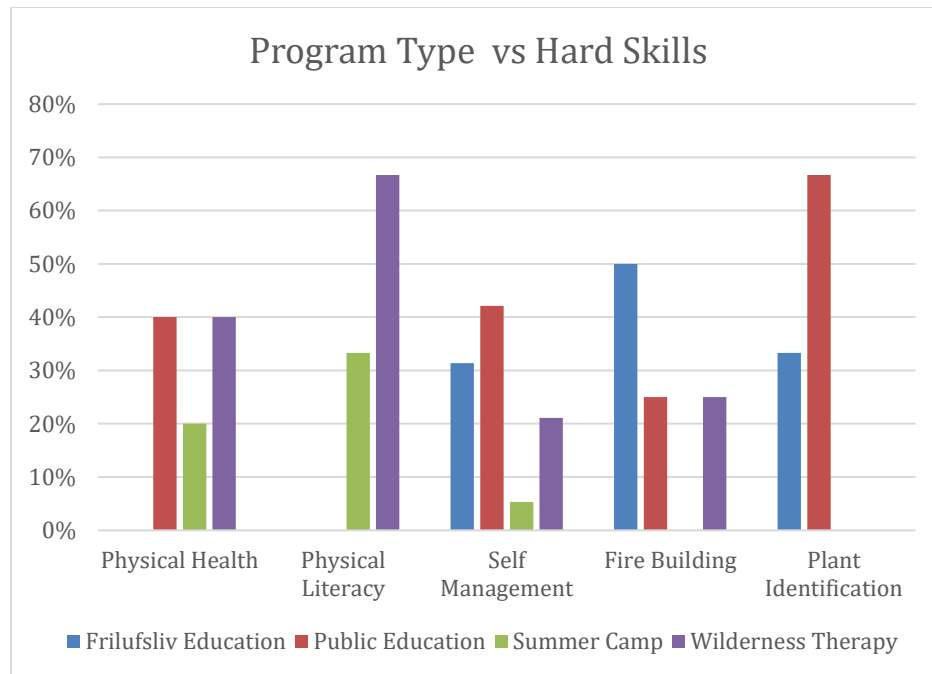


Figure 16: Program type looking at various aspects of survival skills (fire building and plant identification), physical literacy, physical health, and self-management in an immersive outdoor educational experience by frequency of mentions during interviews.

This graph illustrates the distribution of responses for the following categories: physical health, physical literacy, self-management, fire building, and plant identification. These categories were selected for the distribution as they represent the hard skill investigation in this section. The distribution of responses is worthy to note summer camp instructors only mentioning a small number of hard skills as an observable asset to their students – and only mentioning attributes in line with physical literacy and self-management. This is an interesting result as it indicates that summer camps do not focus heavily on survival skills and instead on aiding in students’ discovery of how to successfully spend a majority of time outdoors.

“It’s a combination of having to deal with things as they are happening because when you are in the nature you don’t have control. What it’s really about is to learn how to listen about what’s happening. And to

learn the skills you need in order to take care of yourself and the people around you.” – Sam, Participant 2

Meanwhile, public education had an interesting array of responses, due in part to the type of public education performed in Norway in which survival skills are deemed an essential attribute of the curriculum. This is supported by the fact that Norwegian interviewees had nearly all the responses involving fire building and plant identification (two codes from the survival skill coding group included in Figure 20).

All in all, the distribution of responses indicates that Canadian programs focus more on physical literacy with hiking as the greatest means of achieving this form of hard skill learning. Meanwhile, these results indicate that Norwegian curriculum find survival skills and the management of oneself as an essential aspect of their teaching – whether in public schools or *friluftsliv* education. Hard skills are an interesting coding group to consider within the scale of this project as they are often associated with a physical sense of safety in the out of doors. It will be interesting to compare the responses in this coding group to the skills developed mentally and socially, as we will investigate in the next section.

Hard skills make up an interesting aspect of mental health as they dictate the level in which one feels confident interacting with their physical environment. Physical activity alone has been showed to help with anxiety and panic disorder mental illnesses while also decreasing depressive symptoms significantly (Paluska & Schewenk, 2000). In conjunction with actual movement, the additional confidence yields directly to students' mental health development by giving them more in-depth skills (physical literacy, self-management, and survival skills) to navigate their physical space with a deep understanding and high level of confidence. Indicative factors of this level of confidence

play out in how a student experiences risk taking behaviors. More research can be done on how one's mental health improves through intentional risk-taking behaviors in an outdoor education immersive experience.

Understanding These Results

What are the benefits of immersive outdoor education in youth? How does an immersive experience such as this impact their mental health? What are the differences in these experience between Norway and Canada? What are the differences in perceived mental health benefits based on various types of demographics and histories? Are there different types of programs that have a higher level of mental health benefit?

The results of this study indicate that there is relationship between the implications of immersive outdoor education and the development of mental skills, social skills, development of conservation interest and responsibility, joy and immersion, and connection. The variations of response rates indicate aspects of the different types of programs, differences between the two countries, variations in generations of educators, and the role that gender identity plays in the recognition of various forms of mental health benefits within the experiences of immersive outdoor education.

Of all the codes, connection with nature and self-management were mentioned the most (10 total), with comfort in nature (9 total) and exposure to new environments (8 total) in close second. In fact, connection with nature, was the only code that was mentioned in every single interview. Close behind that was conservation interest, connection with community, comfort in nature, and confidence. This alludes to the fact that within immersive outdoor education for youth is the connection with nature and community, the comfort in the natural outdoors, and confidence within oneself.

In looking at the difference between male and female interviewees, only male interviewees expressed a greater investment in hard skills during immersive educational programs. Meanwhile, only the women from Norway mentioned using the bathroom outdoors as an impactful experience for students. Female interviewees were the only ones to mention overcoming fear in the mental health implications of immersive educational experiences. These results perhaps yield those implications of normative gender roles have a role to play within Norwegian and Canadian culture and the interpretation of immersive outdoor educational experiences.

Regarding variations in country of origin and the greater mentions of various aspects of thematic responses in this study, there is a higher correlation Norwegian educators mentioning responsibility, connection with place, using the bathroom outdoors, self-management, comfort in nature, mindfulness, and cooperation significantly more than their Canadian counterparts. This is interesting as these aspects of immersive outdoor education in youth together indicate the result of a comfortable, responsible, cooperative, mindful individual.

On the other hand, Canadian responses were more heavily prevalent in the subcategories of distress tolerance, emotional regulation, self-efficacy, and team building. Together these paint a clear image of the resulting youth being tolerant of emotional distress, able to manage their emotions, and thus engage in meaningful team building activities. One potential factor that may have influenced these results is the existence of a wilderness therapy program that is focused heavily on the aforementioned mental health skills in youth. In Norway there is no such program similar or equivalent to wilderness therapy.

When looking at the various programs and their variations in key identifiers of mental skill development in youth participants of immersive outdoor educational experiences, this theory is not completely supported as all mentions regarding emotional regulation and self-efficacy were the only Canadian-weighted responses that were mentioned only by a wilderness therapy field staff.

Public education held a high level of response in the subcategories of empathy, development of a world view, shared experience, shared experience, cooperation, interpersonal skills, and team building. Meanwhile, *friluftsliv* education had a high level of response (80% or greater) with using the bathroom outdoors, survival skills, joy of mastery, and nature as teacher. These differences illustrate the variations in public education and *friluftsliv* education – illustrating public education across national borders as engaged in establishing group-based cooperation and shared experiences and skills. Meanwhile, *friluftsliv* is focused on experiencing and operating outdoors, while enjoying the mastery that comes from accomplishing tasks.

The prevalence of responses from *friluftsliv* educators regarding nature as teacher indicates a level of respect towards the natural environment – a conscious level of wild-pedagogical teaching that regards the natural world as greater than human. This type of connecting with nature is very interesting and would be worthy of greater investigation. Questions such as the role in which considering nature as a teacher in aspects of immersive outdoor education can be investigated further. This is something that can include natural consequences, impacts of accepting weather patterns, and utilizing nature as a metaphor. I expect with a more expansive investigation that more evidence of nature as a teacher will come up in all types of immersive outdoor education. The level of outdoor participation

(greater than 10 hours a week) alludes to a level of mitigating the uncontrollable and natural aspects of the natural world.

Meanwhile, summer camp responses play an interesting role in outlining an image of mental health benefits in immersive outdoor educational experiences. There was no singular coding group in which summer camp stood out with a high rate of responses. In fact, summer camp responses only had a high mention rate of mindfulness. Following that, within the subcategory of challenging students – which was too vague a sub-category that it was not included in this analysis. It would be recommended that more research go into curriculum planning for summer camps to include some of the benefits of mental health development in their youth participants. Without many responses standing out, it is clear that this research indicates summer camp not emphasizing these skills very much. It would be interesting to do a focused assessment on summer camps and the benefits in youth development, as this is a very common experience for many children.

Interestingly, physical literacy and mental health skills are more prevalent within the younger generations of immersive outdoor educators while interpersonal skills and cooperation are more prevalent in the older generations of educators. This generational difference can be attributed to growth within the field as it aims to be more well-rounded and inclusive of a full personal growth. Again, this would be an interesting concept to investigate to see if there are any correlations to curriculum changes and attempts to improve the mental skill development within students.

Chapter 5: Discussion & Conclusion

Discussion

As shown in Chapter 2: Literature Review, these results demonstrate the similarities and differences of outdoor education programs and approaches relative to the development of youth. While all programs “provide participants with opportunities to achieve personal goals, gain self-confidence, and be more independent, and... build warm relationships which [contribute] to a sense of community and a sense of belonging,” (Goldenburg, McAvoy, & Klenosky, 2005 as cited in Opper, 2014, p. 2), the means in which they accomplish this are described differently by the participants.

Moreover, the anecdotal investigations “across the pond” from Maher (2018) are supported by this work, whereby immersive outdoor education has grown together over the last 20 years. “The notion of needing to connect people to nature, away from screens, and enforcement in homes, schools, and commercial settings has expanded. Many different agencies and structures will take this forward, opening up new and varied possibilities,” (Maher, 2018, p. 260). This elaborates on the importance of pursuing immersive outdoor educational research and the benefits of such programs.

Further supporting this would mean elongating the various implications of the types of programs and which similarities and differences were picked up by the observations of interviewees. To revisit the main and sub research questions, what are the differences in the various types of programs, demographics of interviews, time spent in the field, etc.? What are the differences in programs offered in Norway and Canada? What are the differences in coding mention frequency? While there are some important similarities, the differences are noteworthy and expected as outlined in the cultural differences investigated in the Literature Review. For example, Canadians do not have a socio-cultural, *friluftsliv*-

like identity like that of Norwegians. While the results of the Norwegian interviewees paint a picture of an immersive outdoor education very intentionally focused on creating comfortable, responsible, cooperative, mindful individuals, as was also illustrated in Hofmann et al. (2018), the Canadian responses focused more on distress tolerance, emotional regulation, self-efficacy, and team building – built from a concern of the destruction of the natural world (Asfeldt et al., 2013). Ultimately both are addressing some of the major aspects of being human that are tumultuous and challenging – such as self-concept, teamwork, and identity (both of self and community) – that require emotional intelligence education in some form (Humphrey, et al, 2007).

Let us revisit a quote shared earlier in Literature Review chapter of this thesis: “Environmental educators have long known that knowledge alone is insufficient for cultivating flourishing natural and human communities” (Russell & Oakley, 2016, p. 13). This quote is very prevalent in understanding the results of the research conducted as it is avidly supported by the participants of the study. The immersive outdoor education that was investigated is one that achieves the opportunity for a deeper experience of reality and the human condition. This was very evident in the findings from educators from both Norway and Canada.

The deep connection explored between the students and the more-than-human, larger, other of nature is evident. Where the interviewees discussed students getting dirty and being away from the confines of the anthropocentric society (explored as a setting that is under constant surveillance and control), the natural world provides a sense of spontaneity and hard-earned lessons. In revisiting the 6 Touchstones of Wild Pedagogies (Jickling et al., 2018), both “Nature as Co-Teacher” and “Complexity, the Unknown, and

Spontaneity” touchstones are understood through the interviews conducted for this thesis. Nature was frequently mentioned as an important contributor to the physical learning aspect of the immersive outdoor educational experiences, while the aspect of spontaneity was also alluded to in the discussion of the inherently interdisciplinary nature of such experiences.

By taking seriously the many denizens that make up the surrounding more-than-human world and the unexpected connections and unplanned events, immersive outdoor education brings the student to a brand-new world, without the ease and comfort of the familiar, and provides them a new landscape (literally and figuratively) to explore that which makes them an individual. By literally experiencing “things they have not seen before,” (Jickling & Naess, 2000, p. 54) students gain appreciation for ecological diversity and an understanding of themselves in the larger picture of each living thing. “Environmental educators,” as the Literature Review explored, “have long known that knowledge alone is insufficient for cultivating flourishing natural and human communities,” (Russell & Oakley, 2016, p. 13).

Upon returning to the anthropocentric society in which they came, students then see themselves in a new light. One that is more independent, has more self-confidence, can achieve personal goals, and has a sense of community and sense of belonging through the relationships with which they commit (Oppen, 2014; Goldenburg, McAvoy, & Klenosky, 2005). Without said experiences, one can only infer what can be lacking. These aspects of learning and philosophical presuppositions may go ultimately unacknowledged in their lifespan without being able to experience personal relations outside of this dogma and seeing things they have never seen before (Jickling & Naess, 2000). This phenomenon

having been observed by the participants of the study further illustrates the environmental and outdoor educator's understanding of the critical pedagogy that questions the internalized belief systems that further isolate an individual from fellow humans as well as the natural world in which we have a dire need to protect. All together painting a clear and evident picture that educational systems alone cannot fully shape and construct a well-rounded individual capable of life's challenges and the obstacles (climate related and otherwise) that comprise modern human life.

In Conclusion

Taking a step back, I think it's important to round out this research by understanding the indications of benefits witnessed in youth who participate in immersive outdoor education. Public education does, in some situations, have levels of immersive outdoor education, though it is highly limited to the development of functional team or group-based systems. Meanwhile, more intensive outdoor experiences foster a greater sense of self-understanding (such as physical literacy, managing oneself outdoors, and mental health skills). The youth that participate in these more intensive programs (like wilderness therapy and *friluftsliv* education) walk away with greater and more intense understandings of their role within nature and in their ability to manage their own emotions; however, such program may not be available to all.

Though not available to all, it is worth mentioning that this research and Literature Review alludes to the benefits that exist in participating in any type of immersive outdoor educational experience – whether a field trip, summer camp, or any such experiences that may be less intensive and shorter in length than some programs described in this paper. The experience of being in the outdoors with team and individual challenges incorporated into the curriculum, the anticipated benefits are of a stronger sense of self and an

understanding of one's place in a larger group. This would be a worthy extension of this research: looking into the different types of curricula and understanding on a quantitative level the mental health benefits to participating youth.

When it comes to mental health, the benefits of managing emotions and being physically active are the skills that will last until adulthood – as indicated in the positive health indicators that indicate lifelong health and healthy behaviors (Bless, 2015). A high level of emotional intelligence, for example, such as that which has been observed in youth participating in immersive outdoor education has been associated with workplace flourishing (Schutte & Loi, 2014). As youth become adults, this workplace engagement, satisfaction, and perceived power is essential for the functioning as an adult in a workforce driven world.

In comparison, and this is interesting, the public education goals of preparing students for a life of participating in society through working with others does not include as much emphasis on emotional intelligence through managing one's emotions. In fact, all of the attributes of immersive outdoor education in a public education setting discovered in this research outlines greater emphasis on shared experiences and cooperation. "If children build skills that can protect against mental illness in youth, they are more likely to use such skills throughout their life and into adulthood," (Bless, 2015, p. 37). A lack of emotional engagement and encouragement for flourishing with one's emotional understanding is another place of further research that would be an excellent contribution to the modification of public education.

Thus, it is essential for the Canadian government agencies to consider providing such experiences to all Canadian youth, especially as identity is ever more questioned and

on display through social media. The more we can prepare and protect our youth through immersive outdoor educational experiences and similar types of emotional education and self-growth, the more we can expect a diligent and resourceful population in a future that is undoubtedly going to be full of various unforeseen challenges. Additionally, in the wake of the climate catastrophe we are now facing, it is essential to create resilient individuals capable of the determination and innovation that will be required to survive.

Returning to the experience that led me to pursue this field of research, the emotional mental health gains that occurs within the immersive outdoor education field is best illustrated in the outcomes of wilderness therapy. This is an essential take away of this thesis. The wilderness therapy model can (and should) be acknowledged by insurance companies and public health policy makers to make this opportunity even greater. At the moment, wilderness therapy, with all of its in-depth implications on mental health, has restricted access for the youth whose family is able to afford such an expensive opportunity. The model of wilderness therapy can be modified to create more affordable options for youth and those in more impoverished areas of Canada.

There are aspects of other forms of immersive outdoor education that administer different and more vague implications on one's mental health development. While less concentrated on mental health, immersive outdoor educational experiences with public education, summer camp, and *friluftsliv* education do provide an essential form of development. Discovering the social health, mental health, and community building that was observed in these other types of immersive outdoor education is another piece of this thesis that can be extrapolated from and expanded upon.

For further research I would recommend looking into the different outcomes of participants of immersive outdoor educational experiences versus those who did not have these types of experiences. Looking into the presence of variations, the types of variations, and the ability to manage adulthood would be interesting. There are a number of factors that would not be able to be controlled in a study such as this, so a qualitative analysis or mixed approach would be best to incorporate the various aspects of one's development that could play a role in the relative "success" as a functional adult in society.

All in all, the importance of natural experiences does come down to the inescapable impact of anthropogenic climate change that is falling on the human experience rapidly. The navigation one can accomplish through the impending doom of these irreversible changes, the conflicts that arise from overpopulation, and other aspects of developing into a functional adult is an essential aspect of development in the youth years between thirteen and seventeen.

As described from the interviewees in this thesis, the youth are at an essential turning point in their lives as they shape the persons that they will become. Knowing full well through the classroom learning experience of the anthropocentric caused climate change, they need tools to mitigate the inherent stress of such a large and unpalpable concern. They need to learn the skills, like those taught in a therapeutic setting, to navigate complex and complicated emotions and traumatic experiences.

As one of the participants of this study said so succinctly: "The process of education and therapy are really quite similar in the facilitation approach. Almost identical. The difference is the topic which moves from learning some skill or external thing in education versus learning about yourself and the way you interact with the world and other people in

therapy”. At what point are the goals of education – cooperation, development of functional and participating adults – better served through a therapeutic curriculum? What are the aspects of immersive outdoor education that act as therapy?

Students from Norway, Canada, and my own experience in the United States outline a therapeutic benefit of immersive outdoor education. The understanding of oneself in a different environment, of learning more about one’s body and one’s mind, about challenging oneself. These are aspects of many children’s experiences that are limited in a heavily technologic world. There are many things we can learn from educational practices, such as *friluftsliv* education. Nature as self being the greatest. The take-away being that the natural world is not separate from us or lesser than us; the natural world is a contributing and essential factor of our personal development and place in the world.

Returning to the sensation of sitting fireside in the Uinta Mountains in Utah, I am flooded with additional knowledge and experience of knowing the deep and impenetrable results of being amid the gasping silence of a glacial field or the breath of an expansive forest as it surrounds you in distance and in height. The knowledge that is gained from said experience, of being less-than, part of, and intrinsically connected to the world around you is fundamentally irreplaceable and unreplaceable. One must experience the natural world separate from the usual “rose-colored lenses” of the Anthropocene.

We are not alone, as our individualistic culture represents. We are not separate, as our understanding of wilderness-as-other paints. We are not helpless, as our anxiety ridden lives dictate. The youth of these programs are described to have great distance from this fortress-like experience of modern living.

Looking at the stars, they see not a black force field of endless space. The students I worked with in wilderness therapy saw reflections of their experiences, stories of ancient wisdom, and planetary largeness that would be unrecognizable to them just weeks prior. I witnessed the growth and development of individuals that had long lived without any sense of the depth of being human.

It is time for us to return to our roots. Share the beauty and love of life with the birds and the bees and our fragile youth who need such mentors.

“What it’s really about is to learn how to listen about what’s happening. And to learn the skills you need in order to take care of yourself and the people around you.” – Sam, Participant 2

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Appendix A: list of interview questions

1. What kind of outdoor education program do you work for? What is your role at work?
2. How long have you worked in Immersive Outdoor Education?
3. What draws you to working in this field?
4. Why is outdoor education important in Norway/Canada?
5. What are some ways that immersive outdoor education has been successful in your country?
6. In your opinion, why is immersive outdoor education important for students? What aspects of a program like this makes it so impactful?
7. How does immersive outdoor education foster a sense of joy?
8. How long do you interact with the same group of students?
9. Are there any characteristics of the population that you work with? What are some qualities of this population that stand out to you?
10. What are some activities that you do with your students that you notice the most significant amount of change/development?
11. What does being comfortable in nature do for students? What do they bring back to their home life? Any leadership development, community building, etc.?
12. What are some changes that you notice within your students as you progress through the program?
13. Tell me about the development that you witness in your students throughout the timeline of your program?
14. Do you think that there is necessary psychological, emotional, and cognitive development that is fostered in your students? Why?
15. Does immersive outdoor education provide an enhanced predictability of environmental stewardship or sustainable behavior?