

The Voice of Hong Kong Students at the University Level in Canada, Regarding Outdoor
Experiences and Cultural Adaptation

by

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BSc, Sports Science (Outdoor Activities), Bangor University, 2011

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of

MASTERS OF ARTS

in the School of Exercise Science, Physical and Health Education

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Abstract

The purpose of this study was to explore the lived experiences of Hong Kong students regarding their experiential encounters and interactions in the natural environment on Vancouver Island and attempt to discover what impact these experiences had on their process of adapting to a new culture. Three participants took part in an unstructured interview session where they shared their personal outdoor stories spanning their life in Hong Kong and in Canada. This was joined with a photo elicitation task to help recall and gain further in-depth insights into their outdoor narratives. The transcripts that resulted, were analysed using inquiry justifications, personal, practical and social (Lindsay & Schwind, 2016). The resulting themes were cultural adaption through socialization, exploration and stability, experiences in nature and access to nature. This study contributes the unique voice of students from Hong Kong and their experiences with nature in Canada and how it has affected their cultural adaption.

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Chapter 1 - Introduction

Students who travel to Canada to engage in higher education originate from a wide variety of destinations; both national and international (Camosun, 2015; University of Victoria, 2014). These students come from vastly diverse cultures and upbringings and have varying views towards participation in outdoor education and recreation. My past experiences as a guide, coach and outdoor facilitator have continually engaged me with natural environments and embedded a love and respect for nature, in multiple areas around the globe. My current educational experiences in a higher educational institute as a graduate student and as a teaching assistant, introduced me to a host of many students whose demographic ranged from high school students to mature graduate students, from Canada, Asia, the Middle East and South America. I began to think about my interest in participation in physical activity in green environments. I also wondered about the outdoor leisure and recreation choices of the global student community around me. These connections, coupled with my background working as an outdoor educator in Hong Kong, led me to the decision to connect with international students, specifically from Hong Kong. I wanted to explore their relationship to outdoor education experiences. I was interested to find out the significance it might hold for them in their process of adapting to a different culture.

Beames and Brown (2005), suggest that students from Hong Kong have experienced a different culture, climate and topography to Canada. They may have differing outlooks in prioritizing outdoor environments as a recreation or leisure tool compared to students in other countries, even though Hong Kong has a well established national park system, with good urban-nature proximity and access to “over 40% of Hong Kong [that] is designated government parkland” (Chan, Yuen, Duan, & Marafa, 2018, p. 69). Challenges such as hot weather, monsoons, typhoons, and hillside fires prevent some people from adventuring in the outdoors in

Hong Kong. The strong focus on academic achievement and an expectation of the younger generation to be financially secure has been suggested as a reason that has prevented young people living in Hong Kong (Beames & Brown, 2005) and international students arriving in Canada from connecting with outdoor physical spaces.

Historically, in Hong Kong outdoor education has been encouraged and integrated through multiple organizations. These include the Scout and Girl Guide programs, designed for personal development; the Hong Kong Playground Association, working with disadvantaged youth; the Boys and Girls Clubs Association, founded to promote physical and mental development for young people and Outward Bound Hong Kong, which focuses on the use of adventure education and experiential learning. A number of these organizations stemmed from outside cultural influences, such as the British System of outdoor education (Beames & Brown, 2005). They report on how outdoor education was interwoven into the Hong Kong schools' program but were eventually deemed as not experiential in nature but just activity focused (Beames & Brown, 2005). This focus has not developed much further since 2005. Presently outdoor education in Hong Kong, within the school system, is not highly valued and is only attributed to the curriculum through other subjects (Cheng & Lee, 2015). There seems to be a very different outlook towards outdoor education in Hong Kong now, in comparison to the past vast number of organizations facilitating important beneficial programs.

Traditionally, humanity has had an undulating relationship with nature (Louv, 2008; Soga & Gaston, 2016). Previous research indicates numerous reasons for this: from population movement and increase in urban dwelling, to a reduction in access to green spaces, to technological advancements and cultural shifts (Maller et al., 2006; Shultis & More, 2011; Ward Thompson et al., 2008).

Outdoor experiences can also be difficult to define. One interpretation describes the educational aspect as “an experiential process of learning by doing, which takes place primarily through exposure to the out-of-doors” (Priest, 1986, p.13). Keeping this in mind, it is important to differentiate between a nature experience – movement into a natural place or engagement with a natural feature in a built environment (Hartig, 1993), and a natural environment; an environment with little or no evidence of human presence or intervention (Hartig et al., 2014). These two concepts might cast a very different light onto our personal definitions of interacting with nature.

Active participation in outdoor recreation and education has been shown to be beneficial in multiple capacities, such as physical health (Sharma-Brymer & Bland, 2016), mental health (Clough et al., 2016) and overall well-being (Chawla, 2015; Maller et al., 2006).

Gruno and Gibbons (2020), report that nature-based physical activity fosters participation in life-long physical activity. Sharma-Brymer and Bland (2016), state that the emphasis of physical benefits of outdoor activities has resulted in some schools in the United Kingdom (UK) introducing programs such as Change4Life and Forest School programs. Outdoor education experiences are becoming better understood from a clinical standpoint too, due to researchers who are studying the effects of Shinrin-yoku – taking in the forest environment or “forest bathing”. Research proposes that Shinrin-yoku can lower blood pressure and levels of stress hormones, and induces relaxation (Ideno et al., 2017; Payne & Delphinus, 2018).

Clough et al. (2016) suggest that natural outdoor environments where adventurous physical activity often occurs “should be considered a mainstream intervention for positive mental health” (p. 953). There is also support for improvements in our psychological state after forest walking in laboratory conditions (Koselka et al., 2019), as well as out in natural

environments (de Brito et al., 2019). With regard to overall well-being, outdoor activity can initiate both seemingly innocuous interactions such as shared encounters with others and result in powerful experiences such as generating lifelong community connections that have profound positive impacts on an individual (Breunig et al., 2010). It also promotes resilience, personal development and social improvements (Hayhurst, et al., 2015).

The struggle to experience nature is apparent in a cross-cultural context, as various countries and cultures have differing definitions of what a recreation or leisure activity is. In Canada, recreation experts suggest that the definition of recreation is to encapsulate “the experience that results from freely chosen participation in physical, social, intellectual, creative and spiritual pursuits, that enhance individual and community wellbeing” (Recreation Council, 2015, p.8).

Between certain cultures, the term leisure or leisure time can have many meanings. In English, the word has its beginnings in freedom, whereas in Chinese it was born out of rest (Walker & Wang, 2009). The generally accepted western definition is “an un-coerced, contextually framed activity, pursued in free time and certain kinds of work, which people want to do and undertake in a satisfying or fulfilling manner” (Stebbins, 2020, p.38). This is reflected in Freysinger and Chen’s (1993) research showing 37% of the frequently reported leisure activities in mainland China were relaxation based (watching TV or reading). This perceived difference in meaning, not just between the words recreation and leisure but within leisure itself, could seem to reduce participation for certain populations as it depends which lens you view the research through (Walker & Wang, 2009).

Context must also be applied for each personal case, as choice of engagement in outdoor activities relies on individual circumstances; for example what financial limitations someone

might have and how much time a person has to recreate (Stodolska, Shinew, & Camarillo, 2020). Context also needs to be applied regarding a person's interpretation of what outdoor recreation or leisure is and what past experiences they have in recreating or enjoying time in nature (Walker & Wang, 2009).

Di (2018) showed the potential for outdoor education with the role it may play in the acculturation process. Fabrizio and Neill (2005) have theorized that constructs for outdoor education and cultural adaptation overlap. They talk about attitudes and skills regarding participation in nature experiences and the development of resilience. They also describe how the process of adjusting to a new environment could help develop coping mechanisms towards one's participation in the nature experience.

The Use of the Term 'Acculturation'

Throughout the thesis, the term 'acculturation' will be used in relation to international students and their outdoor experiences. According to Sam and Berry (2010 p.1), "one of the major sources of the development and display of human behaviour is the contact between cultural populations". With Johnson (2011), adding, "acculturation is the exchange of cultural features that results when groups of individuals having different cultures come into continuous first hand contact" continuing with "the original cultural patterns of either or both groups may be altered." (p.1). It is important to note that the term acculturation can have negative connotations regarding one of its associated pathways, assimilation, which is one of four acculturation pathways; integration, separation and marginalization are the others (Sam & Berry, 2010). There are discrepancies in the connotations of the concept, however I will be using the above representations to view this research and will focus on the "distinct groups, immigrants, refugees and ethno-cultural groups over Indigenous peoples" (Berry, 2019, p.34).

Recent Canadian revelations have reinvigorated these potential discrepancies and I acknowledge that the word ‘acculturation’ can have significant historical and cultural weight attached to the use of the term (Berry, 2019). This research will be viewing the process of transitioning from one culture to another through the eyes of the individuals that have taken that journey. I will use the terms acculturation and integration sparingly and with care. This is with the knowledge of the Truth and Reconciliation Commission of Canada: Calls to Action report (2015) and recent discoveries of unmarked graves sites at many Canadian residential schools where young Indigenous children were sent to attend school (BBC News, 2021; Dickson & Watson, 2021; Migdal, 2021). The Canadian Indigenous populations are in the forefront of my thoughts. This is supported by the work the University of Victoria is doing, to right the wrongs of the past (Hall, 2021), coupled with the commitment of the federal government as seen in the Truth and Reconciliation Commission of Canada: Calls To Action report, (2015).

Rationale

An extensive literature review has shown two main gaps in the academic literature relating to my study. First, there are very few studies exploring the lived experiences of Hong Kong students regarding their experiential encounters and interactions in the natural environment in Canada and the impact of these interactions on their process of adapting to a new culture. Secondly, the specific benefits of nature-based activities and experiences for Hong Kong students studying in Canada - either long term (lived here before they became a university student) or short term (came here specifically to study) are not articulated in the current research. Exploring how international university students, specifically students from Hong Kong, interact with nature in Canada, might assist with their social integration, physical health, mental wellness, and continual interactions with nature. An in-depth understanding of their experiences

might inspire future participation of Hong Kong students in outdoor experiences or nature-based activities.

Purpose of the Study

The purpose of this study was to explore the lived experiences of Hong Kong students regarding their experiential encounters and interactions in the natural environment on Vancouver Island and attempt to discover what impact these experiences had on the process of adapting to a new culture.

This study focused on both positive and negative experiences the participants had while participating in or interacting with nature when in their home region in Hong Kong. It also focused on how they interacted with the outdoors since their arrival in Canada, specifically on Vancouver Island. Qualitative research methods including unstructured interviews, narrative inquiry analysis and photo elicitation methods were used to gain a deeper insight into this demographic and how the outdoors influenced them. The nature based experiences discussed by the participants were defined by the participants, not imposed by the researcher.

Primary Research Question

What is the lived experience of current international students from Hong Kong relating to nature-based encounters on Vancouver Island?

Secondary Research Question

How does growing up in a Hong Kong culture influence current participation in nature-based encounters and adaptation with Canadian culture?

Operational Definitions

Acculturation: is “the exchange of cultural features that results when groups of individuals having different cultures come into continuous first hand contact” (Johnson, 2011, p.1).

Canadian Resident: “a matter of the degree to which a person in mind and fact settles into or maintains or centralizes his ordinary mode of living with its accessories in social relations, interests and conveniences at or in the place in question” (Canada Revenue Agency, 2016)

Cultural Adaptation: is a “process of adjustment in which daily experiences and individual, familial and community factors influence the quality of life of diverse immigrants” (Castro & Murray, 2010, p.375).

Experiential Learning: A collaborative ‘active learning style’ that encompasses learner-centered sharing of ideas, cooperation and discovery (Beames & Brown, 2005).

International Student: “Non-Canadian students who do not have “permanent resident” status and have had to obtain the authorization of the Canadian government to enter Canada with the intention of pursuing an education” (Statistics Canada, 2010, p. 1). For the purpose of this paper, this definition will include those likely to be in the country on a non-permanent basis.

Leisure: an “uncoerced, contextually framed activity, pursued in free time and certain kinds of work, which people want to do and undertake in a satisfying or fulfilling manner” (Stebbins, 2020, p.38).

Recreation: an “experience that results from freely chosen participation in physical, social, intellectual, creative and spiritual pursuits, that enhance individual and community wellbeing” (Recreation Council, 2015, p.8).

Natural Environment: an environment with little or no evidence of human presence or intervention (Hartig et al., 2014).

Nature Experience: movement into a natural place or engagement with a natural feature in a built environment (Hartig, 1993).

Outdoor Education: an experiential process of learning by doing, which takes place primarily through exposure to the out-of-doors (Priest, 1986).

Chapter 2 – Review of the Literature

General Introduction

The literature review will explore, in depth, the impact outdoor education can have on an individual's physical and psychological well-being, the participation rates of those engaging in outdoor pursuits, what constraints are prominent, and how demographics, specifically Hong Kong International students could benefit from outdoor activity.

The Positive Human Reactions to Nature

In this section both the physical and psychological benefits of nature are presented. Exposure to nature can have many effects; some overlooked elements include improved air quality in green spaces (Hartig et al., 2014). Studies have also shown there is an increase in physical activity when children participate in “outdoor unstructured free play” (McCurdy et al., 2010, p.113) which can improve overall physical health (Canadian Society for Exercise Physiology, 2011). Cleland et al. (2008) and Ewert and Yoshino (2011) suggest that an increase in outdoor-based physical activity could play a role in the reduction of chronic illnesses caused by being overweight or obese. Frumkin et al. (2017) contributed to this evidence by, outlining 20 different areas of health and well-being that showed evidence of nature contact being beneficial.

There are some specific health benefits that have been linked to activities in the outdoor domain, such as forest bathing (Shinrin-Yoku). Forest bathing is a Japanese “traditional meditative practice described as walking in a forest at a non-tiring pace and pausing along the pathway to rest, do breathing exercises and contemplate the surrounding natural environment” (Antonelli et al., 2021, p.1). A guide or guiding principles are employed to navigate the

experience in regards to safety, but also to produce the best results in relation to benefits (Antonelli et al., 2021).

Ideno et al. (2017) in a systematic review and meta-analysis, found evidence for the preventative compound of walking in the forest or sitting and observing forest environments. Being in nature helped to reduce both systolic and diastolic blood pressure in subjects (ranging in ages between 18 to 80 years old) who participated in a 2-hour forest-bathing event. Their findings show that exposure to nature can have physiological restorative powers in a short time (Ideno et al., 2017). Forest bathing has also been shown to enhance an individual's quality of life that includes both physical and psychological aspects. Antonelli et al. (2021), in an extensive systematic review, suggest that there is evidence of the benefits of forest bathing as an added practice for the promotion of psychophysical well-being for stress and anxiety management.

Historically, research suggests that outdoor adventurous education can have a greater impact on our psychological health than our physiological health (Kaplan & Kaplan, 1989). Mutz and Müller (2016), found evidence for elevated life satisfaction coupled with happiness and increased self-efficacy in university students participating in an eight day wilderness program. Correlating stress against resilience Ewert and Yoshino (2011), found adventurous experiences aided participants in developing the necessary coping mechanisms needed to combat stressors, as they transferred back into everyday life. Outdoor activity not only reduces stress, but allows for self-management, preventing stress from materializing in the first place. This was reflected in Davidson and Ewert's research (2020), directed specifically at outdoor orientation programs and university students, which showed strong social activity and emotional reactivity. This was explained by linking outdoor orientation programs with time to practice dealing with stress while integrating with peers.

More structured adventurous activities on campus has also yielded similar beneficial results, not just to the student but for the institutions themselves (Andre et al., 2017). Recruitment, retention and satisfaction have been seen to improve from an institutional perspective and integration into student life. Lower stress and anxiety has been seen from a student perspective (Andre et al., 2017). The use of university outdoor programming was explored by Chang, Davidson, Conklin, and Ewert (2019), in relation to stress specifically. They found that shorter term programs reduce both physiological symptoms of stress, as well as psychological symptoms (Chang et al., 2019). Active interaction with the natural environment or green space, can see increases in mood and quality of life for students (Holt, Lombard, Best, Smiley-Smith, & Quinn, 2019). Use of green spaces as a young person was also linked with frequent participation as a university student (Holt et al., 2019). Outdoor adventure education has even seen positive impacts in group work and interpersonal skills, in a university setting (Cooley, Burns, & Cumming, 2016; Gargano & Turcotte, 2021). Further linking of outdoor activity benefits to the chosen university demographic will come below in the student section.

The research support discussed above provides evidence for the broad restorative powers that nature-based experiences can have on an individual. However, this is not always the case.

The Negative Human Reactions to Nature

With these positive outcomes, there will always be the potential for the opposite to occur. Research shows the more isolated the outdoor environment, the higher an individual's perceived prospect for danger is; therefore, potentially increasing stress and attention fatigue (Gatersleben & Andrews, 2013). Several factors can act against the beneficial potential of a nature-based experience. These have been described as disorientation and other manifestations of fear (Herzog & Rector, 2009); lack of skill or coping mechanisms for a given task (Weber, 2001); and

negative previous experiences (Kaplan & Kaplan, 1989). These can be caused by the density or extremeness of the environment, such as darkness, poor visibility and tough terrain (Gatersleben & Andrews, 2013). They may not be a lasting or a true representation of an experience but can still be a powerful determinant impacting future participation in outdoor and nature-based activities.

Leisure Constraints Theory

Leisure constraints theory introduces multiple factors limiting potential revellers in both general leisure activities (Crawford & Godbey, 1987; Lyu & Oh, 2015) and outdoor adventure activities (White, 2008). This theory links motivation, factors inhibiting participation, people's ability to mitigate those inhibiting factors, and its overall impact on their ability to partake in activity (Crawford & Godbey, 1987). Self-efficacy to complete an arduous adventurous task, or a potential participant's perception of success at a new or risky activity, can be a barrier to engagement with nature (Doran & Pomfret, 2019; Propst & Koesler, 1998).

According to Jackson (1988), leisure constraints need to be continually negotiated. Perceived self-skill, previous social interactions, anxiety, finance, season, climate, opportunity and time are all examples of both intrapersonal and structural constraints surrounding leisure activities (Crawford & Godbey, 1987). The dimensions of constraining factors have varying importance to individuals. Two elements that have been identified by Guo and Schneider (2015), include financial constraints and social interactions. Finance especially strikes true for those who are curious about involvement with extramural activities, whether that relates to obtaining equipment necessary for participation, paying for parking and camping fees, or just change to get the bus. Secondary factors include time management, as well as having the skills necessary to stay safe (Guo & Schneider, 2015). These remaining factors can also be linked to finances, as

work usually takes precedence over leisure activities. Lack of skills can be navigated through undertaking ability courses or hiring guides.

Jackson et al. (1993), first explored leisure constraints theory by assessing an individual's ability to negotiate potential constraints. They investigated the possibility that participation in leisure activities was not a result of a lack of constraints, but due to an individual's resources to negotiate the constraints (Jackson et al., 1993). Throughout the progression of research in this field, multiple models of constraints negotiation emerged. The models mapped the strength of interaction between participation, negotiation efficacy, and motivation and constraints. These models fuelled Hubbard & Mannell's (2001) research comparing competing models. Their constraint-effects-mitigation model was found to have the most support, theorizing that with constraints comes an increase in negotiation resources applied, which in turn can increase the potential of mitigating constraining factors (Hubbard & Mannell, 2001). More effort or motivation leads to finding solutions to participate. This, however, has not been wholly reproduced and does not receive unanimous support (Schneider & Wynveen, 2015).

Constraints theory has been applied to outdoor specific recreation (Guo & Schneider, 2015; Lovelock et al., 2018; Schneider & Wynveen, 2015; Shores et al., 2007; White, 2008). White's (2008) study found similar results to constraints research from outside the field of outdoor adventure education. This is in the form of constraints negatively impacting involvement in recreation outside. Motivation, related to the desire for fulfilling recreation encounters, had a reasonably strong positive impact on outdoor recreation participation. It was also the most important single predictor of participation (White, 2008). Constraints that are more prominent in outdoor activities have been noted as time, which involves a distance to resources and travel (Walker & Virden, 2005). Motivations of challenge and viewing nature are seen as prominent

reasons to overcome outdoor recreation conflict (Schneider & Wynveen, 2015). Shores et al. (2007), arranged constraints to outdoor activity in a new way, arranging them in a hierarchical manner of age, gender, socioeconomic status and ethnicity. They found that, disregarding time, all other constraints measured were impactful to the elderly, female or minority subjects who were considered to be of a lower socioeconomic background. If the subjects were included in a combination of these populations – for example, female and from a low socioeconomic status, or an older person from an Asian community – then the possibility of constraints was magnified (Shores et al., 2007).

Guo & Schneider (2015) administered a back-translated outdoor recreation tailored questionnaire to Chinese and USA college students. Back-translation, sometimes described as reverse translation, is the practice of converting a previously translated document back to its source language (Protranslate, August 15, 2019). They examined how the students overcame constraints to leisure in outdoor recreation in a cross-cultural format. They used the concept of hierarchy while measuring constraints, looking at issues such as defining language and culture when involved with cross-cultural equivalency. The results did not fit with the structure put forward. Age of participants and the adaption of their measurement from ‘physical activity in an outdoor setting’ to ‘outdoor recreation’ did not translate effectively between cultures (Guo & Schneider, 2015). Their findings leave many unanswered questions regarding the cross-cultural approach to any leisure constraints based outdoor-activity specific model, particularly regarding student-based populations.

Resource availability to ethnic minorities has been the focus for many studies on this topic (Guo & Schneider, 2015; Shores et al., 2007; White, 2008; Winter et al., 2004). Winter et al. (2004) looked at the difference between Asian immigrant sub-groups’ participation resources,

finding large differences depending on the culture and socioeconomic status of the individuals. It is clear that not all people face the same constraints or have the same negotiation resources to overcome constraints.

Several theories have been developed to help explain the difference in outdoor participation between settled dominant demographics and ethnic minorities (Floyd, 1999). Two of them show evidence of opposing reasoning. Ethnicity theory proposes that participants in nature-based activities by ethnic populations, is due to specific values and social norms held in high regard by racial groups (Floyd, 1999). Marginality theory follows the hypothesis that low participation in the realm of outdoor recreation is due to resource access, which would potentially originate from historic discrimination (Aizlewood et al., 2006). Other theories described by Floyd (1999) have relevance as well. Assimilation theory indicates the “acquisition of the dominant cultures characteristics” (Floyd, 1999, p.4). In this context, ethnic minorities would take on the structure of visitation of natural spaces demonstrated by the host culture, resulting in behaviours similar to that culture. The discrimination hypothesis looks at the impact of prejudice as a barrier to engaging in outdoor recreation for minority ethnic groups.

Di (2018) undertook a study concerning the narrative of the outdoor recreation experience of Chinese immigrants in Canada and their use of outdoor recreation introductory programs (ORIP) to navigate constraints. The demographic, of ‘youth still exploring’ showed seeking new experiences, exotic experiences, strength and bonding between others, and self-identity as major benefits (Di, 2018). The attractive elements of ORIP’s to this demographic were easy access, worth the money paid, enjoyable, endorsement from a trusted source, and not acting as an obstacle for independence (Di, 2018). This study shows evidence for ethnicity theory, with a potential link to marginality theory, and suggests that outdoor elements can be

used to negotiate constraints unique to this group that are considered important to the individual. It also reveals that those beneficial resources that help negotiation, apply to the individual as well and the community or family nucleus for Chinese youth in Canada. It does not, however, address the extended regions of the Peoples Republic of China specifically and the effects of shorter-term cultural adaptation processes on outdoor experiences in British Columbia.

The Fall and Rise of Outdoor Activity

There is a widely held belief of a generational decline in time spent involved in outdoor play of young people (Clements, 2004; Louv, 2008). There is data revealing that many young people are not as physically active as the recommended Canadian daily physical activity guidelines suggest they should be (Hallal et al., 2012). The need for young people to engage in physical activity and outdoor play is important to support the reduction of obesity levels and cardiovascular and respiratory disease (Cleland et al., 2008). Regular physical activity assists with the development of fundamental skills and experiences such as inquisitiveness, experimentation with physical literacy, and an appreciation of nature (Rivkin, 2000). These two areas could have commonality. The decline in time spent outdoors participating in outdoor physical activity or play has been attributed to a number of factors such as the rural to urban migration (Maller et al., 2006), There is also a lack of, or reduction in green spaces in many urban environments (Ward Thompson et al., 2008). Low variation in quality, usability, and limited access to outdoor physical activity spaces are other considerations (Dadvand & Nieuwenhuijsen, 2018). In regions where increases in proximity to green areas may be seen (Kessel et al. 2009), the distribution may not consider sociodemographic differences where those in need are lacking the most.

Other contributing factors to limited outdoor interactions include an increase in accessible technologies (Clements, 2004) which divert attention and motivation away from outdoor time, an increase in screen time (Larson et al., 2019), and reduced funding, or uneven funding distribution in national parks between conservation and education (Shultis & More, 2011), which could diminish access and knowledge of reachable outdoor options.

Some of the reasoning behind the variation in perceived park visitation is due to the unaccountability of different space users, whether they are national or international peoples, and how the researchers gathered their data. This coupled with varied methods of information gathering and how visitors have come to use traditional forms of information about green spaces (Jones & Ohsawa, 2016). These include park information centres and park rangers, or access through electronic means such as the internet or park terminals, where use is assumed and not through adjacent private and public land (Cordell, 2012; Crowell, 2019; Jones & Ohsawa, 2016). The evidence that supports Cordell (2012) and Crowell's (2019) findings could have questionable validity, as most of the data tracking forms come from the organizations managing the areas. They could also have financial or political motivations, as suggested in Shultis and More (2011). This, along with the fact that the little evidence found is not peer-reviewed or bound by recognized measures. What we can presume is that participation numbers will vary depending on specific activities and data recorded from those sources. Floyd (2001) suggests that actual numbers of participants will not be reflected if we do not account for areas where population growth is happening and whether or not the majority of the population increase is occurring in demographics primarily visiting monitored outdoor spaces. Examples such as these may influence the numbers of perceived participation (Shultis & More, 2011).

COVID-19 and Participation in Outdoor Activity

On December 31, 2019, the World Health Organization (WHO, 2021) learned about unidentified cases of pneumonia originating in Wuhan City, China. Soon identified as a new strain of coronavirus, it was subsequently labelled the COVID-19 virus. By the beginning of March 2020, the WHO declared COVID-19 as a worldwide pandemic (WHO, 2021). In addition to general COVID-19 pandemic restrictions that limited day-to-day activities, safety guidelines were also put in place governing many aspects of participation in physical activity pursuits. These restrictions may have impacted participation in a variety of ways for both indoor and outdoor physical activities. While COVID-19 recommendations did suggest that being outdoors was a safer option than connecting with people indoors, many national, provincial, and municipal parks were initially closed to the public at the beginning of the pandemic (Landry, Bergstrom, Salazar, & Turner, 2020). As research about COVID-19 restrictions was published, researchers suggested that when managed outdoor areas reopened or partially reopened, visitation levels might be reduced due to the fear of catching or spreading COVID-19. This thought is reflected in Freeman and Eykelbosh's research (2020), which reminds us of the relationship between individual actions and community based actions regarding strategies used to minimize transmission rates. Another reason could include individual methods, such as social distancing and respiratory etiquette, that may have a smaller impact on transmission, whereas closure of managed green spaces, is more effective but could lead to people accessing other less functional or prepared spaces and increase congestion (Flowers, Freeman, & Gladwell, 2018).

While much of the research speaks of community based prevention methods leading to a reduction in outdoor physical activity (Doubleday, Choe, Isaksen, Miles, & Errett, 2021), there is support for outdoor activity increasing during the period of severe community-based

transmission control measures (Schweizer et al., 2021). The reasoning for this was a transition from predominantly indoor organized fitness activities, to using accessible green spaces to perform similar organized physical activity. The difference in comparison between Doubleday et al. (2021) and Schweizer et al. (2021) is that Doubleday et al. (2021) were looking at population as a whole in a longitudinal manner, in all urban areas, whereas Schweizer et al. (2021) were focused on looking at foot traffic in green areas specifically. While the COVID-19 Pandemic has forced constraints on outdoor recreators, due to travel restrictions, people do seem to be engaging with nature but closer to home and less frequently than before (Rice et al., 2020).

Who Participates in Outdoor Physical Activities?

Research shows 90% of visitors to national parks in the US, are white and European, with only 7% being from an ethnic background (Floyd, 2001). With more recent data suggesting things have not changed, with only 5% of visitation from ethnic groups such as Hispanics and Asian Americans and only 2% from African Americans (Scott, Jae, & Lee, 2018). Looking at participation for outdoor recreation for physical activity purposes, inequalities have also been found. Rigby et al. (2020) found a higher level of participation in white demographics, with the benefits of outdoor activity unlikely to equally overlap different social groups (Rigby, Dodd-Reynolds, & Oliver, 2020). Winter et al. (2004), suggests that this could perpetuate the attraction of national park visitation with the same groups, not enticing the faster growing ethnic minority groups who prioritize family and the older generations over other populations. This focus is sometimes due to tightknit family dynamics created through the hardships of living in a different culture (Kwak, 2003; Whiting et al., 2017; Winter et al., 2004).

As well as participation numbers, there are also the cultural priorities and attitudes of minorities towards their leisure activities, which can also affect participation in nature

experiences. Definitions of leisure activities are individualistic and can differ between gender, ethnicity, and individual personality (Barnett, 2006; Walker & Wang, 2009). Walker & Wang (2009), compared Asian and Canadian leisure participants and found a distinct difference in their definitions of leisure. This could lead to a varying pattern of passive to active leisure norms for ethnic populations, who are newer to a different culture (Walker & Wang, 2009). This difference in definition does not always mean that these groups participate less; rather, they use the available resources differently to gain varied outcomes. For example, the Latino community using Georgia State parks in the USA state their primary goal is for social interactions (Whiting et al., 2017).

The initial data in this section suggests a decline in outdoor engagement for recreational purposes and visitation to green spaces is down. However, the questions being asked may not reflect the actual level of engagement, nor the reasons behind using natural areas for leisure purposes.

Hong Kong, Canada and the Outdoors

Despite the image that sometimes comes to mind when people think of Hong Kong a densely populated urban city-scape and the hub of international commerce and investment, 40 percent of the land mass is designated as government parkland (Jim, 1987). There are mountains and arable shrubland with over 230 islands in the region. With this land distribution, comes a high density population, and a tropical climate, which boasts high temperatures in the summer and the potential for major disruptions with flooding due to typhoons and monsoons during the winter. Adding in bush fires and pollution warnings (Hong Kong Observatory, 2020), the window for residents to make the most out of their outdoor landscape can be narrow. Hong Kong also has high economic and housing costs, which puts pressure on young inhabitants to

concentrate on academics, to ensure higher salaries in adulthood to sustain a Hong Kong lifestyle. There is also an expectation of the young to look after the older family members so priorities can shift from enjoying outdoor activity opportunities to career and family responsibilities (Beames & Brown, 2005; Sibthorp et al., 2018).

However, these potential drawbacks did not stop the growth of western agencies such as the Boy Scout movement, the Duke of Edinburgh initiative and Outward Bound to be stalwarts in a region with rich history and many outdoor and recreational organizations throughout Hong Kong (Scout Association of Hong Kong, 2020). There does exist a culture of promoting experiential learning in this region, but it has struggled, as some of these guiding principles do not match with Chinese cultural norms (Beames & Brown, 2005; Lo et al., 2014; Sibthorp et al., 2018). Sibthorp et al. (2018), does not provide a definitive answer about the level of experiential learning and the gaining of natural experiences, but does remind us that experiential education and outdoor learning are centred on the individual.

When some people think of Canada, they imagine mountains, forests and lakes. These topographical landscapes can be hubs of outdoor recreation (Kariel & Draper, 1992). Canada has the second largest land mass in the world and a relatively low population in comparison to its size, leaving a large amount of sparsely populated areas full of the above geophysical features (Potter & Henderson, 2004). Additionally, Indigenous Peoples have contributed to accessibility of their homeland not just in physical ways with outdoor transit (canoe and snowshoe) and shelter styles and technologies, but spiritual linkages to the landscape that are uniquely theirs (Potter & Henderson, 2004).

The Pacific Northwest and the west coast of British Columbia have a similar prioritization of environmental goals (Alper, 2009). Within Canada, British Columbia

specifically shows a higher number of individuals with a connectedness to nature, ecological citizenship, and natural place attachment (Perks, 2017; Scannell & Gifford, 2010). Furthermore, Vancouver Island is thought of as a nature-abundant destination, with a density of old growth forests, mountains, lakes and oceans (Watkins, 2019).

Acculturation

Acculturation refers to the cultural change involved in adapting to a new context, different to that of a home culture as a result of migration (Berry, 1997). Acculturation theory describes four different ways of mixing with a new society: cultural assimilation, cultural integration, cultural separation and cultural marginalization (Berry, 1997; Berry & Hou, 2016). Berry and Hou (2016), emphasize how cultural integration can take place with the least amount of stress. It has been seen that nature-based recreation can help cultural integration (Hurly, 2015) and can help cultural adaptation (Fabrizio & Neil, 2005).

Acculturation theory's integration pathway has been shown to be the least stressful method of achieving a level of acculturation (Berry 1997). The cultural integration pathway uses a shared responsibility between the host society and the migrant as a foundation, both elements adapting in response to each other (Lovelock et al., 2011). Canada favours integration, encouraging a balance of home culture and new culture, which encourages participation in new broader cultural integration and maintenance of heritage culture. It is the use of integration over assimilation theories that allow for a lower stress acculturation and better overall integration (Hurly, 2015).

More recently 'selective acculturation' looks to expand on the acculturation process by focusing on different behaviour between public cultural interaction and private family realms (Lo, Gidlow, & Cushman, 2014). Lo, Gidlow and Cushman (2014) found this to be in line with

their findings regarding parents' encouragement of participation in adventure education programs, compared with more traditional expectations of behaviour at home.

Cultural Adaptation

Looking closer at the relationship between acculturation and cultural adaptation, it has been proposed that adaptation to the culture follows the acculturation process, therefore adaptation becomes a result of acculturation (Sam & Berry, 2010). With outdoor educational programs, a new micro culture with-in the domain of the outdoor program is created and this transfers to the social aspects within the group undertaking the experience. These new micro cultures within an experience require adaptation but on a smaller scale. Like cross-cultural adaptation it can be evolutionary in nature, changing throughout the course outdoor program (Fabrizio & Neill, 2005).

The Transition into a Student

Early university experiences can be seen to be an opportunity to re-invent oneself. The stresses involved in this transition, from leaving home to establishing yourself at university, can vary, from independent functionality (cooking and caring for yourself) and fostering relationships both new and old, to the academic playing field and changes in internal and external expectations such as, predicted and past grades (Parker et al., 2004). The formation of a community is an important aspect for new students. Experiencing a sense of community can be key to creating a support network when faced with independency for the first time. Breunig et al. (2010) have shown the positive impact outdoor pursuits can have on the short-term formation of a sense of community. The opportunity to access both athletic orientation programs and outdoor orientation programs at the university level is also a way to cultivate this community feeling (Hill et al., 2018). Hill et al. (2008) found that outdoor orientation programming facilitated the

creation of community as a result of participation, and the activities stimulated the growth of relationships and well-being.

In the literature review, it became apparent that one group in particular has historically struggled to integrate - the international student. They have more transitional elements to deal with than students coming to a collegiate environment within their own country or culture (Ramsay, Jones, & Barker, 2006; Zhou, Zhang, & Stodolska, 2018). Zhou et al. (2018), considered these additional cultural adaptation elements to include language, differing cultures, food, social norms, and integration. Ramsay et al. (2006), found that foreign students perceived that they had adapted less or slower than domestic or local students.

Research showing the use of ‘serious leisure pursuits’ (Lee et al., 2018) to aid in the cultural adaptation process of international students to collegiate life has shown a definite connection between the function of leisure activities in overcoming a lack in social support networks and cultural inconsistencies between the home nation and host nation. Successful adjustment to a new educational and cultural environment, along with participation in serious leisure pursuits, were found to be linked to fun and enjoyment, especially when longevity of the activity was concerned (Lee et al., 2018). This highlights the need for opportunities to engage in activities such as this, to ensure benefits for international students.

Throughout the literature review I identified barriers restricting certain demographics’ participation in leisure activities, specifically those in the outdoors. I was able to find research support that suggests there are tools such as displacement, resources, motivations, and outdoor capacity that do exist to overcome barriers that are prevalent. There was very little research related to students from China’s special administrative region of Hong Kong, and in particular,

their experiences relating to nature and the outdoors. The following methods chapter will describe my research process.

Chapter 3 - Methodology

The review of the literature led me to two questions: 1) What is the lived experience of current international students from Hong Kong relating to nature-based encounters and outdoor activity on Vancouver Island; and 2) How does growing up with the Hong Kong culture influence current participation in outdoor experiential opportunities and integration with Canadian culture?

As I open this chapter, I want to acknowledge the reasons for engaging in this research subject matter. The selection of this topic area and population seemed natural to me because they were both inextricably linked to my working life as an outdoor activity instructor. I have always had an attraction to the outdoors. My education and life experiences have led me down this path. I have spent the past 10 years working in the outdoor industry. Half of that time was with United World Colleges (UWC).

During my tenure with UWC, Atlantic College located in Wales, I gained a wealth of outdoor and life experiences as I was encouraged to take on more leadership responsibilities each year. I had the opportunity to introduce students from around the world to outdoor adventure environments. I appreciated the interactions the position afforded me as it gave me the ability to develop my interpersonal skills and build my own cultural competency within an international agency. Beginning this work, I discovered that the college was fortunate to attract some students who wanted to continue their outdoor skill development, initially learned in their native countries. In addition to students who attended the college and had previous outdoor experience, some students wanted to start their personal outdoor experience journey, as they had never had the opportunity before. Additionally, some did not wish to continue outdoor practices that they

had participated in their own country, and those who had never joined in sporting activities and did not wish to start.

All new students were required to attend a weeklong camp, which acted as an introduction to the philosophies and mission of the school. UWC's mission followed the guiding principles of their founder, educationalist Kurt Hahn, who was instrumental in propounding the importance of experiential learning through the outdoors to the development of intellectual ability (UWC Atlantic, n.d). Due to the orientation week, the majority of students were excited to learn more about outdoor adventure education, which allowed for a blossoming of friendships, knowledge and skill within the student body. It also created an opportunity to develop skills, knowledge and a philosophy of my own: when framed and facilitated well, outdoor education and nature-based experiences can have limitless benefits to anyone and everyone.

Asia Pacific Adventure (APA), based in Hong Kong is a leading experiential education provider, where I also worked for a number of years, provided a tangential view on this philosophy of mine. It presented a more commercial perspective of nature-based experiences. The larger proportion of participants either had past experience in outdoor adventure education but had no interest in participating in the program or had not had experience at all and had no interest in participating. This was due to the clientele that APA predominantly worked with; prestigious, private, international schools where participation in the outdoor education curriculum was mandatory. Students were been enrolled due to rigorous academic programs, but the schools also included experiential elements as part of their curriculum. This launched my thinking on how different approaches to nature-based activity might impact people.

Cultural differences did not seem to be the reason for why participants did or did not embrace the opportunity to experience outdoor recreation adventure programs. Both establishments were international agencies. The UWC attracted students from around the world. The primary clients at APA were from Hong Kong international schools. Other questions started to form as to why such prevalent differences existed. For me personally, my working career has been more than just a job: it has been a carrier of meaning within my life. It has helped me develop a set of guiding principles, which in turn helped me construct a personal development path that created continuity and order (Carlsen, 1988).

Research Bias

When undertaking qualitative research of a historical or reflective and personal nature it is important for a researcher to confront their own biases (Janak, 2018). The use of bracketing can be used to assist in this process and provides some insight into a self-interview process (Tufford & Newman, 2012). In qualitative research bracketing is used “to mitigate the potentially deleterious effects of unacknowledged preconceptions related to the research” (Tufford & Newman, 2012, p.81). Tufford & Newman (2012) have also said there are many ways to bracket, and one specific method has not come to the forefront. It has also been suggested that narrative inquirers bracket themselves into an inquiry instead of out of an inquiry, solidifying the co-participant stance (Li, 2011). This method does seem important to consider when interacting with participants and prompting during the interview process.

In learning more about the differences and similarities between bracketing and bridling I was able to explore my own story, which allowed for space for both internal and external beliefs to be identified. I was also reminded to continually reflect on a journey of self-discovery along with my participants (Janak, 2018).

At this point, I acknowledge that as the researcher, I was one of the tools used as a method of interpretation. The lens through which the researcher views the participants' narrative is important (Creswell et al., 2007) and the process needs to be seen as an inquiry *with the participant and not on the participant* (Larson, 1997). Stories traditionally pass between friends, and the process of narrative inquiry, described in the next section, required close collaboration with the participants. This in itself could bring about potential bias in the results. The re-storying can be difficult to escape from for both participant and researcher (Sinclair Bell, 2002). I understood the necessity of learning about a variety of research methods prior to beginning my study. I also recognized that it would be important to ask for assistance of my supervisory committee throughout my graduate student journey. They reassured me they would provide objective perspectives and make suggestions with regard to a research framework to follow. The use of bridling did help me to navigate the data collection and analysis process which resulted in making sure that themes could be scrutinized and reflected upon as they evolved (Janak, 2018). It also helped me not jump to conclusions too speedily and step back to see the broader picture of the narrative (Janak 2018). It prevents the researcher from disseminating meaning too hastily from the shared narratives (Janak, 2018).

Narrative Inquiry

I chose a qualitative method approach for my research, that of narrative inquiry (Clandinin & Caine, 2013). Narrative inquiry is an account of a series of actions or events that can be organized or connected and put into a chronological setting (Czarniawska, 2004). The purpose of using narrative inquiry allows for a deeper and wider study of chosen area. It is also holistic in nature (Clandinin & Connelly, 2000; Dewey, 1938). The ontological classification of

experience is key to narrative inquiry (Clandinin & Rosiek, 2019), as Clandinin and Connelly (2000) say, “narrative inquiry is a way of understanding experience” (p.20).

The narrative paradigm focuses on the idea that the entirety of significant human communications are found in stories and assists in the explanation of how intricate information can be absorbed and understood by people (Fisher, 1985). To this end, narrative inquiry was the most appropriate approach to draw out the experiential stories that have occurred over time (Creswell et al., 2007). Human stories and descriptions add meaning to experiences, evolving those experience in regards to value, substance, and continuity (Clandinin & Rosiek, 2019). It is important to keep in mind that the narratives are reflections of important personal and social incidences, however they are not the incidences themselves (Clandinin & Rosiek, 2019)

The narrative in this study are the experiences of the participants regarding significant interactions with nature. Their narratives serve to connect the meaning of those lived experiences chronologically. I acknowledged the interwoven nature of my story and the participants’ narratives as further insight was gained. I became a co-participant in this study, alongside the participants, as they shared their narratives, to better understand the phenomenon (Lindsay & Schwind, 2016).

The foundation that this research was constructed on was that every experience told of future experiences. These experiences were continuous, dynamic and if reviewed purposefully could be educational, (Clandinin & Connelly, 2000; Lindsay & Schwind, 2016).

The participants’ stories are re-storied (Ollerenshaw & Creswell, 2002), focusing on the individual’s experiences using a three-dimensional inquiry – space approach. This consists of interactors, both personal and social, continuity and situational dimensions (Ollerenshaw & Creswell, 2002). An additional dimension to Ollerenshaw and Creswell’s (2002) model consists

of deconstructing the stories, a process of unmaking them to further explore disruptions and contradictions (Czarniawska, 2004). To uphold the above collaborative element of this process and to continually validate the researcher as the tool, constant communication was upheld. Active collaboration can also be potentially useful to participants as well as research and further interweave of the researcher's personal narrative (Clandinin & Connelly, 2000).

Photo-Elicitation

I am using photography to support the narrative inquiry. It has been suggested that the pictures provided by participants have little consequence by themselves but need the participants to help give meaning to them (Collier & Collier, 1986). According to Thomas (2009), "there are as many ways to interpret a photograph as there are researchers using auto-photography" (p.7). This underlines the unstructured nature of the genre. Photo-elicitation is defined as a way to "encourage talk, invoke memory and elicit accounts from participants in the course of an interview" (Sparkes & Smith 2014, p.98). I have used it as a tool to aid in the reflective process. I also used the framework put forward by Sparks and Smith (2014) to structure my analysis, drawing from both image and text, in the form of photographs and labels, as well as transcripts from interviews, sharing the participants' voices. Additionally, I have included a representation of a selection of images for the reading audience to draw out their own thoughts unadulterated by the researcher (Phoenix, 2010). Thomas (2009) suggests the researcher codify the images and text into themes and analyzing the frequency that the themes occur. Both researcher codifying and photographer codifying has precedent when using auto-photography (Noland, 2006). I believe that researcher codifying has a high probability to introduce personal bias and the potential for informants' voices being altered to fit the researcher's goals. To include more of the participants' voices, I used photo-elicitation in an interview format, to which assisted the

transformation of the participant into an assistant to the research, with back-and-forth communication (Collier & Collier, 1986).

I asked the participants to take or find three photographs using their personal camera, mobile phones or images from an open copyright source. If they did not have access to this equipment, they would be provided with it. The three photos were to depict one scene or object that, in their understanding, broadly encapsulated nature; one that specifically represented their current and past experiences that helped them feel at home in a new environment; and a final photograph that captured their aspirations or future goals regarding their engagement with nature-based activities in Canada. If the participants chose to include photographs, which included their personal images, they were asked to complete a photo-release form. (See Appendix A) If the photographs they took included images of other individuals with identifying discerning features, they were also asked to complete the photo release form (See Appendix A). However, none of the participants included images containing the depiction of anyone other than themselves. This process was optional for the participants as an aid to recall and engaging the participant as much as possible in the narrative, one participant, Peter chose not to participate.

An Introduction to the Participants

The participants involved in this study comprise of two international university students and one international college student, attending academic institutions on Vancouver Island. They have spent the majority of their childhood living in Hong Kong, Special Administrative Region. The number of participants determined as a minimum were two individuals (male and female). An additional participant was interviewed as a way of working towards data saturation (Fusch & Ness, 2015). Data saturation is defined as having enough data to replicate the study, or no new additional information will be gained by interviewing participants (Fusch & Ness, 2015).

Although the goal is not to hear all there is to hear on the subject matter. The students were enrolled at their respective academic institution for a minimum of six months and had lived in Canada for a number of years. This allowed for the maximization of selective acculturation to take place (Lo et al., 2014), leisure norms to develop, and an understanding of the microculture of Vancouver Island to form. The number of international students in British Columbia have been predicted to rise, with South Korea, China and Japan being the top three countries international students have arrived from, into the K-12 system (British Columbia Ministry of Education, 2012). The expansion of recruitment to other local Southern Vancouver Island institutions started in early January 2021, due too little to no interested in participation through initial recruitment channels. The international office at Camosun College was contacted, and the ethics process was started at this institution.

These participants did fall into the category of ‘have participated in significant nature experiences and wish to participate again’. I understood that this limited the potential number of students who might be available to participate in my study, but this was the demographic that I wanted to focus on.

Recruitment Process

I used a variety of methods to access the sample needed. The primary method included creating advertisements in the form of posters and e-posters, coupled with approaching academic institutions that might be able to aid in advertisement, such as Student Intake Services (SIS), International Student’s Society (ISS), and Graduate Student’s Society (GSS). These university services and general campus departmental notice boards have a reasonable reach. The secondary method was snowball sampling reach this demographic, via word of mouth with the initial participant acting as a seed, recruiting a further participant or participants (Etikan, Alkassim, &

Abubakar, 2015). This was a secondary recruitment method, as some interest needed to be generated before this method was initialized. The advantage of snowball sampling is to get access to many individuals from this demographic. The disadvantage of using this as a secondary method is that possible participants may not fit within the nature experiences categories that I set out as a criteria for participating in the study. My outdoor education experience in Hong Kong was mentioned in the recruitment material. I hoped that this information would inform potential participants about my understanding of the culture and history of the region. I also hoped that potential participants would understand that I possessed the ability to understand, geographically, some of the outdoor resources that were available, including regional and national parks, transport networks, and other infrastructural elements.

Data Collection Procedure

Human ethics approval was obtained from the University of Victoria Human Research Ethics Board and by the Camosun College Research Ethics Board (see Appendix B & C) before recruitment began. Once a participant identified their willingness to engage with the process, there are two major contact periods within the timeline.

First contact was an electronic mail sent to the prospective participant (see Appendix D). This included a number of short questions concerning a participant's background, nationality and experience in the outdoors, solidifying their appropriateness to the inclusion criteria. Potential participants were asked about their availability to determine an appropriate interview time slot. Further connection with the participant was organized if clarification about any of the short questions asked was needed. Once the questions were answered and their appropriateness for inclusion in the study was determined, participants were invited to an interview via a second email detailing a time, date and location to suit both the participant and the interviewer. The

email communication included instructions for the photo elicitation task (see Appendix E). Any resulting questions were answered, and further instructions were shared asking the participants to email a signed copy of the consent form before the interview (an example of the consent form can be found in Appendix F).

Second contact involved an in-depth, virtual interview process, conducted using the software Zoom (Zoom Video Communications, Inc. 2020). This revolved around the participant's outdoor personal narratives and photos from the photo elicitation task. This was recorded with multiple Dictaphones and via Zoom's record function, so that analysis and transcription of the interviews could be completed at a later date. The interview had as little structure as possible to allow the narrative to flow naturally (Clandinin & Connelly, 2000; Creswell et al., 2007). If needed prompting questions were asked (Appendix G), and a timeline activity to assist recollection and chronology was applied. This involved participants creating a visual representation of their history of nature-based interactions, labeling both prominent positive and negative events (Guenet, 1999).

Data Analysis

Once interviews were completed, immediate anonymization of the data under a pseudonym occurred. After each interview transcription of the audio file began, analysis and collection taking place concurrently. The transcript was created by using a video recording device, uploaded as a private video to the video-sharing platform YouTube. This platform automatically generates a transcript, which can then be extracted (Hopper, Fu, Sanford, & Hinkel, 2021). Once the raw transcript is transferred to a working document, it is formatted to reflect who was speaking, repeated words are removed, and some punctuation added. With the resulting transcript, I have reviewed the categories and themes discussed, which allowed me to

start a visual narrative analysis (Sparks & Smith, 2014) of the images and descriptions, and the discussion material from the semi-structured interview. Multiple reviews, included listening, watching and reading of the field text were completed before returning the document to the interviewee for additional review for accuracy and additions (Lindsay & Schwind, 2016). This created the research text, which was then analyzed using the three levels of justification: personal, practical and social (Lindsay & Schwind, 2016).

The first level of analysis is personal justification. This is the revising, reading, listening, and watching participants' stories phase. It is the time where the researcher considers personal assessments or observations of the collected data. The second level of analysis is practical justification. This is when the researcher determines the themes that emerged within the participants' stories. This is also the time where the researcher becomes sensitive to the discerning patterns that threads throughout the themes. The third level is social justification. This is encompassing what the researcher has found and then shares back with the participants before revealing the findings of the significance of the study in the real world (Lindsay & Schwind, 2016). During the analysis phase I chose instead to use another lens on which to view the results – that of bridling. This concept “examines how a researcher’s assumptions and preunderstanding guide the research by tightening and slackening the development of their intentional relationship with the world” (Janak, 2018, p.91).

The final thesis shares a chronological narrative that reflects the lived experiences of the participants' interaction with outdoor activities and nature as closely as possible. The narrative allows for variations in experience to be identified both pre visitation of Canada compared to current activity habits. The identification of natural experiences occurs through an evolutionary

process with multiple small or seemingly insignificant events shaping behaviour, or revolutionary events that drastically changed the direction of participation.

Assumptions & Limitations

As with any research methodology, there are assumptions and limitations that must be considered when collecting and analyzing data. One assumption was that participants would tell the truth and would be able to verbalize their experiences accurately. Recall bias, is where the participants share information about their experience in a past behaviour or event where the memory may be distorted (Smith & Phoenix, 2019). This could be another limitation, but this is a matter of researcher opinion with some researchers saying a miss-remembered story is part of being human (Smith & Phoenix, 2019). Due to the reflective nature of the interviews and the amount of time since the experience occurred, participants may not correctly or completely recall their memory of their experiences. However, this bias or truth may be partially mitigated as the focus of the photo-elicitation and interview process was on the stories shared as a whole and its effect over small, individual facts, which provided more profound and genuine insights (Randalla & Phoenix, 2009).

A limitation for this study was the sample size. It was small but continued until analysis of the data had satisfied the questions I outlined. Cultural and linguistic misinterpretation by the primary researcher (UK) and the participants (multinational) was another potential limitation but was mediated by multiple forms of communication with the images both brought by the participant and drawn during the interview.

Chapter 4 – Results

Introduction to Findings

This study set out to explore the lived experience of Hong Kong students who have transitioned to Canada and how their experiences in nature using individual qualitative narrative analysis and photo-elicitation methods may have aided their process of cultural adaptation. Each interview has been documented, transcribed, coded and analyzed. This chapter will provide a brief narrative of each participant and their journey from Hong Kong to Canada and Vancouver Island. Each participant was currently engaged in some form of outdoor recreation and describe themselves as outdoors people or nature enthusiasts. My personal justification of the data (Lindsay & Schwind, 2016) came by reading transcripts, listening to the audio recordings and watching the video recordings of the interviews. It also came by writing narratives of the participants, while reflecting on the feelings, questions asked, and observations made while considering the objectives of the study.

The practical justifications (Lindsay & Schwind, 2016), came about after highlighting major themes in the original transcripts and separation was achieved using the program Google Documents and the Add-on ‘Highlight Tool’ (Chin, 2015). This allowed for insightful sub-themes to slowly emerge. Additional input from my thesis supervisor saw the emergence of five themes within each participant’s individual narratives. These were transformed from a linear format to a circular format using the program C-map (Cañas et al., 2004). The concept mapping software allowed for a different perspective and a review of the themes and sub themes, as well as connections between themes and sub themes to form naturally. The C-map diagrams can be seen in Figure 1, 4 and 6.

As described in the methods section, the social justification level of analysis comes in the discussion chapter. Social justification of the narratives, involves attributing the stories back to the real world and the relevant literature (Lindsay & Schwind, 2016).

While specific themes emerged from the narratives for each participant the themes also demonstrated consistency across the participants. The sub-themes will be presented categorized under the primary themes. I reviewed, in depth, the individual themes and sub-themes and then I looked at consistencies between participants. Two photo images provided by two of the three participants supported in their narratives recall. Concept maps developed for each participant based on the emergent themes will also be presented.

Participant Narratives

James

James moved directly from Hong Kong to Southern Vancouver Island when he was 14. When living in Hong Kong he attended an international school, which gave him the opportunity to participate in structured outdoor programs as part of the curriculum. *“[G]rowing up I went to an international school; we would have weekend trips in the cohort that we would go hiking and then we like we go on camping trips starting in grade four”*. This allowed for multiple structured adventures as well as personal adventures with family. *“I like hiking because I live really close to the peak, so on the weekends I would go hike up to the peak with my mom”*.

When in Canada and on Vancouver Island, James’s interest in personal adventures blossomed, but he was limited to public transport in the city limits, *“I didn't have transport to go out myself, only relied on busses so I stayed around areas like Mt Tolmie and Mt Doug”*. After learning to drive and being able to go further afield the personal expeditions increased and the sense of adventure grew. Most recently, James took full advantage of Vancouver Island

travelling to the Mt. Washington ski resort, a fact that he expresses as being uniquely Canadian and an activity he links strongly to his Canadian identity. *“Skiing is one of the most Canadian activities I can think of. You live in Canada and you have to go skiing”*.

Holly

Holly spent the early part of her life living in Hong Kong. During this period, her time spent in nature consisted mostly of hikes with family and other structured outdoor activities organized by her school. *“In my childhood I used to go on like nature trips on the weekend I think it happens quite a lot especially during I guess holiday times...(with school). Annually we had this picnic thing, where we go to this park in the New Territories and we barbecue and have these activities laid out where we play games”*. Most interactions in Hong Kong were a means to escape the day-to-day hustle and bustle of the big city.

Holly moved to Canada when she was 10. She attended high school in Victoria B.C. and later the University of Victoria, finding it less densely populated and colder compared with Hong Kong. *“I found it super different, there’s not a lot of people walking in the streets here, it was quite empty”*. With more independence, her outdoor activities moulded into a deeper appreciation of nature and her motivations to participate were more to relax and appreciate what was around her. *“I just feel super calm” the sunsets are relaxing for me”*. These interactions remained social in context, which formed a link to creating home, *“I started going into nature with friends...Being able to watch the sunset with loved ones makes me feel at home”*.

Peter

Peter lived for the first portion of his life in Hong Kong and then moved to China for the remainder of his schooling and University. *“[I]n Guangzhou you have more farmland or like*

outdoor areas and I really like going outside, fishing with my friend". When growing up in Hong Kong he attended a nature school and was partially home schooled by his mother.

"As a young child I cannot really sit there for four years for 15 minutes and I like running around playing around in a playground little playground or sandy beach in Hong Kong".

This led to a lot of self-exploration as a young child with some structured outdoor experiences.

He moved to Kamloops, B.C., Canada in 2016 to pursue a master's in education, coming to Victoria, B.C., in 2018 to continue further graduate studies. He was inspired to explore the breadth of the country and experience the vastness and diversity of the country. *"I did a solo trip hitchhiking, flying, rail, car, paddling and ferries all over"*. This fostered a thirst for knowledge regarding flora and fauna in Canada, connecting and strengthening his acculturative bonds to Canada. *"Another method that helped me adapt was getting to know different trees and rocks in Canada...I'm learning the geographic names for rocks and things, to help foster discussion with people I go out (into nature) with...It helps me connect with Canada a lot... especially as I had an aboriginal teacher"*.

Individual Narrative Themes

In the following section, I will outline the specific themes in accordance with the particular participants. Reflecting on the practical justification of the narrative (Lindsay & Schwind, 2016).

James's Narrative

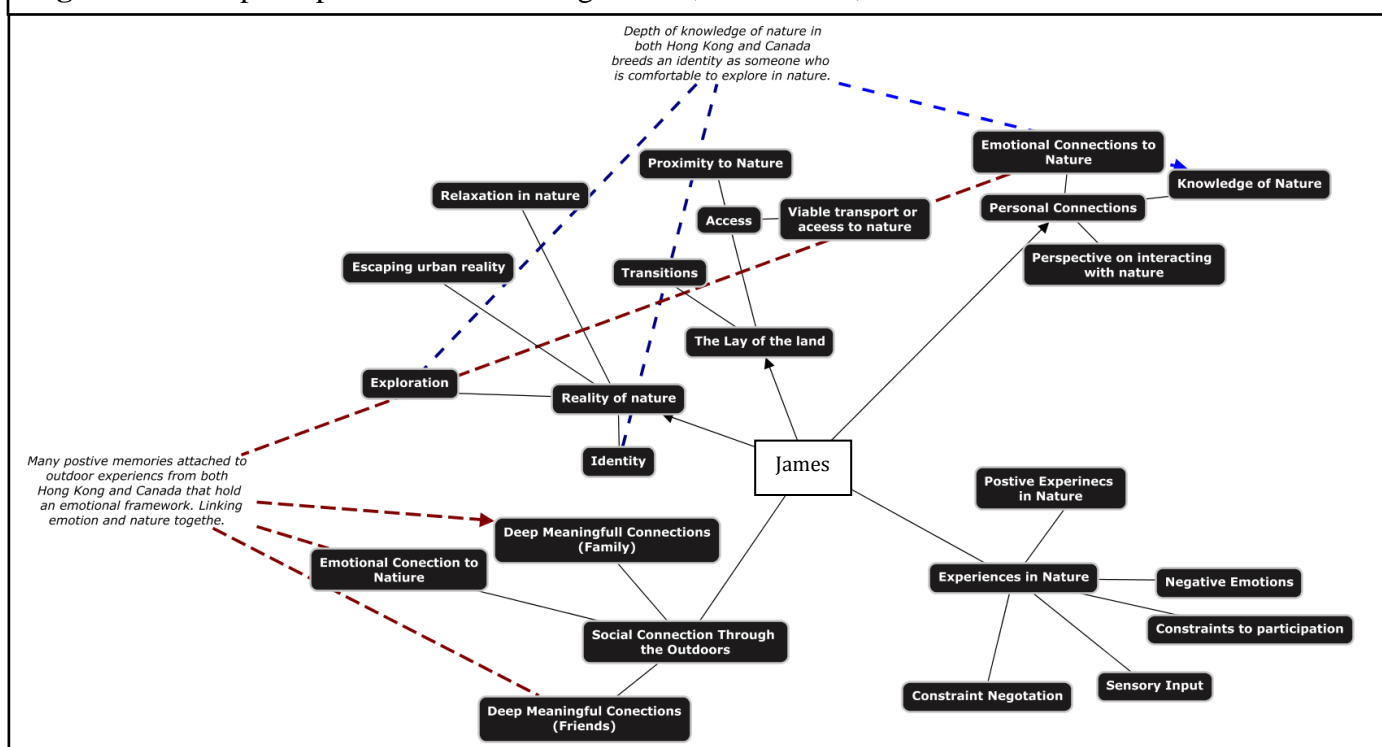
Theme - Experiences in Nature

Positive experiences (in Nature)

James's schooling impacted heavily on his level of participation in outdoor experiences as a young person growing up in Hong Kong. Attending an international school meant an

international curriculum. This meant a lot of his early experiences where structured with specific aims and objectives to interact safely with nature, with education at the forefront and skill acquisition a part as well. “We would go hiking and camping with school. Everyone, the entire

Figure 1. Concept Map for James reflecting themes, sub-themes, and connections



cohort would go on a proper under canvas camping trip, we had to bring our own food and everything... It was fun because we were only in grade 6, quite an experience to be out in the elements”.

Negative Emotions

In participating in both in and out of school adventures, potential negative experiences occurred. When talking about the rain he said: “We stayed out for the rest of the two days, when we got back everything was soaked”. On an out of school organized kayak trip in Hong Kong, “in doing this I capsized, I lost my phone, my Hong Kong ID and my glasses”. In this case both experiences were part of structured institutional outdoor education.

Constraints to Participation

Some general constraining factors that were mentioned by James were, a lack of transportation - *“I didn't have transport to go out myself, only relied on buses so I stayed around areas like Mt Tolmie and Mt Doug”* and time - *“I didn't do as much in the last few years of high school in Canada because of academics and exams. Preoccupied with schoolwork and things”*.

Constraint Negotiation

School was a way to break down the constraining factors to participation by facilitating the equipment, travel, planning and safety aspects. This was also supported by positive experiences, which increased the motivation to participate. *“I joined an after-school club called the Outdoor Exploration Society. While James suggested that his parents construed the kayaking adventure was negative, he did not. “[After a kayaking adventure], It was very fun! I had to continue and head home without all my things, my parents were not happy. It was adrenaline filled, capsizing in the waves and it being windy and stormy”*.

Sensory Level and Emotional Input

James's outdoor narrative linked his outdoor experiences with other feelings and the engagement of further senses apart from sight and touch. When engaging in Hong Kong fear and excitement were prominent during the activities. *“A mix of excitement and scary, a good balance”*. In Canada, other natural elements on top of the raw feelings were noted when interacting with natural surroundings. *“I can already hear the sound of it, you have the seagulls, you have the ocean waves crashing into the little coastline there”*.

Theme - Social connections through outdoor experiences

Family Based Deep Meaningful Connection

When in Hong Kong part of James's outdoor identity had a more family orientated narrative. Hiking with his mother around where they lived, outside of school times, he developed an adventurous spirit and strong bonds with both place and family. *"On the weekends I would go hike up to the peak with my mom"*. For James this was valuable time spent in nature. *"Hiking in Hong Kong and the Peak makes me think of family and my Mom"*. This contrasts with the institutional based adventurous outdoor experiences he gained.

Friendship Based Deep Meaningful Connection

James commented on some outdoor trips where he linked his participation in activity in a nature setting with friends, both in Hong Kong and Canada. *"I would do weekend cycling classes with friends in the New Territories [Hong Kong]"*. These trips included both planned and spontaneous excursions. *"My summer trip to Tofino was very special. It was with high school friends, old friends from Vancouver, who I do not get to see often...Spontaneous hikes with friends to new places such as the one in August 2020 to Mt. Finlayson is nice"*. These friend-based excursions in Canada sparked of a wistful dynamic of conversing and reflecting.

Emotional Connections (to nature)

Both of the 'nature' and 'friend' connections described above led to the development of emotional connections to places. *"The peak represents home for me"*. These connections also promoted conversation, bond-forming, the sharing of experiences and an important development of community. *"That trip [Tofino] was pretty meaningful to me. The evenings talking around a campfire. Campfires to me, are moments to sit down with people and chat, get to know them or catch up. It is a moment where we bond, and get to know each other, develop community"*.

Theme – Access and Transitions

A common idea that came up when James talked about his Canadian experiences was that of the juxtaposition to nature, *“That's what makes Victoria so attractive as a city, its proximity to all kinds of nature”*. When he was responsible for his own access to nature, he found local areas that he could get to with the means he had at that time, *“a couple of days a week I would go up Mt. Tolmie”*. He also explored other local areas where he could access nature and find places to engage with such as, *“Dallas Road, Gyro Beach, Beacon Hill Park, those are the places that are accessible and close to the waterfront”*. He solved the issue of ‘constraint of distance’ by exploring and finding what access to nature he had on a local level.

He compared this to his understanding of access to nature in Hong Kong, *“In Hong Kong you have to go further out to find areas rugged like here [Canada]”*. He revelled in this proximity with nature and was proud of the access to particular adventurous activities he had when living in Canada, *“If you live in Hong Kong, people would come all the way to Whistler to go skiing, this is my backyard... It is engaging in these kinds of sports, that I might not necessarily have the opportunity to do in Hong Kong”*.

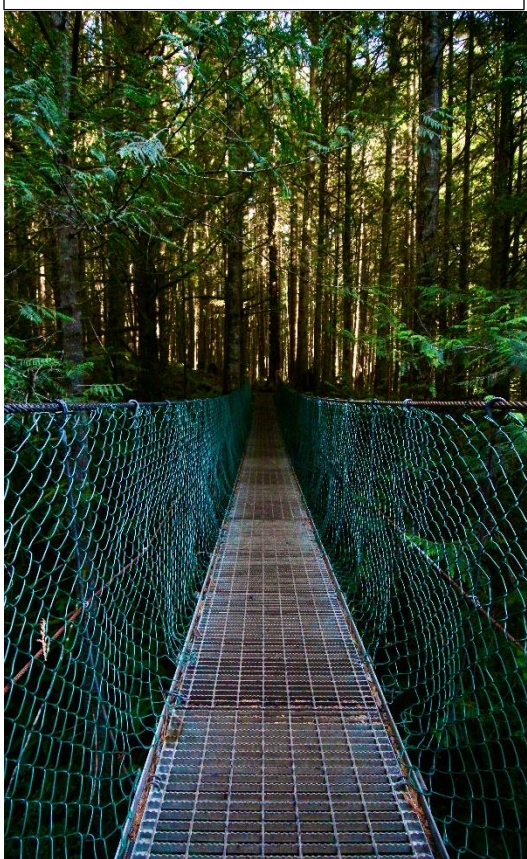
Access-Transport Links

As mentioned in James’s narrative section above, he got his driver’s licence while living on Southern Vancouver Island. James mentioned that with access to a personal vehicle he was able to explore outside of the city, which allowed for further reaching adventures to occur, *“When I was able to drive, I found as soon as you leave the greater Victoria area everything is natural”*. However, he talked fondly of the areas that were close within the city with equal enthusiasm for his ‘further away outdoor adventures’.

Transitions

The infrastructure that could take you almost instantly into nature is different in Hong Kong. *“The cable car, as it rises, feels like it takes me to nature, and it is from downtown Tung Chung. A representation of transition from the city and urban life to nature”*. James compares

Figure 2. Image provided by James as part of the photo elicitation task



Note. *“There are an endless amount of things to explore in nature and that's what that bridge encapsulates for me”* – James talking about what nature means to him.

the accessibility in Hong Kong and Victoria B.C. and proposes that there is a different perspective to be had in interacting in both places. *“I have a different mindset, going out in nature in Hong Kong to being on Vancouver Island”*.

Theme - The Reality of Nature

Exploration

James used a combination of imagery and captioning to explain his association with exploration. The image of a bridge leading into a forest and his caption, *“There are an endless amount of things to explore in nature and that's what that bridge encapsulates for me”* illustrates what potentially drives him to go further into natural settings.

Exploration is a motivator as he attempts to find new outdoor areas to be able to identify with. (See Figure 2).

Escapism

James referred to using adventurous activity in nature so he could both physically and cognitively escape in Hong Kong. *“Kayaking allows you to not just be on the ocean but escape from the heat”*. He also referred to adventurous activity as a cognitive escape. *“In Hong Kong I lived in an urban area, going out to nature is a way to escape from all the city noise and the stress and everything”*. This led James to use nature as a way to distance himself from infrastructure. *“It’s really spectacular, that place [Long Beach, Tofino], without a crowd. I felt like I had the whole beach to myself”*. From this I found him appreciating natural spaces more when there were fewer people around.

Relaxation

A distinct change happened when James spoke about some of the experiences he had in Canada when he was near the ocean. *“I find the open ocean serene”*. When he talked about some accessible coastal areas he visited within city limits he said. *“Most of the time I would go there and just sit there for a couple hours and just absorb all the sounds of nature...It's calm, it's peaceful, it's by the ocean and it's a great place to reflect”*. The adrenaline fuelled activities used to escape were gone and a deep-seated appreciation of his surroundings replaced it. He used the natural environment to relax and de-stress his cognitive space and use it as a canvas to reflect on things.

Emotional Identity

As a natural progression from the two above sections, a closing statement shared by James demonstrated another level of growth regarding interactions with nature that of exuberant enthusiasm towards nature. *“Being outdoors is not just a tool for me to use to relax, but it has*

also become my passion, and what I really love to do". This development of harmonious passion towards nature, influenced James's self-identity.

Theme – Personal Connections

Emotion

James was emotional when it came to talking about what form nature takes and about the images he provided of nature (See Figures 2 & 3). When referring to nature in Canada, his

Figure 3.

Image provided by James as part of the photo elicitation task.



Note. This image was provided under the prompt 'Describe or represent what you want to aspire to regarding nature-based experiences in Canada

feelings are paramount. *"It is a good representation of what I feel like nature is or looks like on the West Coast"*. Pride stood out, when commenting on where he comes from. *"You have mountains, clouds and the sunset. Phoenix Mountain is the second tallest in Hong Kong"*. The feelings of delight and belonging were also evident when he spoke about how he views traditional nature-based activities in Canada. *"Skiing is one of the most Canadian activities I can think of. You live in Canada and you have to go skiing. To me that is my connection and acculturation of being in Canada"*. Passion was also connected to the personal importance and pride in his journey. *"That transition from using nature to escape the*

stress, to something that I really enjoy and has become part of my passion, it is important [to me]".

Knowledge

James showed knowledge from an academic perspective. *"[In Hong Kong] 70 percent of the entire territory is dedicated to national parks or country parks"*. Situational knowledge was forged through exploration. *"One of my favourite spots in Victoria is Harling Point in Oak Bay. It's a little hidden gem, not a lot of people know about that place"*. This was coupled with personal insights, associating situationally specific nature images to his local area. *"Nature right, you have to associate it with the ocean and being by the water side here"*.

Perspective

His knowledge of the local environment, coupled with his perspective from relaxing and reflecting in his chosen natural environments helped him develop a holistic view on how to engage fully with the environment around him. *"Being able to look across the water and be able to see the mountains is also great"*. He revealed his gratefulness at the individuality of natural places and disclosed a deep appreciation of his new environment. *"Moving to Vancouver Island makes me realize how wonderful the world is...watching the sunset on the beach, with almost no one around was a fantastic experience, mainly because it would rarely happen"*. This has worked its way into his personal identity, using local experiences in nature to describe aspects of his personality. When talking about a trip up Mt. Finlayson he exclaimed, *"The top of the mountain allows you to look forward to a lot of things, you can see the ocean and other mountains, the little hills at the bottom, it reflects me, as I like to look far ahead and absorb a lot of things"*. This was prompted by the image seen in Figure 3.

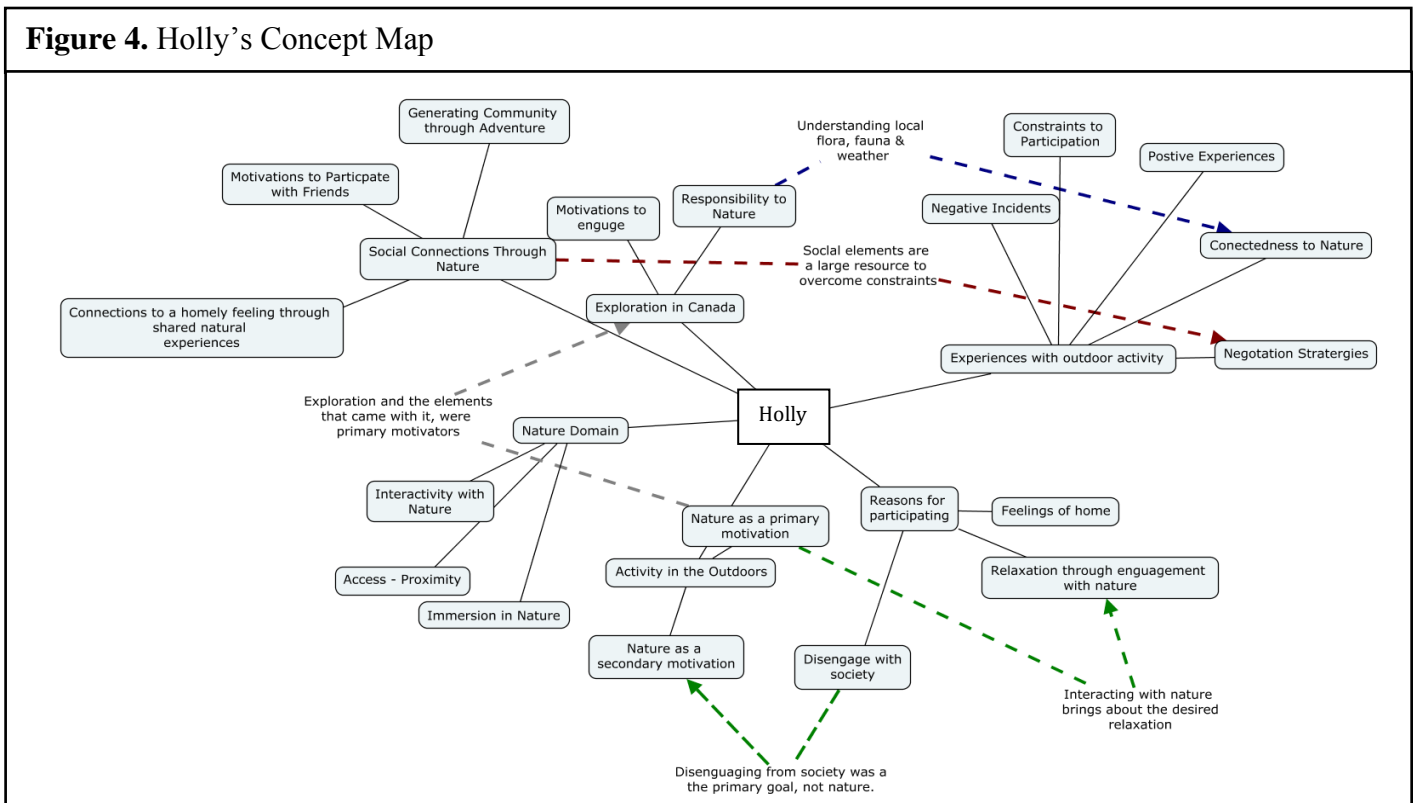
The connections drawn between the themes and sub themes for James are depicted in Figure 1. The concept map works to show the interconnectivity of two particular thoughts that relate to multiple different subjects James touched on. Emotional connectivity and nature were evident in four different sub themes. Knowledge connected identity and exploration in both Hong Kong and Canada for James.

Holly's Narrative

Theme – Experiences with Outdoor Activity

Positive Experiences

With Holly, her positive experiences were mostly identified through exertion, “*Standout experiences in Canada last summer, included a hard 7 hour hike up Panorama Ridge*”; or through positive interactions with locals while outside. “*People out were nicer and say Hi to you*”.



Negotiation Strategies

Speaking specifically about overcoming constraining factors Holly said. *“It's always that first hurdle to get over is kind of hard and then after you try, you're like, oh it's not that bad, then you keep wanting to do more of it”*. This outlines Holly's awareness that outdoor activity can have active constraints and has shown negotiation skills in the past. She explained some of these negotiation resources could have been developed with age. *“Since being in Canada my outdoor experiences increased, I think it was the age factor”*.

Negative Incidents

Holly re-counted how some experiences in nature could be less than ideal. *“We went hiking and these monkeys' kind of stole our food because we kept it a plastic bag and they snatched it and ran away, they were super smart”*. She also developed some expectations while spending time in the outdoors when she lived in Hong Kong. She felt that compared to outdoor activities in Canada, activities seemed easier to negotiate in Hong Kong. However, *“Usually there are lots of people there though”*. The elements of misadventure allowed learning to take place and increased motivation to overcome disengagement with the task (paddle boarding). *“It started raining and we were still stuck on the board, we rushed to get back on shore, it was cold that day and we were not dressed for it”*. Indicating potential negative elements, but Holly went on to say: *“It was a fun experience but memorable because we were kind of in trouble”*.

Ultimately taking positives from the experience.

Constrains to Participation

After the transition from Hong Kong to Canada, Holly reflected on some specific natural barriers to her participation in outdoor recreation. *“In Canada I found out I was going out less, the cold and the difficulty of hiking were the constraining factors... Lack of equipment and*

clothing. I found I had less interest in going out when it was rainy as well.” This indicated some climate-based challenges after coming to Canada. Further along her personal timeline, time and the COVID-19 pandemic became a factor. “[Because of] school has also been really hard to find

Figure 5. Image provided by Holly as part of the photo elicitation task, titled ‘paddle boarding with friends’



Note. This image was provided under the prompt ‘Describe or represent what you want to aspire to regarding nature-based experiences in Canada. It related to her story of getting rained on and not being fully prepared for the conditions.

time to go out and go on road trips and hikes... COVID has also reduced my frequency, it's been hard to go outside”.

Theme - Nature Domain

Interactivity with Nature

Both indirectly through her stories and directly through her descriptions and analysis of her transition from Hong Kong to Southern Vancouver Island, Holly mentioned that she felt she was more interactive with nature in Canada. She described the type of activities she liked to participate in. “*Hiking, kayaking, paddle boarding and swimming in lakes*”. In Canada she was “*more interactive than in Hong Kong*” and directly analysing her own feelings, said “*More nature interactions are had in Canada*”. The descriptions of her activities begin to go into what she defines as ‘interacting with nature’. It is not just her perspective, but develops from an observer of nature. “*It was super interesting watching how animals interact with each other*”, to becoming mixed with reasons

to participate in nature-based activity. “*Interacting with nature, having fun, hanging out. Elk*

Lake is a good spot, people always having fun". She goes on to describe interactions with nature as a tool to guide her escapism. *"Even though moving to a different place you still get that ability to interact with nature and use that as a form of activity to relax from daily life"*.

Access - Proximity

Holly's perspective on accessing nature in Hong Kong was, that it was harder to do so than in Canada. *"In Hong Kong you had to go to a specific area to really get into nature and be separated from urban life"*. This suggests a sense of distance from nature in Hong Kong and more defined boundaries between urban living and natural areas needing conscious specific thought to access. Conversely, when speaking about Victoria B.C. she said: *"It is closer, easier or more accessible, it's everywhere"*. She increases this sense of effortless access when talking about a hike quite a distance from where she lived. *"A favourite hike is near Squamish, Saint Marks or something. The mountains are so close to the highway, with the islands and water"*.

Immersion in Nature

Following her feeling of nearness to nature, she talked about 'green' areas around the city she lived. *"To be in such close proximity is really nice in a semi urban park area...These just capture how Victoria is not too urbanized with lots of trees incorporated into the urban planning"*. This proximity to nature has become part of her definition of nature. *"This encapsulates what nature means to me, to be close to animals and wilderness"*. Her narrative continues to underline this feeling that proximity to nature both flora and fauna helps facilitate her definition. *"To me it showed the clarity of the water in Canada that you can see the wildlife on the bottom, just attached to a log. This again to me shows how close you can get to ocean creatures as well"*.

Theme - Social Connections Through Nature

Motivation to Participate with Friends

In her narrative, motivation to participate with friends was found only in her Canadian stories where she used socialization as a catalyst for participation. *“I started going into nature with friends”*. It continued with aspirations for an ongoing upswing in this same vein. *“Hiking is something I want to continue to do more of, on the island with people you enjoy being around”*. She speaks out about activities when friends are involved with two examples for stand-up paddle boarding. *“I paddle boarded at Oak Bay with some friends last summer...After a paddle boarding excursion, friends and I were standing around on the dock”*.

Connections to Home

With friends being at the epicentre of some of the more valued experiences, connections seemed to be forged between friends, nature and home. *“Hikes with friends, make me feel at home...Being able to watch the sunset with loved ones makes me feel at home”*, driving the motivation to find more of these moments.

Generating Community

Holly acknowledged that the activities she enjoyed in nature enhanced this social bubble and feelings of community. *“It is definitely the people, hiking as an activity is a community orientated activity”*. Inherently some of the activities that Holly chose to engage in brought friends together and strengthened community bonds, through cooperative means and shared experiences. *“It was a big SUP [stand-up paddleboard] so we could fit four of us on. It was super fun coordinating, trying to get places”*.

Theme – Activity in the Outdoors

Nature as a Secondary Motivator

When speaking with Holly a pattern within her Hong Kong experiences seemed to develop. The experiences were motivated by goals other than being in a natural environment. There were different primary motivators that were activity driven. “*We would go to the New Territories, there'll be trails there that we hike, or we go biking*”. They were also culinary or culturally driven. “*You can take a ferry and then you get to walk around these piers and eat like local food...annual picnics where we would go to this park in the New Territories and we barbeque and have these activities laid out where we play games*”. When speaking specifically to this, she recounted: “*As a young person, going into nature was always in the form of a trip*”. The experiences did not revolve around the natural aspect but the activity or culture encountered.

Nature as a Primary Motivator

Conversely, Canadian excursions seemed to embrace more of a nature-centred focus: nature was at the forefront of the activity and the activities were secondary. “*You see the ocean and you get to walk around*”.

Theme – Reasons for Participation

To Disengage with Society

Early in the narrative Holly she expressed that nature was “*somewhere to get away from daily life and to take a break from reality*”. She continued with “*It has been helpful in terms of taking a break from what's going on in your life*”. She conveyed the idea that she saw nature-based activity as a tool to separate herself from the day-to-day hum of life.

Relaxation Through Nature

Her statements transformed into having a more balanced approach to spending time in nature. She was opening up to experiencing nature for the pleasure of the environment and realizing it was having an emotional effect on her. *“I just feel super calm the sunsets are relaxing for me”*. Enjoyment of the activity and the environment became important to her. *“Stopping along the way at a lake to relax and really enjoy the experience”*. Towards the end of Holly’s story, this became a more prevalent theme, a personal revelation that seemed to emerge and feel close to the surface and fresh. *I find the waves are really relaxing, just sitting there hearing it really helps you kind of stop thinking about too much and just be in the moment, present”*.

Feelings of Home

A prevalent idea portrayed by Holly was how ‘at home’ she felt in nature, with specific incidences or places, invoking the homey feeling. *“Nature makes me feel at home, especially the view from Capitol Hill in East Vancouver”*. An added significant comment was that the specific activity of hiking has a special connection to her upbringing. *“Hikes make me feel calm and I guess remind me of my childhood, even though it is a different country”*. The activity spans the geographical locations for her.

Theme – Exploration in Canada

Motivations to Engage

Exploration of her surroundings became another significant motivator for Holly. *“Road Trips to other places on the island are also important parts of interactions with nature with friends”*. Equal significance was emphasized as a combination of being in nature and being with friends. She also commented on prevalence of opportunities and wanted to continue this explorative activity. *“There’s so many beaches and there’s just always more to explore”*.

Responsibility for Nature

This exploration of the landscape was adapted into a need to be familiar with the landscape. Holly developed real drive to feel like she had adapted to her surroundings. *“It is important to get familiar with the landscape, it was a huge part of the transition, with the weather and like different animals”*. The latter part of this quote showed hints of both knowledge of nature from a safety aspect but also a responsibility to those who you go with and the land itself.

Holly’s concept map depicted the circular nature of her narrative well (see Figure 4). The visual representation of her story pulled some interesting connections into view. Multiple threads have connected similar elements between sub themes on five separate occasions.

Peter’s Themes

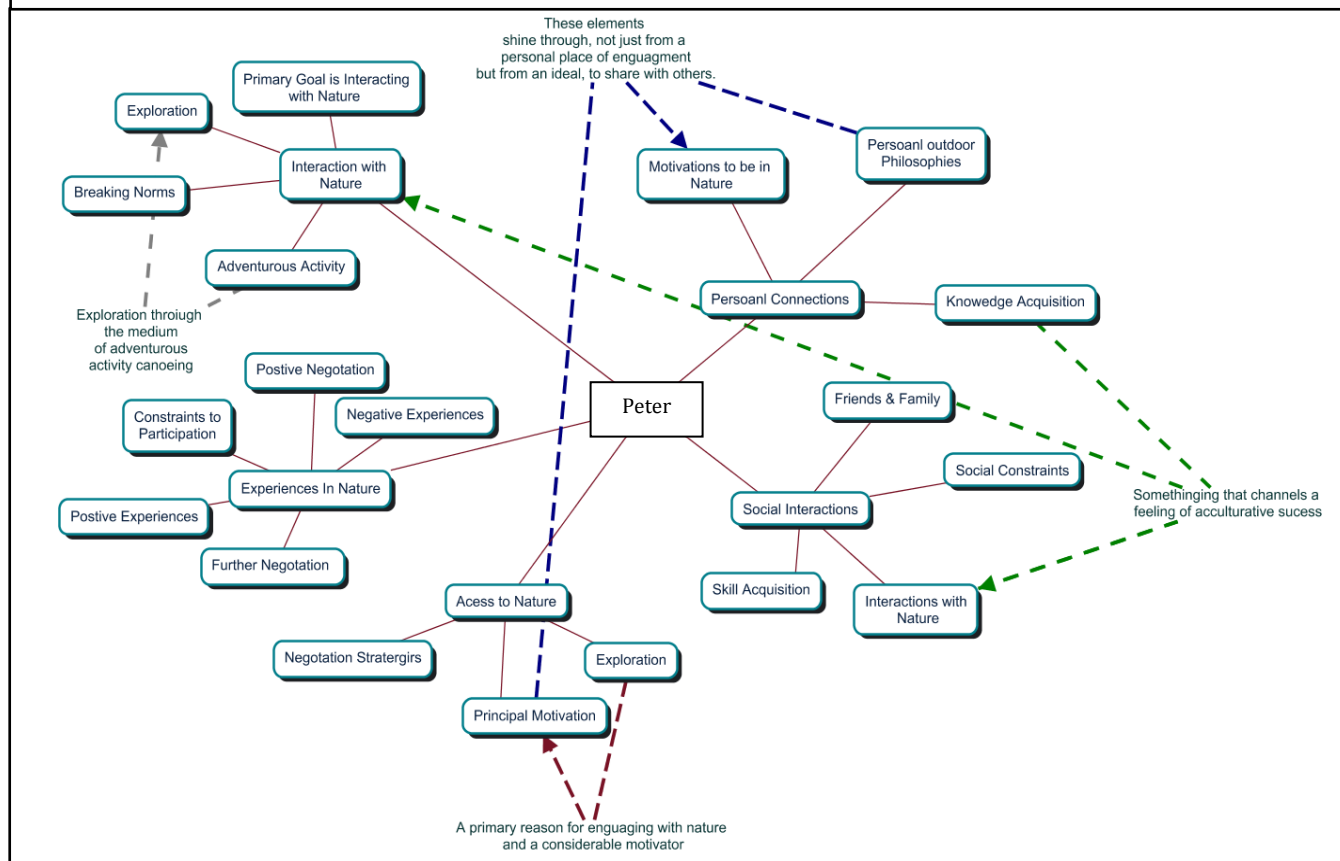
Theme - Personal Connection

Motivations to be in Nature

When speaking with Peter, it was evident he had a connection with nature. He stated: *“I believe going outdoors provides you with priceless life skills”*. He connected with his parents on the subject of his leisure time pursuits while in Canada. *“They were curious about if my young experiences influenced my decisions as an adult”*. He also used his interactions with nature as a motivator to be more in tune with his new chosen culture and country. *“It helps me connect with Canada a lot”*. He continued with the statement, *“It made me understand how important it is to pass on knowledge of the land here”*. This added an extra dimension to his potential motivations to experience nature in Canada.

Outdoor Philosophies

Peter’s ideals and values regarding nature developed as our conversation progressed. The

Figure 6. Peter's Concept Map

following is his view on outdoor activity in a variety of conditions. *"A little rain will not hurt, it is more natural and more in-tune with human nature"*. He understood the role that nature played in his transition to living in Canada and used it actively to adjust to the cultures and to people around him. *"I took time to adapt, but found connections to adventure over time after looking specifically for them. It took me time to adjust to the cultures"*. When he found others with similar outdoor philosophies to himself, he remarked. *"This helps me connect to Canada and feel like I belong here"*. Peter valued finding others with which he could connect with by getting out in nature.

Knowledge Acquisition

In talking about his experiences as a child in Hong Kong and China he related to his enrolment in an outdoor school. *"This laid a foundation for my own motives and philosophies*

around teaching and learning as an adult when I moved to Canada". He added, *"It is a long learning process"*. He provided more detail of that long process of gaining new knowledge specific to Canada. *"I went to a community centre and saw a van with two canoes on top of the van and it is rare to see this image in Hong Kong because we don't really do this there"*.

Curiosity and a drive to learn led him to ask questions and discover the similarities and differences between the cultures through his understanding of the outdoors. *"There are some differences if I have learned in Hong Kong. Canada canoe coaching was very experiential, Hong Kong methods would be very autocratic and following specific steps"*.

Theme – Access

Negotiation Strategies

Peter's negotiation resources started building from a young age, with his mother contributing to his outlook on nature. *"She was an educator, and I was home schooled for a while...My Mum decided to enrol me in an outdoor school in Discovery Bay"*. This institutional access he experienced as a young person, helped him when transitioning to Canada. When he wanted to try and engage with nature as he once did, he turned to an institution in the form of a club. *"[I] joined an outdoor club in Canada to help adapt"*. In his words, he used a self-recognized method of accessing the outdoors to continue his adaptation to a new culture.

Differences in Principal Motivation

Motivations to participate in outdoor recreation came from an experiential philosophy. Hong Kong differed to Canada as it had a more traditional structural approach to the outdoor experience for Peter who grew up there. In Canada this helped him align with a culture more closely associated to his beliefs. *"I noticed that here they encourage young people to go outside in schools which is different to Hong Kong. Even if the weather is bad...They get so much snow"*

there. People still went outside and kids were encouraged to go too.”. When comparing educational values between the two geographical locations he said. *“It was a space kids could spend time outside learning. They are learning stuff naturally, based on their exploring and observations, not forcing them to study”*. He found that an experiential pathway is preferred in Canada, and it challenged him to engage with nature. *“Here rather than in Hong Kong I had to learn how to help myself”*. He was alluding to Hong Kong not challenging him in the way he was looking for when out in nature.

Exploration

The challenge that nature posed, opened up the element of exploration for Peter. The difference he noticed in leisure time activities buoyed him into participation. *“It was different to Hong Kong in the leisure activities that people did, from drinking tea in Hong Kong to going outside and exploring in Canada”*. He noticed potential reasons for the differences in levels of leisure time exploration of natural spaces. *“The population density is different to going out in the wilderness in Hong Kong. If you get into trouble, there is almost always someone around to ask for help”*.

Theme – Experiences in Nature

Negative Experiences

Peter’s outdoor adventure journey both in Hong Kong as a young person and as a young man in Canada included negative outdoor experiences. When talking about an early hiking experience in Hong Kong he explained he’d gotten into trouble. *“The strangers then called the police and we got into trouble, so did the teacher”*. In Canada he had more direct negative experiences when undertaking activity in nature. *“[When kayaking] I tipped over...I still remember the tip over, four or five times in a short time, like an hour for me because the boat*

was on the river". These experiences did not seem to faze him with regard to applying resources to overcome constraints in the future.

Constraints to Participation

The barriers identified by Peter that held him back occurred in Canada. Some skill-based inadequacies appeared to create a fear of failure with regard to adventurous activities, as when talking about kayaking on a river. He said. *"I had only finished like 10 hours or so of practice at the time, I thought how can I do that?"*. A mixture of preconceptions about Canada, its expansive environment and its unknown ecology and culture may have been a driving force for Peter. *"I found Canada very wild. It is the second biggest country in the world, with lots of open space, people before I came described it as the wild west"*.

Positive Negotiation

Negotiation for Peter appeared to be instilled by exterior forces. *"My instructor only asked me one question, do you know how to swim? I had swum a lot in Hong Kong so I was confident"*. Drawing energy from an experienced and a knowledgeable individual being present, gave him an intrinsic drive to perform. It gave him confidence to branch out. *"So I spent time practicing on my own"*. Having an exterior source present appears to have helped him reflect on incidents in a positive light. *"It was a memorable experience for me and one of my first in an outdoor adventurous environment"*.

Further Negotiation

The variety of resources used to negotiate barriers were described as ease of access and facility in Hong Kong. *I moved back to mainland China, Guangzhou. There was more open space and farmland there"*. The conversation returned to skill acquisition and the methods used by Peter's Canadian paddling coach. *"My coach in Canada gave very few coaching points and*

asked you to go and practice". The use of a more experiential learning approach helped engage Peter and encouraged him to practice, which built up his confidence in his skills and helped him to continue to engage with nature through the activities he enjoyed.

Positive Experiences

Peter had many positive interactions with nature, whether it was with organized groups, *"I went for an organized hike with school on Lantau Island"*, or through his own curiosity. *"There was so much trust from people and they directed me to all the local wildlife spots so I felt like I got a better experience and saw more of real Canada"*.

Theme – Interaction with Nature

Exploration

The essence of exploration was facilitated by his schooling from a young age in Hong Kong, even if it was not designed intentionally. Self-discovery was promoted by simple things such as. *"My teacher was with us but staying at a distance"*. This would have been a result of the type of school he was enrolled in. The spirit of adventure accompanied Peter to Canada, inspiring him to travel and see all the corners of the country and culture. *"I took advantage of the train ticket deal and explored all across Canada over the three-month period. I did a solo trip hitchhiking, flying, rail, car, paddling and ferries all over"*. It inspired an interest and passion for the culture of Canada. *"I really want to continue seeing more and more of the country"*. He used this method of exploratory adventure to hone transferable skills. *"It is a method of travel that helps you develop survival instincts and how to problem solve and figure things out"*. He applied these new skills as he began participating in more adventurous outdoor activities, which acted as a gateway to enjoying nature. He recalls his paddling coach adding. *"I will paddle with*

you, but you have to go on your solo canoe paddle". His explorative nature has given him the tools to adapt culturally and physically to a significant change.

Primary Goal is Interacting with Nature

Peter talked directly about adventurous activities being a mode of engagement with nature. More subtly, he described an evolutionary relationship, engaging directly with nature. *"learning what you can eat and what you can't is also interesting"*. He continued with fauna as a focus as well. *"I got to see a lot of different and interesting wildlife"*. He did show sparks of this in Hong Kong in organized outdoor activities. *"Me and my classmates were getting into the spirit of things [being in nature] crafting little tools"*. He did attribute some methods of adjustment between cultures to engagement with increasing knowledge of aspects of flora and geology. *"Another method that helped me adapt was getting to know different trees and rocks in Canada"*.

Breaking Norms

Peter was not afraid to pursue things in his own way, whether they conformed to the Hong Kong traditions or not. *"We didn't do any foraging in Hong Kong so is a great connection to Canada especially as I had an aboriginal teacher"*. He was also not that worried about the concern his parents had about his involvement in outdoor activities. *"When I first came to Canada my parents were worried, they had heard the stories of it being a wild country"*. He did not enter into participating in Canadian outdoor activities with any trepidation, *"I said I was interested in them [the canoes] and they invited me to come with them to canoe"*.

Adventurous Activity

This attitude blossomed into a significant way, which he used to participate in physical activity and engage with nature. *“It [canoeing] became one of my favourite activities to do here in Canada and I did a lot of it since being here”*.

Theme – Social Interactions

Friends & Family

Peter talked about the inclusion of friends in his pursuit of outdoor activity when he moved from Hong Kong to Mainland China. He exclaimed *“I really enjoyed going fishing with my friend there at night”*. He talked about missing friends and family, in the context of participation in nature-based activity. *“I did miss my friends and family from Hong Kong when I came to Canada. He did go on to talk about using socialization as means to access the outdoors in Canada. When talking directly about levels of participation he said. “It steadily increased as I found new friends and networks to go outdoors with”*. It became apparent that friends were not the primary motivator for going out but were an important incentive to the rate and levels of engagement with activities in nature. *“I also did canoe trips when I lived there. With friends mostly but I got some instruction too”*.

Social Constraints

With socialization identified as a vessel, continual support for this was evident. Opposite occurrences were social constraints, which reduced the levels of participation. *“COVID has affected the amount I go out as it is hard to socially distance in a canoe and a tent. I have spent a lot more time with my roommates”*. As identified above, moving countries was a factor at play but maybe had less to do with cultural transitions *“When I moved to different places in China, it was hard because I had to make new friends and adventure partners, so I went out less”*.

Skill Acquisition

Interactivity in social situations, with sharing of knowledge being valued by Peter, was a driving force, from the learning perspective. *“My friend taught me how to make my own hook and how to use grass or leaves to make lures”*. From a teaching or sharing perspective, Peter stated, *“I’m learning the geographic names for things and trees, to help foster discussions with other people I go out with”*.

Interactions with Nature

Instead of close relationships with family and friends supporting nature-based experiences, Peter had reinforcement from acquaintances, co-members of clubs and individuals he initiated conversations with. The bonds were created through the specific outdoor activity. *“I was really curious, they asked me where I was from and I said Hong Kong, I asked them what they were called as I had never seen a canoe at the time”*. Nature was social for him, but not essential. *“I go out to socialize and sing songs around a campfire. Sharing space and experiences, talking and cooking together are what I want and get out of adventuring”*. He did express a number of cultural learnings from social interactions when adventuring. When talking about an outdoor club experience he said. *“[We] shared tents with girls and things. It was a weird experience, but I got used to things quickly. The leaders wanted us to make friends and it was a good method to do that.*

The use of the concept map in Peter’s case, helped find and then showed the subtle interconnectivity between sub themes under the same themes. The visual representation of his story also added the broader connections between sub themes throughout the narrative.

Cross Participant Themes

In this section, common themes across the participants' narratives will be compared and discussed. Only critical themes that reappear in more than one participant narrative will be explored. Much of the information I have discussed above will now be looked at from an inter-participant perspective. This section provides a connection to the social justification of the research (Lindsay & Schwind, 2016). Shifting to a presentation of a broader perspective of the narratives to see how the threads may interweave into a broader perspective is important. Depiction of the inter-participant themes and sub-themes are found in Table 1.

Table 1. *Themes and sub-themes that occurred in multiple interviewees*

<i>Major Theme</i>	<i>Sub theme</i>	<i>Participant</i>
Cultural Adaptation Through Socialization	Community building	H, J, Y
	Established Friends & Family	H, J, Y
Cultural Adaptation through Exploration	Local Knowledge	H, J, Y
	Skill Acquisition	J, Y
	Exploration	H, J, Y
Cultural Adaptation through stability	Using nature to relax rather than escape	H, J,
	Nature as a Primary goal	H, J, Y
	Homely feelings through nature	H, J, Y
Experiences in Nature	Constraint Negotiation	H, J, Y
Access to Nature	Proximity	H, J

Cultural Adaptation Through Socialization

Community building

All three participants talked about finding people to participate alongside with, when partaking in outdoor activity. Community building started for all the participants when they were young people in Hong Kong. James and Peter explained how they had established friendship groups before they moved from Hong Kong, friends who they regularly participated in outdoor

activities with. James started off with school-based interactions but that grew to incorporate adventurous activities outside of those boundaries in Hong Kong. Peter had a combination from a young age. Holly had a different experience of community in Hong Kong, as it was focused firmly on family and institutional (school based) interactions.

All three participants had a social community in the outdoors in Canada. James and Holly's experiences in the natural environment in Canada revolved around friends, family and acquaintances, whereas Peter continued his trend of a combination of organized school and club-based interaction. This helped him to firstly make acquaintances and then forge friendships with individuals with whom he bonded with quickly through common interest and participation in outdoor activities.

Established Friends and Family

All the participants referred to their established friends and family as recreational support networks both in Hong Kong and in Canada, either remotely or directly. Most of these interactions occurred when in Hong Kong, building bonds with family through interacting together in the outdoors or through shared philosophies. This was especially the case with Peter. Both Holly and James moved with their close families to Canada, Peter left this connection behind in China. James, he did not mention his family as being a factor in his participation in outdoor recreation in Canada, only referring to them when participating in Hong Kong. Holly did not mention her family significantly in her Canadian experiences either, but did refer to nature conjuring homey feelings, which she liked sharing with both friends and family. Peter described conversations with his parents about his activities in Canada and their potential riskiness; however, this did not seem to be a factor in Hong Kong where he was enrolled in an outdoor school as a young person.

Cultural Adaptation Through Exploration

Exploration

All three participants mentioned that one of their primary reasons for participating in outdoor activities after arriving in Canada was exploration. This was less evident in their narrative in Hong Kong. Motivations of getting to know their new surroundings and feel more comfortable in their surroundings came out for James and Holly. With Peter, his connections more inspirational and on a bigger, Canada wide scale, understanding the vast wildernesses Canada has to offer.

Local Knowledge

This involvement with the natural environment developed into local knowledge. James, Holly, and Peter all talked about increasing their knowledge of flora, fauna, local geology and culture. It was touched upon by James and Holly but given particular emphasis by Peter. They are using their interests in a myriad of fields of natural science particular to Canada to spark conversation or interaction with like minded people. This assisted them in integrating further with an outdoor community in Canada. James and Holly referred to knowledge of local natural beauty spots that were close to their homes. These places reflected a quiet, serene scene; a place they could go to interact with nature on their own terms. This, to them, seemed like a way of showing a level of integration with the geographical features of the local area, which made them feel a part of the community into which they had settled.

Skill Acquisition

James regarded skill acquisition of some activities he took part in as being particularly native to Canada, such as skiing, which he said marked him as 'being a Canadian'. Coming from Hong Kong, he was surprised to witness that people fly to the West Coast of Canada, specifically

to ski. He considered it a marker of adapting to the Canadian culture. Peter shared this appreciation of acquiring skills in a specific activity. In his opinion, doing so was strongly linked to being in Canada. He focused on improving his skills as a canoeist, which in his mind, helped him integrate firmly within the Canadian culture.

Cultural Adaptation Through Stability

Using Nature to Relax Rather Than Escape

Holly and James talked extensively about how, in Hong Kong, they integrated with nature as a way of escaping the reality of urban living in a large city. Nature was seen by both of them as a means to an end; a way through which to exit the hustle and bustle of daily urban life. This approach changed when they described their interaction with nature in Canada. Their home communities in Victoria were not so densely populated or high-rise and they described their Canadian interactions with nature as more mindful, as it helped them to relax, quieten their mind and allowed them to think.

Nature as a Primary Goal

Peter showed consistency in having interactions with nature as a primary motivator for discovering the natural world. Exploration and fishing were elements that he described doing in Hong Kong, with canoeing, exploration, socializing, adventuring, and increasing knowledge about nature were priorities over elements such as escapism and a requirement for educational purposes. Both James and Holly mirrored each other's paths in changing their base of motivation to participate in nature being secondary, to an organized activity or to be a means of escapism in Hong Kong. James began to transition to a more nature-based appreciation towards the end of this time growing up in Hong Kong, but experiencing nature based adventurous activities became more important to him when he moved to Canada. When in Canada, both James and

Holly talked extensively about appreciating nature around them, learning about nature and gaining enjoyment from just being in nature. Activities were involved here but a distinct connection with the landscape, flora and fauna and people were formed during those activities, such as hiking or paddle boarding.

Generating Homey Feelings in Nature

Either by directly mentioning or by referring to it indirectly, all three interviewees alluded to their participation in nature-based activity in Canada as generating feelings of home. These homey feelings were prompted by their success in their adaptation to the new Canadian culture. Some of their comments were linked to reflections on Hong Kong and their initial cultural experiences, either reminders of family interactions in nature (James), geographic features (Holly), or a sense of exploration (Peter), some of these homely feelings were also generated by familiar past experiences in Hong Kong.

Experiences in Nature

Constraint Negotiation

All the interviewees described incidences where they successfully navigated specific constraints to participation. A portion of the constraints linked to either access, time or skill. These constraints were consistent throughout both cultures they were based in. Access was hindered in Hong Kong, due to a feeling of separation from nature in the city, even though there was good transportation links available to help them travel from the city to a natural environment with relative ease. In Canada the feeling of nature being all around was expressed, by James and Holly, despite being with-in an urban environment.

For James and Holly, independence developed when they moved to Canada and motivation to get into nature increased. At first, due to transport links that were less well

established compared to those in Hong Kong, age became a factor. However, this changed when they were able to acquire their own means of transport, a car. For Peter, the limitation in Canada was not transportation but socialization and having others to go out with. He remedied this quickly by engaging like-minded members of the public and joining institutions and clubs to find others to adventure with.

Time, especially around academics and studying, did become a limiting factor at various times during their personal narratives. Time constraints were overcome, as not having the time to go out was limited to certain phases, such as high academic loads and exam periods.

The final constraint negotiation by all was skill. Holly's knowledge of weather and conditions initially stopped her from participating in outdoor adventure activities, but her choice of activity and time of year help skirt the issue and allowed her to engage on her own terms, once she had adapted to the differences between Hong Kong and Canada. In Peter's case, he took lessons to help build his skills for canoeing. With increased skills through practicing this specific activity, an increase in confidence to continue to go out in nature occurred too.

Access to Nature

Proximity (to nature)

All three participants talk about accessing nature, but James and Holly speak specifically to how close nature feels. As described in the above section, overcoming the access issue was prominent to participation. When in Hong Kong James talks about the feeling of going further to find natural spaces to enjoy and compares it directly to Victoria, B.C., where he states that nature is much closer to hand. Holly reflected the same opinion regarding the city and the abundance of nature and how easy it was to access a natural space, compared to a lack of integrated natural spaces on Hong Kong. Both these participants gave the sense that it was easier to access nature

in Southern Vancouver Island in comparison to Hong Kong, with a greater feeling of being closer to nature in Victoria B.C. Peter referred to joining outdoor clubs to help with the social aspect of accessing nature. This would provide him with a group, logistics or transport to help access and explore new natural spaces.

This chapter introduced the three participants who took part in this study. Their narratives were transcribed which gave voice to the individuals and were the foundation of the five main themes that emerged from the information, presented above. The following section will examine these in relation to the wider world, the current literature and theories.

Chapter 5 - Discussion

The purpose of this study was to explore the lived experiences of Hong Kong students regarding their experiential encounters and interactions in the natural environment on Vancouver Island and attempt to discover what impact these experiences had on the process of adapting to a new culture. Multiple unstructured interviews were conducted, and personal narratives were heard, recorded and transcribed using the video sharing platform YouTube.

To answer the primary research question - *What is the lived experience of current international students from Hong Kong relating to nature-based encounters and outdoor activity on Vancouver Island?* general prompting questions were asked of the participants. (See Appendix G). Themes were generated through the sharing of personal narratives and the re-storying process, which have been detailed in Chapter 4, the Results chapter.

The secondary question asked - *How does growing up with the Hong Kong culture influence current participation in outdoor experiential opportunities and integration with Canadian culture?* drew on themes that were generated by the researcher. The ideas from the themes painted a picture of the transition from Hong Kong to Canada from the perspective of individuals who consider themselves to have spent time interacting with nature.

This chapter presents information that links the findings of this study to the current literature. The study's limitations and recommendations for future research will be proposed, along with the researcher's concluding thoughts.

Connections to the Literature

This section uses the headings from the inter-participant comparison to categorize the findings and relate them to the current literature.

Cultural Adaptation Through Socialization

All of the interviewees talked about creating community in Canada and how that affected their level of participation in nature. Both Breunig et. al. (2010) and Hill et. al. (2018) research supported outdoor activity for fostering community within a collegial society. Within the narratives collected from James, Holly and Peter, it became evident that they relied on community to help facilitate outdoor activity in Hong Kong, which shifted into searching for community to aid their participation in Canada. Traditionally, research has shown that this support comes from within the individual's ethnic community and family (Stodolska, Marcinkowski, & Yi-Kook, 2007). In the case of the narratives, a lot of the support that was established in Canada came from a friendship group or was actively searched for outside of the participants' ethnic groups. The institutional communities seen in Hong Kong through schools and through an outdoor club in Canada seem to be a driving force in creating that community, through structured outdoor programs. The literature does support this from the perspective of student behaviour (Hill et al., 2018). However, there is less academic support about international groups having the same results through organized outdoor programs, when people branch out from their own ethnic groups. This could be because opportunity is not frequent, or interest from the international community members is not there. There is also a potential for missed opportunities due to translation of marketing materials and publicity of organized outdoor orientation events.

Cultural Adaptation Through Exploration

There was evidence from the participants about the acquisition and exploration of Canadian specific knowledge, be it academic in nature (flora & fauna), geographical (knowledge of local natural spaces) or outdoor techniques (skill based). Vocalized by more than one

participant, knowledge in one or more of these categories helped them initiate conversation with other like-minded people, which then fostered community. The academic, geographical, and outdoor techniques categories allowed for the possibility of the information being learned before their arrival in Canada. The academic and geographical categories appeared to help ease the transition the most (Wang & Bai, 2021). This may account for the apparent simplicity of the cultural transition the participants experienced. The transition could have also been supported by skill acquisition too, with experiential learning of skills that were considered by the participants to be 'Canadian activities' increasing their motivation to acquire and master certain abilities to further identify with the new culture. I discovered that there was very little about this. Findings from this study suggest that further research about stereotypical cultural outdoor skill acquisition could be warranted. Based on this study research about the impact of specific sports such as paddle sports and skiing on international students who are transitioning to a new culture would add to the current literature.

Becoming passionate about something could begin to explain drive to gain skills in outdoor activities. Vallerand et al. (2008), noted activity performance and passion are strongly linked, with further research saying that activities that are considered a passion become intertwined with identity (Bouizegarene et al., 2018). This could serve as a link between outdoor activities and identity, but further study is needed targeting specific activities considered Canadian in nature.

Exploration of the local area and comfort in one's surroundings seemed to broaden the participants' ability to identify with the geographical area. Past evidence of this has been found when there is a connection with close friends or significant others who have local knowledge of a new area. This has aided in the cultural adaptation process (Elliot, Reid, & Baumfield, 2016),

however, research about the gaining of local knowledge in the process of exploring in natural environments that makes a new arrival to Canada feel more akin to Canada was not found.

Cultural Adaptation through Stability

For all three participants a shift in fundamental motivations happened between interacting with nature as a means of escapism from city life to engaging to relax. There is lots of evidence supporting the notion that the outdoors reduces stress and aids relaxation (Chiang, Li, & Jane, 2017; Cordell, 2012; Hill et al., 2018; Ideno et al., 2017), however the concept of urban escapism is less utilized and why the transition from one view to the other may occur. What the individual is escaping from may be of consequence. It could be stress (Di, 2018; Guo & Schneider, 2015), regulation (Clough et al., 2016), daily routine (Clemens & Lindenmeier, 2018), a comfort zone (Prazeres, 2017) or just escape a the typical locale (Harper & Potter, 2006). It seems the participants may have changed their fundamental perspectives of interacting with nature, from escaping multiple urban facets, to enjoying their time in nature where they had the opportunity to relax and reflect (McCurdy et al., 2010). This change was also reflected in their approach to nature. The Hong Kong based interactions had the primary goal as escaping for the above reasons, whereas in Canada the primary goal was interacting in nature. This nature interaction in Canada was a known relaxation method for the participants.

This interest and enjoyment of nature would constitute as an intrinsic motivator (Rayburn, 2013), whereas the escapism motivator constitutes a more activity driven nature experience. All three participants talking about fishing, biking, kayaking and hiking when living in Hong Kong. This pushing nature into a secondary position compared to the primary goal of physical activity, reflects a focus on an extrinsic fitness or appearance (both physical and projected self-image). This is in line with research done by Rayburn (2013) but does not fully

explain the transition from extrinsic motivators as a primary goal in Hong Kong (activity and fitness) and more so intrinsic motivators as a primary motivator in Canada (nature, competence in skill and social). If Rayburn's (2013) recommendations on this area are to be extended to the international community, a difference in intrinsic versus extrinsic motivators could be explored in future research, potentially helping shape student orientation programs that could be provided on a university campus.

Homey feelings generated through nature have little research attributed to it. The data only hinted to links with sensory feelings and a thinking of home, however, it was a unique finding and could be an interesting area for future exploration. One avenue could be something akin to, learning to open up the emotional dimension by engaging all one's senses and feeling the landscape instead of just seeing it. This concept was considered in an essay by Bunkše (2012). Bunkše (2012), talks about a wilderness environment becoming considered as a home landscape, only when an individual has become competent in skills to engage in the environment or comfortable enough to engage all five senses. All of the participants in this study seemed to engage their senses in Canada and experience the feelings of home when they were out in nature and observing the landscape. This finding could help to explain why comments about 'home' were shared in the narratives. Possibly the surrounding social group or level or level of cultural adaptation encouraged the participants to reconsider what they thought of as home.

Experiences in Nature

All the participants had significant experiences in nature in both Hong Kong and Canada. Transition from one culture to another usually brings about an increase in constraints or disconnect in leisure understanding (Guo & Schneider, 2015). However, the participants in this study showed motivation and negotiation resources to rival the constraints even when their

motivations were in the process of changing. The research also shows that at times, significant identified constraints to recent arrivals or ethnic minorities seem to be overcome effectively when there is adequate motivation to engage with nature. This is in line with Hubbard and Mannell's (2001) perceive-constraint-reduction model, which outlined that constraints lowered participation, it also triggered increased use of negotiation resources, which countered the negative effects of the constraints. Hubbard and Mannell (2001), also saw that if the health and enjoyment motivators were strong, they also had a positive effect on negotiation of constraints. In the present study, lack of transportation was highlighted as a constraining factor. To counter this constraint more resources were put into finding areas to engage with nature or to partake in an outdoor adventurous activity, within the participants' means especially if the activity was enjoyable.

Winter, Jeong, and Godbey, (2004) looked at participation in outdoor recreation as a new resident in a different culture and surmised that not everyone is equal in the negotiation resources that are available and applicable. In this study, all three of the participants had a variety of constraints put upon them, but over time were able to overcome those constraints, working within their limitations to access nature to a level that they were comfortable with.

There is also evidence that when youth have positive experiences they contribute to the motivation factors and potential resources available and are then better able to overcome barriers as adults. Ward, Thompson, Aspinall, and Montarzino (2008) provide evidence that repeated visitations as a young person increases the likelihood of visiting green spaces alone as an adult.

Two of the participants did have negative experiences during their participation in outdoor activity near the beginning of their transition to the Canadian culture. However, their narratives indicate that these experiences did not seem to have any lasting negative effects on

motivation and resource negotiation. The negative experiences could easily have increased the feelings of fear and danger, which Gatersleben and Andrews (2013) believe could increase stress and attention fatigue. For some populations fear has been seen as a constraint to certain adventurous activities (Mirehie & Gibson, 2020). One participant who talked about having a potentially negative experience, did not refer to the incident as a negative one. It appears through reading her narrative that she was part of a group during this occurrence. It would have been interesting to ask her whether she would have perceived that the experience was negative had it been an outdoor adventure experience on her own. Findings from this study suggest that the negative or fear generating incidences did not affect the participants adversely and only looked to energize them further. Mirehie & Gibson, (2020), suggested that participation with a friend or companion can diminish fears. The participants in this study had influential characters involved in the nature experiences, such as a teacher, coach, or friend. These individuals appear to have been an important source of motivation and critical in the transitioning of negative experiences into positive ones. They seem to have been able to pass on the ability to overcome difficulties to the participants when they were engaged in outdoor adventurous activities. This ability might also help when resilience is needed in future.

Access to Nature

There is documentation that access is a critical feature to user frequency of green spaces in Hong Kong (Wan & Shen, 2015). Hong Kong is also known for its population density and for its lack of care for urban green spaces (Jim, 2002). Despite this urban image, Hong Kong has utilized a large amount of green space located outside of the dense areas and is protecting them well (Jim, 1987). These areas were deemed to be “within easy reach” (Jim, 1987, p.3) for residents because the territory is roughly only 1000 square kilometers. To put that into

perspective Vancouver Island is 31,285 km². Two out of the three participants stated they felt closer to nature in Southern Vancouver Island than in Hong Kong. Both areas have adequate access to natural spaces, it is just a perception of the access.

Distance, or time to travel the necessary distances to reach natural environments, was also deemed to be one of the more significant constraints to outdoor recreation participation (White, 2008). The participants who I interviewed navigated the distance issue in both the short term, using local accessible natural spots to gain natural experiences (Hartig, 1993) and the long term, when they were able to drive, thus gaining more control over schedules, timelines and access. They ventured further afield to more natural environments, with fewer traces of human activity when possible.

Implications, Limitations & Future Recommendations

Implications

This research recorded the voices of university students who experienced cultural adaptation, as they made a transition from living and experiencing nature in Hong Kong to living and experiencing nature on Vancouver Island. The research explored how their personal narratives evolved as they transitioned between the two cultures. The findings of this study add a detailed account to the current literature and shares information about how nature impacts elements of cultural adaptation.

It also highlights the issues that could be captured, explored, or informed and used in the future, to aid the process of adaptation to a new culture for others from Hong Kong. It has the potential not just to engage and guide individuals down the path to adapting to a new culture, but to overcome constraining factors that traditionally effect ethnic minorities in both physical activity, nature-based activity, and outdoor recreation. This could help determine or define a

form of recreation for new Canadians, that not only has the physical benefits of exercise, but also the confirmed psychological benefits nature can provide, which in turn can impact academic success and social cohesion.

This research is the foundation for further research, research such as field-based interactions with the participants over time or a case study of an adapted outdoor orientation program at the University level. These could then more holistically inform university orientation programs and help a university's global community adjust to a new culture, in an ongoing and continual manner. Findings from this research might also encourage administrators and recreation and sports program coordinators to think about opportunities and tools they might use to overcome recreational constraints and assist international students from Hong Kong to form community bonds.

Limitations

As the researcher, I recognize there were certain delimitations of this study. There were a very limited number of participants so no generalizations can be made and results may not be wholly reflective of the selected population.

The participants were students who self-identified as engaging with nature in both Hong Kong and Canada. Not all international university students may engage with nature in their home country and Canada. The selected participants had all been living in Canada and engaged with the adaptation process for a length of time. Two of the participants moved to Canada with their family unit, which could have impacted their adaptation experience. I have had extensive experience of integrating and adapting to different cultures and have a significant background in the practical application of outdoor recreation and education. I also come from a vastly different background than all of the participants. I am also culturally adapting still, and the participants

have lived in Canada for longer than I have. This coupled with my background, the co-participation element of this study and relationship building with the participants could be strengthened.

Regarding the analysis of the data, another element to the social justification of the narrative could have been explored. In addition to using inter-participant analysis from a researcher's perspective, a focus group could have been arranged with all three participants – if agreed upon, to discuss their shared narratives further. Other focus group meetings could have been arranged within the chosen demographics' community where individuals who did not want to participate as individual participants, could have shared their thoughts on the transition from Hong Kong to Canada (Lindsay & Schwind, 2016).

Future Recommendations

This research provided a platform for a particular demographic to voice their experiences about cultural integration and adaptation and their experiences in outdoor adventurous activities. This has brought together issues in outdoor activities and leisure pursuits and issues on cultural adaptation and social connections, which can inform the potential direction of future research. Social connections or social bonds have appeared throughout this study and are connected to one of the five main themes drawn from the data. The Social Bond Theory (Hirschi, 1969) was directed towards youth at risk, but it could also be used to guide future research in the field of cultural adaptation. Using nature to connect international students with other likeminded people and assisting them to form an early connection to the area they will be residing, through personal or guided exploration requires further investigation. Examining how the gathering of local knowledge and the development of outdoor adventure skills can strengthen the bonds between people and place is another exciting research area. Further research could also include students

from other cultures who have a nature-based connection, or to those who do not feel like they have a strong connection to nature.

Additionally, the impact of gender and the participation in nature-based activities could be researched. The potential differences in experience for this demographic and the role of nature in their cultural adaptation could be a valuable supplement to the current literature. Finally, applying a longitudinal structure moving with participants between cultures could be used to build relationships with participants and gain a deeper level of understanding regarding the participants experiences in nature.

This additional of research could lead to more informed initial orientation sessions for a university's international community, but also assist in the structuring and development of outdoor recreation programs in the form of clubs and outdoor recreation facility offerings. Would this on-going provision targeted at international communities allow for smoother transition between cultures? Could this provision help link the new culture with elements of the home culture to ease the transitional period?

I plan to disseminate the findings of this study in the following ways:

- Distribute an executive summary of this thesis to the participating entities.
- Conduct a future field study where the researcher is involved with an outdoor adventure experience along with the participants.
- Publish findings in a related academic journal such as the *Journal of Outdoor Recreation, Education, and Leadership*, the *International Journal of Wilderness*, the *Journal of Experiential Education*, *Journal of Adventure Education & Outdoor Learning* and *World Leisure and Recreation*.
- Approach local organizations within the University of Victoria, from the position of Climbing Coordinator at the Centre of Athletic, Recreation and Special

Abilities (CARSA) such as the UVic Residency Services, the UVic Wellness Centre and to the CARSA staff, to see if there is potential for expansion of focus for outdoor programs and outdoor orientation programs to be employed.

- To present an informative session on the results of this study to the EPHE 270 Foundations of Outdoor Recreation course at the University of Victoria.
- Approaching the Outdoor Recreation Council of British Columbia and the Outdoor Council of Canada with short informative articles on the outcome of the research.
- Public presentations at university orientation events targeted to inform the outdoor programming provision that CARSA facilitates.

Final Conclusions

This study set out to provide a platform for individuals to share their lived experiences in nature while residing in both Hong Kong and Canada and how their experiences may have affected their transition between cultures. Their experiences were shared through unstructured interviews and photo-elicitation. Interviews were recorded, coded and themes determined. The overarching themes that reflected the experiences of the participants were cultural adaptation through socialization, cultural adaptation through exploration, cultural adaptation through stability, experiences in nature, and access (to nature). These themes helped broach the primary and secondary research questions asked and showed that participation in outdoor activities can help form an identity involving both a home culture and an adopted Canadian culture. Participation also helped to establish a feeling of home in Canada, which assisted in the process of cultural adaptation. It also informed the ability to overcome certain outdoor recreational constraints in the Canadian culture, allowing the participants to gain social, health and wellness benefits of outdoor recreation.

References

- Aizlewood, A., Bevelander, P., & Pendakur, R. (2006). Recreational participation among ethnic minorities and immigrants in Canada and the Netherlands. *Journal of Immigrant and Refugee Studies*, 4(3), 1–32. https://doi.org/10.1300/J500v04n03_01
- Alper, D. K. (2009). *American Review of Canadian Studies Transboundary Environmental Relations in British Columbia and the Pacific Northwest*.
<https://doi.org/10.1080/02722019709481555>
- Andre, E. K., Williams, N., Schwartz, F., & Bullard, C. (2017). Benefits of campus outdoor recreation programs: a review of the Literature. *Journal of Outdoor Recreation, Education, and Leadership*, 9(1), 15–25. <https://doi.org/10.18666/jorel-2017-v9-i1-7491>
- Antonelli, M., Donelli, D., Carlone, L., Maggini, V., Firenzuoli, F., & Bedeschi, E. (2021). Effects of forest bathing (shinrin-yoku) on individual well-being: an umbrella review. *International Journal of Environmental Health Research*, 00(00), 1–26.
<https://doi.org/10.1080/09603123.2021.1919293>
- Barnett, L. A. (2006). Accounting for leisure preferences from within: the relative contributions of gender, race or ethnicity, personality, affective style, and motivational orientation. *Journal of Leisure Research*, 38(4), 445–474.
<https://doi.org/10.1080/00222216.2006.11950087>
- BBC News. (2021). Canada: 751 unmarked graves found at residential school. Retrieved July 8, 2021, from BBC News Website website: <https://www.bbc.com/news/world-us-canada-57592243>

- Beames, S., & Brown, A. (2005). Outdoor education in Hong Kong: past, present and future. *Journal of Adventure Education & Outdoor Learning*, 5(1), 69–82.
<https://doi.org/10.1080/14729670585200611>
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology*, 46(1), 5–34. <https://doi.org/10.1080/026999497378467>
- Berry, J. W. (2019). Acculturation: a personal journey across cultures. *Elements in psychology and culture*, 1-56. <https://doi.org/10.1017/9781108589666>
- Berry, J. W., & Hou, F. (2016). Immigrant acculturation and wellbeing in Canada. *Canadian Psychology*, 57(4), 254–264. <https://doi.org/10.1037/cap0000064>
- Bouzigarene, N., Bourdeau, S., Leduc, C., Gousse-Lessard, A. S., Houlfort, N., & Vallerand, R. J. (2018). We are our passions: the role of identity processes in harmonious and obsessive passion and links to optimal functioning in society. *Self and Identity*, 17(1), 56–74.
<https://doi.org/10.1080/15298868.2017.1321038>
- Breunig, M. C., O’Connell, T. S., Todd, S., Anderson, L., & Young, A. (2010). The impact of outdoor pursuits on college students’ perceived sense of community. *Journal of Leisure Research*, 42(4), 551–572. <https://doi.org/10.1080/00222216.2010.11950218>
- Bunkše, E. V. (2012). Proceedings of the Latvia University of Agriculture Landscape Architecture and Art. *Proceedings of the Latvia University of Agriculture Landscape Architecture and Art*, 1(1), 10–15.
- Camosun, I. R. and P. (2015). Environmental scan, in support of the strategic plan. In *Environmental Scan*. Retrieved from [file:///C:/Users/Darby/Downloads/02 escan Sections 1-3.pdf](file:///C:/Users/Darby/Downloads/02%20escan%20Sections%201-3.pdf)

- Canada Revenue Agency. (2016). Income tax folio S5-F1-C1, determining an individual's residence status. Retrieved May 31, 2021, from Technical Tax Information website: <https://www.canada.ca/en/revenue-agency/services/tax/technical-information/income-tax/income-tax-folios-index/series-5-international-residency/folio-1-residency/income-tax-folio-s5-f1-c1-determining-individual-s-residence-status.html>
- Canadian Society for Exercise Physiology. (2011). *Canadian Physical Activity Guidelines, Clinical Practice Guideline Development Report*. https://csepguidelines.ca/wp-content/uploads/2018/04/CPAGuideline_Report_JAN2011.pdf
- Cañas, A. J., Hill, G., Carff, R., Suri, N., Lott, J., Gómez, G., ... Carvajal, R. (2004). *Cmap tools: a Knowledge modeling and shareing environment*. Retrieved from <http://cmap.ihmc.us>
- Carlsen, M. (1988). *Meaning-making; Therapeutic process in adult development*. New York: W. W. Norton & Co. ISBN-13: 978-0-397-70049-7
- Castro, F. G., & Murray, K. E. (2010). Cultural adaptation and resilience: controversies, issues, and emerging models. In J. W. Reich, A. J. Zautra, & J. S. Hall (Eds.), *Handbook of adult resilience* (pp. 375–403). The Guilford Press.
- Chawla, L. (2015). Benefits of Nature Contact for Children. *Journal of Planning Literature*, 30(4), 433–452. <https://doi.org/10.1177/0885412215595441>
- Chan, C. S., Yuen, S. K., Duan, X., & Marafa, L. M. (2018). An analysis of push–pull motivations of visitors to country parks in Hong Kong. *World Leisure Journal*, 60(3), 191–208. <https://doi.org/10.1080/16078055.2018.1496527>
- Chang, Y., Davidson, C., Conklin, S., & Ewert, A. (2019). The impact of short-term adventure-based outdoor programs on college students' stress reduction. *Journal of Adventure*

Education and Outdoor Learning, 19(1), 67–83.

<https://doi.org/10.1080/14729679.2018.1507831>

Cheng, I. N.-Y., & Lee, J. C.-K. (2015). Environmental and outdoor learning in Hong Kong: theoretical and practical perspectives. In *Experiencing the Outdoors - Enhancing Strategies for Wellbeing* (Vol. 2, pp. 135–146). Sense Publishers

Chiang, Y. C., Li, D., & Jane, H. A. (2017). Wild or tended nature? The effects of landscape location and vegetation density on physiological and psychological responses. *Landscape and Urban Planning*, 167, 72–83. <https://doi.org/10.1016/j.landurbplan.2017.06.001>

Chin, J. (2015). *Highlighter tool* [Computer software]. Google Documents.

https://jsonchin.github.io/highlight_tool/

Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research*. San Francisco: Jossey-Bass. ISBN-13: 978-0-787-97276-9

Clandinin, D. J., & Rosiek, J. (2019). Mapping a landscape of narrative inquiry: borderland spaces and tensions. In *Journeys in Narrative Inquiry: The Selected Works of D. Jean Clandinin* (1st ed., pp. 228–264). <https://doi.org/10.4324/9780429273896-15>

Cleland, V., Crawford, D., Baur, L. A., Hume, C., Timperio, A., & Salmon, J. (2008). A prospective examination of children's time spent outdoors, objectively measured physical activity and overweight. *International Journal of Obesity*, 32(11), 1685–1693.

<https://doi.org/10.1038/ijo.2008.171>

Clemens, C., & Lindenmeier, D. (2018). *Outdoor recreation defined*. 55(3), 57–69.

Clements, R. (2004). An investigation of the status of outdoor play. *Contemporary Issues in Early Childhood*, 5(1), 68–80. <https://doi.org/10.2304/ciec.2004.5.1.10>

- Clough, P., Houge Mackenzie, S., Mallabon, L., & Brymer, E. (2016). Adventurous physical activity environments: a mainstream intervention for mental health. *Sports Medicine*, 46(7), 963–968. <https://doi.org/10.1007/s40279-016-0503-3>
- Collier, J., & Collier, M. (1986). *Visual anthropology: photography as a research method* (Rev. and e). Alburquerque: University of New Mexico Press.
- Cooley, S. J., Burns, V. E., & Cumming, J. (2016). Using outdoor adventure education to develop students' groupwork skills: A quantitative exploration of reaction and learning. *Journal of Experiential Education*, 39(4), 329–354. <https://doi.org/10.1177/1053825916668899>
- Cordell, H. K. (2012). *Outdoor Recreation Trends and Futures a Technical Document Supporting the Forest Service 2010 RPA Assessment*. www.srs.fs.usda.gov
- Crawford, D. W., & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences*, 9(2), 119–127. <https://doi.org/10.1080/01490408709512151>
- Creswell, J. W., Hanson, W. E., Clark, V. L. P., & Morales, A. (2007). Qualitative research designs: selection and implementation. *The Counseling Psychologist*, 35(2), 236-264. <https://doi.org/10.1177/0011000006287390>
- Crowell, J. (2019). Youth visitor dynamics in four pacific coast national parks. *Scholars Week 2019*. <https://ir.una.edu/scholarsweek2019/2019/posters/7>
- Czarniawska, B. (2004). *The "Narrative Turn" in Social Studies In: Narratives in Social Science Research*. SAGE Publications, Ltd. <https://doi.org/10.4135/9781849209502>
- Dadvand, P., & Nieuwenhuijsen, M. (2018). Green space and health. In *Integrating Human Health into Urban and Transport Planning: A Framework* (pp. 409–423). Springer International Publishing. https://doi.org/10.1007/978-3-319-74983-9_20

- Davidson, C., & Ewert, A. (2020). College student commitment and outdoor orientation programming. *Journal of Experiential Education*, 43(3), 299–316.
<https://doi.org/10.1177/1053825920923709>
- de Brito, J. N., Pope, Z. C., Mitchell, N. R., Schneider, I. E., Larson, J. M., Horton, T. H., & Pereira, M. A. (2019). Changes in psychological and cognitive outcomes after green versus suburban walking: a pilot crossover study. *International Journal of Environmental Research and Public Health*, 16(16). <https://doi.org/10.3390/ijerph16162894>
- Dewey, J. (1938). *Experience and education* . Retrieved from
https://openlibrary.org/books/OL6367993M/Experience_and_education
- Di, S. (2018). *Stepping Out: Chinese Immigrants in the Canadian Wilderness a Qualitative Study of Recent Chinese Immigrants* '. [Unpublished Masters Thesis]. Queen's University, Kingston, Ontario, Canada.
- Dickson, C., & Watson, B. (2021). Remains of 215 children found buried at former B.C. residential school, First Nation says. Retrieved July 8, 2021, from CBC News Website website: <https://www.cbc.ca/news/canada/british-columbia/tk-emlúps-te-secwépemc-215-children-former-kamloops-indian-residential-school-1.6043778>
- Doran, A., & Pomfret, G. (2019). Exploring efficacy in personal constraint negotiation: an ethnography of mountaineering tourists. *Tourist Studies*, 19(4), 475–495.
<https://doi.org/10.1177/1468797619837965>
- Doubleday, A., Choe, Y., Isaksen, T. B., Miles, S., & Errett, N. A. (2021). How did outdoor biking and walking change during COVID-19?: A case study of three U.S. cities. *PLoS ONE*, 16(1 January), e0245514. <https://doi.org/10.1371/journal.pone.0245514>

- Elliot, D. L., Reid, K., & Baumfield, V. (2016). Beyond the amusement, puzzlement and challenges: an enquiry into international students' academic acculturation. *Studies in Higher Education, 41*(12), 2198–2217. <https://doi.org/10.1080/03075079.2015.1029903>
- Etikan, I., Alkassim, R., & Abubakar, S. (2015). Comparison of snowball sampling and sequential sampling technique. *Biometrics & Biostatistics International Journal, 3*(1). <https://doi.org/10.15406/bbij.2015.03.00055>
- Ewert, A., & Yoshino, A. (2011). The influence of short-term adventure-based experiences on levels of resilience. *Journal of Adventure Education and Outdoor Learning, 11*(1), 35–50. <https://doi.org/10.1080/14729679.2010.532986>
- Fabrizio, S. M., & Neill, J. T. (2005). Cultural adaptation in outdoor programming. *Journal of Outdoor and Environmental Education, 9*(2), 44–56. <https://doi.org/10.1007/bf03400820>
- Fisher, W. R. (1985). The narrative paradigm: in the beginning. *Journal of Communications, 35*(4), 74–89.
- Floyd, M. (1999). Race, ethnicity and use of the national park system. In *Ethnicity and use I Social Science Research Review* (Vol. 1). https://www.researchgate.net/publication/241837833_Race_Ethnicity_and_Use_of_the_National_Park_System
- Floyd, M. (2001). Managing national parks in a multicultural society: searching for common ground. *The George Wright Forum, 18*(3), 41-51. www.jstor.org/stable/43597755
- Flowers, E. P., Freeman, P., & Gladwell, V. F. (2018). Enhancing the acute psychological benefits of green exercise: an investigation of expectancy effects. *Psychology of Sports & Exercise, 39*, 213–221. <https://doi.org/10.1016/j.psychsport.2018.08.014>

- Freeman, S., & Eykelbosh, A. (2020). *COVID-19 and outdoor safety: Considerations for use of outdoor recreational spaces*. Vancouver, BC.
- Freysinger, V. & Chen, T. (1993). Leisure and family in China: the impact of culture. *World Leisure and Recreation*, 35, 22–24.
- Frumkin, H., Bratman, G. N., Breslow, S. J., Cochran, B., Kahn, P. H., Lawler, J. J., ... Wood, S. A. (2017). Nature contact and human health: a research agenda. *Environmental Health Perspectives*, 125(7). <https://doi.org/10.1289/EHP1663>
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *Qualitative Report*, 20(9), 1408–1416. <https://nsuworks.nova.edu/tqr/vol20/iss9/3>
- Gargano, V., & Turcotte, D. (2021). Helping factors in an outdoor adventure program. *Journal of Social Work*, 21(1), 88–106. <https://doi.org/10.1177/1468017319863708>
- Gatersleben, B., & Andrews, M. (2013). When walking in nature is not restorative - the role of prospect and refuge. *Health and Place*, 20, 91–101. <https://doi.org/10.1016/j.healthplace.2013.01.001>
- Gruno, J., & Gibbons, S. (2020). Incorporating Nature-based Physical Activity in Physical and Health Education. *Journal of Physical Education, Recreation & Dance*, 91(3), 26-34, DOI: 10.1080/07303084.2019.1705210
- Guenet, F. L. (1999). *Women's Survivors' Experience of work*. [Unpublished Masters Thesis]. University of Victoria, Victoria, Canada.
- Guo, T., & Schneider, I. (2015). Measurement properties and cross-cultural equivalence of negotiation with outdoor recreation constraints: an exploratory study. *Journal of Leisure Research*, 47(1), 125–153. <https://doi.org/10.1080/00222216.2015.11950354>

Hall, K. (2021). President Kevin Hall's statement on reconciliation and partnerships - University of Victoria. Retrieved July 8, 2021, from UVic News website:

<https://www.uvic.ca/news/topics/2021+notice-presidents-statement-reconciliation-and-partnerships+notice>

Hallal, P. C., Andersen, L. B., Bull, F. C., Guthold, R., Haskell, W., Ekelund, U., Alkandari, J. R., Bauman, A. E., Blair, S. N., Brownson, R. C., Craig, C. L., Goenka, S., Heath, G. W., Inoue, S., Kahlmeier, S., Katzmarzyk, P. T., Kohl, H. W., Lambert, E. V., Lee, I. M., ... Wells, J. C. (2012). Global physical activity levels: surveillance progress, pitfalls, and prospects. In *The Lancet* (Vol. 380, Issue 9838, pp. 247–257). Lancet Publishing Group.

[https://doi.org/10.1016/S0140-6736\(12\)60646-1](https://doi.org/10.1016/S0140-6736(12)60646-1)

Harper N, & Potter T. G. (2006). *Canada and the State of Adventure Therapy: Wilderness Expeditions, Integrated Service Delivery Models and Democratic Socialism* . Retrieved from www.aee.org

Hartig, T. (1993). Nature experience in transactional perspective. *Landscape and Urban Planning*, 25(1–2), 17–36. [https://doi.org/10.1016/0169-2046\(93\)90120-3](https://doi.org/10.1016/0169-2046(93)90120-3)

Hartig, T., Mitchell, R., de Vries, S., & Frumkin, H. (2014). Nature and health. *Erratum Annu. Rev. Public Health*, 35, 207–228. <https://doi.org/10.1146/annurev-publhealth-ad032013-182443>

Herzog, T. R., & Rector, A. E. (2009). Perceived danger and judged likelihood of restoration. *Environment and Behavior*, 41(3), 387–401. <https://doi.org/10.1177/0013916508315351>

Hill, E., Posey, T., Gómez, E., & Shapiro, S. L. (2018). Student readiness: examining the impact of a university outdoor orientation program. *Journal of Outdoor Recreation, Education, and Leadership*, 10(2), 109–123. <https://doi.org/10.18666/jorel-2018-v10-i2-7184>

- Hirschi, Travis. 1969. *Causes of Delinquency*. Berkeley: University of California Press.
- Holt, E. W., Lombard, Q. K., Best, N., Smiley-Smith, S., & Quinn, J. E. (2019). Active and passive use of green space, health, and well-being amongst university students. *International Journal of Environmental Research and Public Health*, 16(3).
<https://doi.org/10.3390/ijerph16030424>
- Hong Kong Observatory. (2020, April). *The Public Weather Service*.
<https://www.hko.gov.hk/en/wservice/tsheet/pubwx.htm>
- Hopper, T., Fu, H., Sanford, K., & Hinkel, T. A. (2021). YouTube for transcribing and Google Drive for collaborative coding: cost-effective tools for collecting and analyzing interview data. *The Qualitative Report*, 26(3), 861-873. <https://doi.org/10.46743/2160-3715/2021.4639>
- Hubbard, J., & Mannell, R. C. (2001). Testing competing models of the leisure constraint negotiation process in a corporate employee recreation setting. *Leisure Sciences*, 23(3), 145–163. <https://doi.org/10.1080/014904001316896846>
- Hurly, J. (2015). Sleeping bags, s'mores and the great outdoors: the role of nature-based leisure in refugee integration in Canada. *ProQuest*. Royal Roads University.
- Ideno, Y., Hayashi, K., Abe, Y., Ueda, K., Iso, H., Noda, M., Lee, J.-S., & Suzuki, S. (2017). Blood pressure-lowering effect of shinrin-yoku (forest bathing): a systematic review and meta-analysis. *BMC Complementary and Alternative Medicine*, 17(1), 409.
<https://doi.org/10.1186/s12906-017-1912-z>
- Jackson, E. L. (1988). Leisure constraints: a survey of past research. *Leisure Sciences*, 10(3), 203–215. <https://doi.org/10.1080/01490408809512190>

- Jackson, E. L., Crawford, D. W., & Godbey, G. (1993). Negotiation of leisure constraints. *Leisure Sciences*, 15(1), 1–11. <https://doi.org/10.1080/01490409309513182>
- Janak, E. (2018). Bracketing and bridling: using narrative reflexivity to confront researcher bias and the impact of social identity in a historical study. *Philanthropy & Education*, 1(2), 82–93. [https://doi.org/DOI 10.2979/phileduc.1.2.04](https://doi.org/DOI%2010.2979/phileduc.1.2.04)
- Jim, C. Y. (1987). Country park usage and visitor impacts in Hong Kong. *Parks Prques Parcs, An International Journal for Managers of National Parks, Historic Sites, and Other Protected Areas*, 12(1), 3–8. <http://npshistory.com/newsletters/parks/parks-v12n1.pdf>
- Jim, C. Y. (2002). *Planning Strategies to Overcome Constraints on Greenspace Provision in Urban Hong Kong* (Vol. 73).
- Johnson, T. M. (2011). *Acculturation: Implications for individuals, families and societies* (T. M. Johnson, Ed.). Retrieved from <http://dspace.ucuenca.edu.ec/bitstream/123456789/35612/1/TrabajodeTitulacion.pdf%0Ahttps://educacion.gob.ec/wp-content/uploads/downloads/2019/01/GUIA-METODOLOGICA-EF.pdf>
- Jones, T., & Ohsawa, Y. (2016). Monitoring nature-based tourism trends in Japan's national parks: Mixed messages from domestic and inbound visitors. *Parks*, 22(1). <https://doi.org/10.2305/IUCN.CH.2016.PARKS-22-1TJ.en>
- Kaplan, R., & Kaplan, S. (1989). *The Experience of Nature, A Psychological Perspective*. Cambridge University Press. ISBN-13: 978-0-521-34139-4.
- Kariel, H. G., & Draper, D. L. (1992). Outdoor recreation in mountains. *GeoJournal* 1992 27:1, 27(1), 97–104. <https://doi.org/10.1007/BF00150640>

- Kessel, A., Green, J., Pinder, R., Wilkinson, P., Grundy, C., & Lachowycz, K. (2009). Multidisciplinary research in public health: a case study of research on access to green space. *Public Health, 123*(1), 32–38. <https://doi.org/10.1016/j.puhe.2008.08.005>
- Koselka, E. P. D., Weidner, L. C., Minasov, A., Berman, M. G., Leonard, W. R., Santoso, M. V., Horton, T. H. (2019). Walking green: developing an evidence base for nature prescriptions. *International Journal of Environmental Research and Public Health, 16*(22), 4338. <https://doi.org/10.3390/ijerph16224338>
- Kwak, K. (2003). Adolescents and their parents: a review of intergenerational family relations for immigrant and non-immigrant families. *Human Development, 46*(2–3), 115–136. <https://doi.org/10.1159/000068581>
- Landry, C. E., Bergstrom, J., Salazar, J., & Turner, D. (2021). How has the COVID-19 pandemic affected outdoor recreation in the U.S.? A revealed preference approach. *Applied Economic Perspectives and Policy, Vol. 43*, pp. 443–457. <https://doi.org/10.1002/aep.13119>
- Larson, C. L. (1997). Re-presenting the subject: problems in personal narrative inquiry. *International Journal of Qualitative Studies in Education, 10*(4), 455–470. <https://doi.org/10.1080/095183997237034>
- Larson, L. R., Szczytko, R., Bowers, E. P., Stephens, L. E., Stevenson, K. T., & Floyd, M. F. (2019). Outdoor time, screen time, and connection to nature: troubling trends among rural youth? *Environment and Behavior, 51*(8), 966–991. <https://doi.org/10.1177/0013916518806686>
- Lee, C., Sung, Y. T., Zhou, Y., & Lee, S. (2018). The relationships between the seriousness of leisure activities, social support and school adaptation among Asian international students in the U.S. *Leisure Studies, 37*(2), 197–210. <https://doi.org/10.1080/02614367.2017.1339289>

- Li, Y. (2011). Translating interviews, translating lives: ethical considerations in cross-language narrative inquiry. *TESL Canada Journal*, 28(5), 16–30.
- Lindsay, G. M., & Schwind, J. K. (2016). Narrative inquiry: experience matters. *The Canadian Journal of Nursing Research = Revue Canadienne de Recherche En Sciences Infirmieres*, 48(1), 14–20. <https://doi.org/10.1177/0844562116652230>
- Lo, S., Gidlow, B., & Cushman, G. (2014). Adventure education and the acculturation of first-generation Chinese Canadians in Vancouver, Canada. *Journal of Experiential Education*, 37(2), 113–128. <https://doi.org/10.1177/1053825913489106>
- Louv, R. (2008). *Last Child in the Woods, Saving Our Children from Nature-Deficit Disorder* (2nd ed.). Algonquin Books of Chapel Hill. ISBN-13: 978-1-56512-605-3
- Lovelock, B., Jellum, C., & Carr, A. (2018). Pulling the pin on active outdoor leisure: building an understanding of leisure abandonment from the narratives of outdoor recreationists. *Leisure Sciences*, 40(5), 406–422. <https://doi.org/10.1080/01490400.2016.1229640>
- Lyu, S. O., & Oh, C. O. (2015). Bridging the conceptual frameworks of constraints negotiation and serious leisure to understand leisure benefit realization. *Leisure Sciences*, 37(2), 176–193. <https://doi.org/10.1080/01490400.2014.952461>
- Maller, C., Townsend, M., Pryor, A., Brown, P., & St Leger, L. (2006). Healthy nature healthy people: “contact with nature” as an upstream health promotion intervention for populations. *Health Promotion International*, 21(1), 45–54. <https://doi.org/10.1093/heapro/dai032>
- McCurdy, L. E., Winterbottom, K. E., Mehta, S. S., & Roberts, J. R. (2010). Using nature and outdoor activity to improve children’s health. In *Current Problems in Pediatric and Adolescent Health Care* (Vol. 40, Issue 5, pp. 102–117). Mosby Inc. <https://doi.org/10.1016/j.cppeds.2010.02.003>

- Migdal, A. (2021). 182 unmarked graves discovered near residential school in B.C.'s Interior, First Nation says. Retrieved July 8, 2021, from CBC News Website website:
<https://www.cbc.ca/news/canada/british-columbia/bc-remains-residential-school-interior-1.6085990>
- Mirehie, M., & Gibson, H. J. (2020). Women's participation in snow-sports and sense of well-being: a positive psychology approach. *Journal of Leisure Research*, *51*(4), 397–415.
<https://doi.org/10.1080/00222216.2019.1702485>
- Mutz, M., & Müller, J. (2016). Mental health benefits of outdoor adventures: results from two pilot studies. *Journal of Adolescence*, *49*, 105–114.
<https://doi.org/10.1016/j.adolescence.2016.03.009>
- Noland, C. M. (2006). Auto-photography as research practice: Identity and self-esteem research. *Journal of Research Practice*, *2*(1), 2.
- Ollerenshaw, J. A., & Creswell, J. W. (2002). Narrative research: a comparison of two restorying data analysis approaches. *Qualitative Inquiry*, *8*(3), 329-347.
<https://doi.org/10.1177/10778004008003008>
- Parker, J. D. A., Summerfeldt, L. J., Hogan, M. J., & Majeski, S. A. (2004). Emotional intelligence and academic success: examining the transition from high school to university. *Personality and Individual Differences*, *36*(1), 163–172. [https://doi.org/10.1016/S0191-8869\(03\)00076-X](https://doi.org/10.1016/S0191-8869(03)00076-X)
- Payne, M., & Delphinus, E. (2018). A review of the current evidence for the health benefits derived from forest bathing. *International Journal of Health, Wellness and Society*, *9*(1), 19–30. <https://doi.org/10.18848/2156-8960/CGP/v09i01/19-30>

- Perks, M. (2017). *Indexing Behaviours Indicative of Ecological Citizenship in Canada*. [Unpublished Masters Thesis], Concordia University, Montreal, Quebec.
- Phoenix, C. (2010). Seeing the world of physical culture: The potential of visual methods for qualitative research in sport and exercise. *Qualitative Research in Sport and Exercise*, 2(2), 93–108. <https://doi.org/10.1080/19398441.2010.488017>
- Potter, T. G., & Henderson, B. (2004). Canadian outdoor adventure education: hear the challenge-learn the lessons. *Journal of Adventure Education & Outdoor Learning*, 4(1), 69–87. <https://doi.org/10.1080/14729670485200441>
- Prazeres, L. (2017). Challenging the comfort zone: self-discovery, everyday practices and international student mobility to the global south. *Mobilities*, 12(6), 908–923. <https://doi.org/10.1080/17450101.2016.1225863>
- Priest, S. (1986). Redefining outdoor education. *The Journal of Environmental Education*, 17(3), 13–15. <https://doi.org/10.1080/00958964.1986.9941413>
- Propst, D. B., & Koesler, R. A. (1998). Bandura goes outdoors: role of self-efficacy in the outdoor leadership development process. *Leisure Sciences*, 20(4), 319–344. <https://doi.org/10.1080/01490409809512289>
- Protranslate. (2019). *What is back translation?* <https://www.protranslate.net/blog/en/back-translation/>
- Ramsay, S., Jones, E., & Barker, M. (2006). Relationship between adjustment and support types: young and mature-aged local and international first year university students. *Higher Education*, 54(2), 247–265. <https://doi.org/10.1007/S10734-006-9001-0>

- Randalla, W. L., & Phoenix, C. (2009). The problem with truth in qualitative interviews: reflections from a narrative perspective. *Qualitative Research in Sport and Exercise*, 1(2), 125–140. <https://doi.org/10.1080/19398440902908993>
- Rayburn, P. J. (2013). Assessment of motivation and interest in outdoor recreation activities facilitated by a campus recreation centre. California State University.
- Recreation Council. (2015). A framework for recreation in Canada 2015: pathways to wellbeing. In *Ottawa: Canadian Recreation and Parks Association*.
- Rice, W. L., Mateer, T. J., Reigner, N., Newman, P., Lawhon, B., & Taff, B. D. (2020). Changes in recreational behaviors of outdoor enthusiasts during the COVID-19 pandemic: analysis across urban and rural communities. *Journal of Urban Ecology*, 6(1), 1–7. <https://doi.org/10.1093/jue/juaa020>
- Rigby, B. P., Dodd-Reynolds, C. J., & Oliver, E. J. (2020). Inequities and inequalities in outdoor walking groups: a scoping review. *Public Health Reviews*, 41(1), 1–24. <https://doi.org/10.1186/s40985-020-00119-4>
- Rivkin, M. S. (2000). *Primary Early Years: Play, Learning and the Brain Outdoor Experiences for Young Children*. www.eric.ed.gov
- Sam, D. L., & Berry, J. W. (2010). Acculturation: when individuals and groups of different cultural backgrounds meet. *Perspectives on Psychological Science*, 5(4), 472–481. <https://doi.org/10.1177/1745691610373075>
- Scannell, L., & Gifford, R. (2010). The relations between natural and civic place attachment and pro-environmental behavior. *Journal of Environmental Psychology*, 30(3), 289–297. <https://doi.org/10.1016/j.jenvp.2010.01.010>

- Schneider, I. E., & Wynveen, C. (2015). Exploring outdoor recreation conflict's role in evolving constraints models. *Journal of Outdoor Recreation and Tourism*, 9, 37–43.
<https://doi.org/10.1016/j.jort.2015.04.001>
- Schweizer, A. M., Leiderer, A., Mitterwallner, V., Walentowitz, A., Mathes, G. H., & Steinbauer, M. J. (2021). Outdoor cycling activity affected by COVID-19 related epidemic-control-decisions. *PLoS ONE*, 16(5 May), e0249268.
<https://doi.org/10.1371/journal.pone.0249268>
- Scott, D., Jae, K., & Lee, J. (2018). People of color and their constraints to national parks visitation. *The George Wright Forum*, 35(1), 73.
- Scout Association of Hong Kong. (2020). *History of the Scout Association of Hong Kong*.
<https://www.scout.org.hk/en/history/hohks/>
- Sharma-Brymer, V., & Bland, D. (2016). Bringing nature to schools to promote children's physical activity. *Sports Medicine*, 46(7), 955–962. <https://doi.org/10.1007/s40279-016-0487-z>
- Shores, K. A., Scott, D., & Floyd, M. F. (2007). Leisure sciences constraints to outdoor recreation: a multiple hierarchy stratification perspective. *Leisure Sciences*, 29(3), 227–264.
<https://doi.org/10.1080/01490400701257948>
- Shultis, J., & More, T. (2011). American and Canadian national park agency responses to declining visitation. *Journal of Leisure Research*, 43(1), 110–132.
<https://doi.org/10.1080/00222216.2011.11950228>
- Sibthorp, J., Funnell, A., Riley, M., Chan, B., & Meerts-Brandtsma, L. (2018). Outdoor adventure education in east Asia: interpreting data from outward bound Hong Kong. *Journal of*

Outdoor Recreation, Education, and Leadership, 10(1), 67–78.

<https://doi.org/10.18666/jorel-2018-v10-i1-8194>

Sinclair Bell, J. (2002). Narrative inquiry: more than just telling stories. *TESOL QUARTERLY*, 36(2), 213. <https://about.jstor.org/terms>

Smith, B., & Phoenix, C. (2019). Qualitative research in physical activity and health. In *Research Methods in Physical Activity and Health* (pp. 109–116).

<https://doi.org/10.4324/9781315158501-12>

Soga, M., & Gaston, K. J. (2016). Extinction of experience: the loss of human-nature interactions. *Frontiers in Ecology and the Environment*, 14(2), 94–101.

<https://doi.org/10.1002/fee.1225>

Sparkes, A. C., & Smith, B. (2014). *Qualitative research methods in sport, exercise and health*. Routledge.

Statistics Canada. (2010). *Definition of “International students.”*

<https://www150.statcan.gc.ca/n1/pub/81-004-x/2010005/def/intlstudent-etudiantetranger-eng.htm>

Stebbins, R. A. (2020). Pondering everyday life coordination, continuity, and comparison. In *Leisure studies in a global era* (pp. 37–54). Retrieved from

<http://www.palgrave.com/gp/series/14823>

Stodolska, M., Marcinkowski, M., & Yi-Kook, J. (2007). The role of ethnic enclosure in leisure in the economic achievement of Korean immigrants. *Journal of Leisure Research*, 39(1), 1–27. <https://doi.org/10.1080/00222216.2007.11950096>

Stodolska, M., Shiness, K. J., & Camarillo, L. N. (2020). Constraints on recreation among people of color: toward a new constraints model. *Leisure Sciences*, 42(5–6), 533–551.

<https://doi.org/10.1080/01490400.2018.1519473>

Thomas, M. E. (2009). *Auto-Photography*. Columbus, OH.

Truth and Reconciliation Commission of Canada. (2015). Calls to action. Retrieved from truth and reconciliation commission of Canada website: https://ehprnh2mwo3.exactdn.com/wp-content/uploads/2021/01/Calls_to_Action_English2.pdf

Tufford, L., & Newman, P. (2012). Bracketing in qualitative research. *Qualitative Social Work*, 11(1), 80–96. <https://doi.org/10.1177/1473325010368316>

University of Victoria. (2018). *UVic Factbook Table 21 - Study Permit Headcounts by Student Type and Citizenship (FALL TERMS)*.

<https://www.uvic.ca/institutionalplanning/reports/enrolment/index.php>

University of Victoria, I. P. and A. (2014). *Previous Institution Attended: Non-BC High Schools*.

UWC Atlantic (n.d.). *Our mission and vision*. Atlantic College.

<https://www.atlanticcollege.org/about-us/our-mission-and-vision>

Vallerand, R. J., Mageau, G. A., Elliot, A. J., Dumais, A., Demers, M. A., & Rousseau, F. (2008). Passion and performance attainment in sport. *Psychology of Sport and Exercise*, 9(3), 373–392. <https://doi.org/10.1016/j.psychsport.2007.05.003>

Walker, G. J., & Virden, R. J. (2005). Constraints on outdoor recreation. In E. L. Jackson (Ed.), *Constraints to leisure* (pp. 201–219). State College, PA: Venture Publishing, Inc

Walker, G. J., & Wang, X. (2009). The meaning of leisure for Chinese/Canadians. *Leisure Sciences*, 31(1), 1–18. <https://doi.org/10.1080/01490400802557907>

- Wan, C., & Shen, G. Q. (2015). Salient attributes of urban green spaces in high density cities: The case of Hong Kong. *Habitat International*, 49, 92–99.
<https://doi.org/10.1016/j.habitatint.2015.05.016>
- Wang, Y. X., & Bai, L. (2021). Academic acculturation in 2 + 2 joint programmes: students' perspectives. *Higher Education Research and Development*, 40(4), 852–867.
<https://doi.org/10.1080/07294360.2020.1775556>
- Ward Thompson, C., Aspinall Alicia Montarzino, P., Findlay, C., Wherrett, J., Scott Myers, M., Robertson, S., Southwell, K., Travlou, P., Morris, N., Gooch, D., Gregory, G., Wisdom, S., & Omar, C. (2008). The childhood factor adult visits to green places and the significance of childhood experience. *Environment and Behavior*, 40, 111–143.
<https://doi.org/10.1177/0013916507300119>
- Watkins, A. (2019). *The Healing Power of Nature on Vancouver Island*. Hello BC.
<https://www.hellobc.com/stories/the-nature-of-vancouver-island/>
- Weber, K. (2001). Outdoor adventure tourism a review of research approaches. *Annals of Tourism Research*, 28(2), 360–377. [https://doi.org/10.1016/S0160-7383\(00\)00051-7](https://doi.org/10.1016/S0160-7383(00)00051-7)
- White, D. D. (2008). A structural model of leisure constraints negotiation in outdoor recreation. *Leisure Sciences*, 30(4), 342–359. <https://doi.org/10.1080/01490400802165131>
- Whiting, J. W., Larson, L. R., Green, G. T., & Kralowec, C. (2017). Outdoor recreation motivation and site preferences across diverse racial/ethnic groups: a case study of Georgia state parks. *Journal of Outdoor Recreation and Tourism*, 18, 10–21.
<https://doi.org/10.1016/j.jort.2017.02.001>

- WHO. (2021) About the virus: coronavirus disease (COVID-19) pandemic. Regional Office for Europe. <https://www.euro.who.int/en/health-topics/health-emergencies/coronavirus-covid-19/novel-coronavirus-2019-ncov>
- Winter, P. L., Jeong, W. C., & Godbey, G. C. (2004). Outdoor recreation among Asian Americans: a case study of San Francisco Bay area residents. In *Journal of Park and Recreation Administration*, 22. www.census.gov.
- Zhou, Y., Zhang, H., & Stodolska, M. (2018). Acculturative stress and leisure among Chinese international graduate students. *Leisure Sciences*, 40(6), 557–577.
<https://doi.org/10.1080/01490400.2017.1306466>
- Zoom Video Communications, Inc. (2020). *ZOOM cloud meetings* (Version 4.6.9) [Mobile app]. <https://zoom.us/download>

Appendix A

Photo consent form

School of Exercise, Physical and Health
Education, University of Victoria

Participant Photo/Video Release Form

The Voice of Hong Kong Students at the University of Victoria Regarding Positive and Negative Outdoor Experiences in Canada

You are invited to participate in a study entitled “The Voice of Hong Kong Students at the University of Victoria Regarding Positive and Negative Outdoor Experiences in Canada” that is being conducted by Robert Archer.

Rob Archer is a Graduate Masters candidate in the department of Education at the University of Victoria, and you may contact him if you have further questions by email at robertarcher@uvic.ca.

As a graduate student, I am required to conduct research as part of the requirements for a degree Kinesiology. It is being conducted under the supervision of Dr. John Meldrum. You may contact my supervisor at 250-721-8382

Purpose and Objectives

The purpose of this study is to explore the impact of personal outdoor narratives on international members of the University of Victoria community, specifically those from Hong Kong. This study will focus on what, if any experiences, both positive and negative the individuals may have had while participating or interacting with nature in their home region, and how they currently interact with the outdoors since arriving in Canada. It would identify constraints, fears, nature of the activities, level of participation, personal background and evolutionary or revolutionary based timelines.

Video/Photo Publication Release Form

All persons taking still photographs or videos for UVic research publications must obtain a signed release form from anyone who is visibly recognizable in the photograph. Crowd scenes where no individual person is the featured are excused. I authorize units of the University of Victoria and approved third parties to reproduce photos and video taken of me in print or electronic media for educational, promotional or other university purposes. I understand my personal contact information will not be released without my permission.

Participant Consent (any individual in an image submitted as part of the interview process)

I am 18 years of age or older and hereby grant the researcher designated below from the University of Victoria permission to photograph and/or videotape my voice and likeness and to use my voice and

likeness in photograph(s)/video for publication for the above research only. My name will not be used in any publication.

Printed Name: _____

Date:

Signature: _____

If Participant is under 18 years old, consent must be provided by the parent or legal guardian:

Printed Name: _____

Date:

Signature: _____

RESPECTING YOUR PRIVACY

The University of Victoria is committed to respecting your privacy and will abide by the restrictions indicated above in using your photograph and video footage and accompanying personal information. The personal contact information you provide above will not be published without your permission. It may be used to contact you to discuss matters pertaining to the use and reproduction of your photo and it may be shared with other UVic employees for this purpose. Any personal information you provide is managed according to the British Columbia Freedom of Information and Protection of Privacy Act (FOIPPA). You have a right of access to the collected information. If you have questions regarding Freedom of Information or Protection of Privacy, please contact the Office of the University Secretary 250-721-8100, which coordinates all formal FOI requests for the university.

Researcher Contacts

Individuals that may be contacted regarding this study include:

Robert Archer: principal researcher and graduate student at the University of Victoria.

robertarcher@uvic.ca

John Meldrum: graduate student supervisor, member of the faculty of the school of Exercise and Physical Health Education at the University of Victoria. jmeldrum@uvic.ca

In addition, you may verify the ethical approval of this study, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca).

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researchers, and that you consent to have your photo materials in this research project.

Name of Participant/Interviewee

Signature

Date

A copy of this release will be left with you, and a copy will be taken by the researcher.

Appendix B

University of Victoria, Certificate of Approval



**University
of Victoria**

Office of Research Services | Human Research Ethics Board
Michael Williams Building Rm B202 PO Box 1700 STN CSC Victoria BC V8W 2Y2 Canada
T 250-472-4545 | F 250-721-8960 | uvic.ca/research | ethics@uvic.ca

Certificate of Approval

PRINCIPAL INVESTIGATOR	John Meldrum (Supervisor)	ETHICS PROTOCOL NUMBER	20-0287
		Expedited review - delegated	
PRINCIPAL APPLICANT	Rob Archer Master's student	ORIGINAL APPROVAL DATE	21-Sep-2020
UVIC DEPARTMENT	Exercise Science, Physical and Health Education EPHE	APPROVED ON	21-Sep-2020
		APPROVAL EXPIRY DATE	20-Sep-2021
PROJECT TITLE The Voice of Hong Kong Students at the University of Victoria Regarding Positive and Negative Outdoor Experiences in Canada			
RESEARCH TEAM MEMBERS None			
DECLARED PROJECT FUNDING None			
DOCUMENTS INCLUDED IN THIS APPROVAL Recruitment Poster.pdf - 28-Jun-2020 First contact script - Email II.docx - 08-Aug-2020 Prompts and Questions III.docx - 16-Sep-2020 Consent Form 2.pdf - 16-Sep-2020 Photo Release Form.pdf - 16-Sep-2020			
CONDITIONS OF APPROVAL			
This Certificate of Approval is valid for the above term provided there is no change in the protocol.			
Modifications To make any changes to the approved research procedures in your study, please submit a "Request for Modification" form. You must receive ethics approval before proceeding with your modified protocol.			
Renewals Your ethics approval must be current for the period during which you are recruiting participants or collecting data. To renew your protocol, please submit a "Request for Renewal" form before the expiry date on your certificate. You will be sent an emailed reminder prompting you to renew your protocol about six weeks before your expiry date.			
Project Closures When you have completed all data collection activities and will have no further contact with participants, please notify the Human Research Ethics Board by submitting a "Notice of Project Completion" form.			
Certification			
This certifies that the UVic Human Research Ethics Board has examined this research protocol and concluded that, in all respects, the proposed research meets the appropriate standards of ethics as outlined by the University of Victoria Research Regulations Involving Human Participants.			
<hr/> Dr. Rachael Scarth Associate VP Research Operations			

Certificate Issued On: 21-Sep-2020

Appendix C

Camosun College, Letter of Approval



Camosun College Research Ethics Board
c/o Camosun Innovates

January 12, 2021

Dear Rob:

RE: Application Number

On behalf of the Camosun College Research Ethics Board, I am pleased to inform you that your research project entitled "**The Voice of Hong Kong Students at the University of Victoria Regarding Positive and Negative Outdoor Experiences in Canada**" has been granted ethics approval. In reaching their decision, reviewers took note of the revised documentation addressing issues raised during review of your original application.

Please note that:

1. Approvals are granted for a one year period and any extension of the project beyond this time requires reapplication to the Research Ethics Board.
2. Any significant modifications to the proposal, even after commencement of the research project, require approval from the Research Ethics Board.
3. Principal investigators are required to promptly notify the Research Ethics Board of completion of the research project.

Please quote the above application number on any further correspondence. We wish you success with your project.

Camosun College
REBChair@camosun.bc.ca

Appendix D

Initial contact and Invitation to participate (sent via email)

Hi 'participant',

Thank you for your interest in participating in my research project, exploring the narrative of experiences in the outdoors between Hong Kong and Canada. As a student completing a master's program at the University of Victoria in Kinesiology, I am required to complete research. This research will be conducted under the supervision of Dr John Meldrum. – jmeldrum@uvic.ca.

As a requirement you must self-identify as a spending a portion of your childhood in Hong Kong, have had some experiences in the outdoors or wish to increase your engagement with nature-based experiences. These experiences could be in Hong Kong or since you have been in Canada, you must have been in Canada for at least 6 months.

This is a great opportunity to share your experiences and contribute to an area of research that has not been expanded in a long time. Leading to potential real change within your community. It may help others from your community access similar nature-based opportunities or acculturate in integrate into Canadian culture.

Participation will include an interview that will take about an hour and a half, I will also check back with you to make sure the transcript of our interview is a true representation of your feelings and experiences. Also, you will be asked to take a number of photographs or images to the interview. One of these photos will represent your understanding of nature (what is nature to you?), the second photograph is looking to represent you current level of participation in outdoor activities (a recent trip or experience that encapsulated your current participation) and the final can be a photograph or an image that you can find that represents your level of integration regarding natural experiences in the future (this can be an experience that you have wanted to do for a while or something that represents your integration with nature). We can discuss these further in future communications.

Your participation will be anonymous and voluntary. You can withdraw from the process at any time. Any details identifying you personally will be omitted or changed.

I hope you feel excited to share your personal experiences and stories about spending time in natural areas and what activities you are aspiring to in the future.

Feel free to contact me if you have further questions. We can set up a zoom meeting to discuss things further if you want more information.

If you wish to participate, let me know and I can send through a consent form with an information sheet to guide the image gathering process in more detail.

Many thanks,

Rob Archer

Appendix E

Guidance provided to the participant regarding Photo Elicitation

Photo Elicitation Guidance

Acculturation refers to the cultural change involved in adapting to a new context, different to that of a home culture as a result of migration.

Canadian policy takes a multicultural approach, encouraging a balance of home culture and new culture which encourages participation in new broader cultural integration and maintenance of heritage culture.

Describe what nature is to you.

To do this I would like you to take 3 photographs that best depicts what nature has and does mean to you. These can be of people (people should be indistinct or not show their faces) or places but must contain something representing nature to you.

Describe how nature, current or past experiences have helped you feel at home in a new place.

This should be a further 3 photographs depicting connections nature has with you regarding what makes you feel comfortable at home. These can be of recent trips, experiences or places but should convey some form of connection to your current feeling of home in Canada.

Describe or represent what you want to aspire to regarding nature-based experiences in Canada.

A final 3 images that describe your relationship with the land and culture and how this relationship is developing since being in Canada. This could be future planned experiences or visual representations of connections you have developed with nature in Canada.

Note: As you capture the images try to label or organise them straight away in the chosen category. Please come up with a title or caption for each image.

Make sure none of your images contain strangers and anyone they do contain must not show their face.

Appendix F

Participant consent form

School of Exercise, Physical and Health
Education, University of Victoria

Participant Consent Form

The Voice of Hong Kong Students at the University of Victoria Regarding Positive and Negative Outdoor Experiences in Canada

You are invited to participate in a study entitled “The Voice of Hong Kong Students at the University of Victoria Regarding Positive and Negative Outdoor Experiences in Canada” that is being conducted by Robert Archer.

Rob Archer is a Graduate Masters candidate in the department of Education at the University of Victoria and you may contact him if you have further questions by email at robertarcher@uvic.ca.

As a graduate student, I am required to conduct research as part of the requirements for a degree Kinesiology. It is being conducted under the supervision of Dr. John Meldrum. You may contact my supervisor at 250-721-8382

Purpose and Objectives

The purpose of this study is to explore the impact of personal outdoor narratives on international members of the University of Victoria community, specifically those from Hong Kong. This study will focus on what, if any experiences, both positive and negative the individuals may have had while participating or interacting with nature in their home region, and how they currently interact with the outdoors since arriving in Canada. It would identify constraints, fears, nature of the activities, level of participation, personal background and evolutionary or revolutionary based timelines.

Importance of this Research

There is compelling evidence supporting the health benefits of outdoor experiences. This, coupled with the evidence showing how some demographics struggle to integrate and participate in nature-based leisure activities, has led to the conception of this study. There is little information regarding the voice of Hong Kong nationals and how outdoor activity may have impacted their experience in a new country.

Participants Selection

You are being asked to participate in this study because you have identified as growing up in Hong Kong and have participated or want to participate in more outdoor experiences. You have also been in Canada for more than 6 months.

What is Involved?

If you consent to voluntarily participate in this research, your participation will include a virtual interview via Zoom, with the researcher and will be recorded and transcribed for analysis. Field notes by the researcher, visual representations (timelines) of your experiences and the taking of photographs to represent outdoor experiences will be collected and will be used in the virtual interview and reviewed for later analysis along with the transcript.

Zoom

"Zoom servers are located outside of Canada and Zoom stores users' names and usage data outside of Canada. No other information is stored outside of Canada, and recordings of Zoom meetings are not stored on Zoom servers."

Photos/images

An image release must be completed for any individual visible in a photo submitted as part of data collection (form attached). Images may be published in the final thesis and retained for 5 years before being destroyed.

Inconvenience

Participation in this study may cause some inconvenience to you, including a time commitment for the interview and for the collection of pre-interview materials such as photographs and images.

Risks

There are no known or anticipated risks to you by participating in this research.

Benefits

The potential benefits of your participation in this research include adding to our overall knowledge of how outdoor activities have an impact of our lives and how a connectedness to nature may have an impact for international communities. It may also lead to more specific outdoor programs and/or orientation programs at the University of Victoria for specific international demographics.

Voluntary Participation

Your participation in this research must be completely voluntary. If you do decide to participate, you may withdraw at any time without any consequences or any explanation. If you do withdraw from the study your data will be withdrawn and returned to you or used with the express consent of the participant.

On-going Consent

To make sure that you continue to consent to participate in this research, I will continually check with you throughout the interview process and through the transcription process as the transcript will be returned to you to confirm that it is a valid representation of our interview.

Anonymity

In terms of protecting your anonymity, the research data will be disseminated, and each participant will be given an alias, however due to the nature of the interview, complete anonymity is not possible. Identifying details within the transcript will be changed or omitted to protect the anonymity of the participants.

However, anonymity and confidentiality may be limited as UVic students from Hong Kong may know each other.

Confidentiality

Your confidentiality and the confidentiality of the data will be protected by the above use of an alias as well as the storage of the data on a password protected device. Any paper-based information will remain in a locked filing cabinet. All electronic and paper images and files will be destroyed or deleted after an appropriate waiting period.

Dissemination of Results

It is anticipated that the results of this study will be shared with others in the following ways, through a published graduate thesis on the University website. The author does intend to publish the research results in a scholarly journal and/or present the findings in a seminar or conference setting.

Contacts

Individuals that may be contacted regarding this study include:

Robert Archer: principal researcher and graduate student at the University of Victoria.

robertarcher@uvic.ca

John Meldrum: graduate student supervisor, member of the faculty of the school of Exercise and Physical Health Education at the University of Victoria. jmeldrum@uvic.ca

In addition, you may verify the UVic ethical approval of this study, or raise any concerns you might have, by contacting the Human Research Ethics Office at the University of Victoria (250-472-4545 or ethics@uvic.ca). This research has also received ethical approval with the Camosun Ethical Review Office.

Your signature below indicates that you understand the above conditions of participation in this study, that you have had the opportunity to have your questions answered by the researchers, and that you consent to participate in this research project.

<i>Name of Participant</i>	<i>Signature</i>	<i>Date</i>
----------------------------	------------------	-------------

For electronic meetings, electronic signatures or photos of signed documents are acceptable. If you indicate in the return email that you consent to the above, it will also count as consent.

A copy of this consent will be left with you, and a copy will be taken by the researcher.

Appendix G

Draft of interview prompts

General prompting questions

Tell me the story of your interactions with nature as a young person in Hong Kong?

Any specific experiences that stand out?

What experiences outside school stood out?

What is your story of participation and interactions with nature in Canada?

How did you find your period of adjustment to Canadian culture?

Can you draw a timeline of your level of interaction crossing Hong Kong and Canada?

Photo Elicitation

How and when was the image made?

What does the images story suggest (what is going on), what does it include/exclude?

Is it constructed in a particular way?

Is there any specific reasoning behind the components included or the colour?

What would you call or caption this image as?