A DIFFERENT ANGLE: EXPLORING GENDER AND SOCIALIZATION THROUGH RECREATION SPECIALIZATION AMONG FLY FISHERS IN NORTHERN BRITISH COLUMBIA

By

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Abstract

Studies of how gender is characterized, performed, and understood in outdoor activities in relation to skill development are limited, but growing. This research explored gender and social relationships across levels of recreation specialization in fly-fishing among anglers in Prince George, BC. Semi-structured interviews were conducted with 23 participants, 11 of whom then attended a level-specific fishing day during which participant observation was conducted. Interviews were transcribed and coded. Four main findings were derived. First, anglers' social relationships shifted from dependence on others to intentional self-expression. Second, anglers learned to belong ecologically and socially through skill development and equipment use. Third, anglers' relationships with fish moved from possession to communion. Fourth, anglers' described escaping their daily routines to engage with rural places and fishing. The analysis and discussion show how masculinity was constructed and performed, and highlight the roles of socialization, behaviors, and equipment in shaping and gendering rural settings.

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Introduction

Scholars and practitioners in outdoor recreation and education are always seeking out new ways to critically analyze and better understand human-environment relations. Such approaches have seen a shift from understanding humanity and nature as separate, to understanding humanity as belonging within environments as "always already socio-ecological" (Mullins, 2014a, p.132). Research in outdoor education is paying more attention to the dynamic and complex ways in which participants experience and embody outdoor activities, and a relatively new and growing aspect of this is how gender is characterized, performed, and understood in natural environments and outdoor recreation activities through skill development and progression. The purpose of this research project was to explore gender and the social relationships that occur through skill development in fly-fishing, using recreation specialization theory (Bryan, 1977). There are practical and academic challenges of diversity among the representation of individuals' participation in outdoor recreation activities, and these challenges deserve attention for two main reasons:

1. Spending time in outdoor settings is linked to better health and well-being (BedimoRung, Mowen, & Cohen, 2005; Doherty, Lemieux, & Canally, 2014).
2. Growing urbanization has produced disconnectedness from nature in everyday life, whereas outdoor recreation helps to promote environmental awareness, behavior, and policies (Cocks & Simpson, 2015; Kil, Holland, & Stein, 2014).

Further, the relationship between gender and socialization in outdoor activities has yet to be fully explored and has the potential to significantly influence recreationist's, abilities to develop skills, how and where they choose to participate in leisure activities, and how they self-identity and relate to natural settings in which they recreate. Gender, socialization, and skill

development all intersect, and when understood as interacting in this way, these concepts can inform outdoor practitioner's ability to learn, teach, and develop through outdoor activities. Leisure is a site of power, privilege, forming identities, and engaging and caring for places, but it can also be one of resisting, challenging, showing nuance, and difference (Pritchard & Morgan, 2000). Because of such push and pull factors within outdoor recreation, it is important to further explore how gender norms and socialization contribute to and/or complicate various levels of skill development and related relationships within recreation specialization. If men, for example, are considered the predominant actors or participants among outdoor activities, and these activities remain male dominated, men continue to have better opportunities to participate in these spaces. Additionally, I argued that other recreationists such as women, the differently abled, and minority groups risk exclusion from important elements that connect to quality of life. Rural areas have been traditionally imagined and marketed as environments to be 'conquered' and 'tamed' by men (Stoddard, 2011; Little, 2011). Moreover, northern landscapes are "particularly marketed as wild, rugged and untamed and, thus, oriented towards the male gaze" (Pritchard & Morgan, 2000, p.123).

Historically in settler North America, outdoor adventure activities have been situated in a Western settler paradigm that understood participants as being separate from and in competition with surrounding natural settings, which were viewed as a 'backdrop'. The environment presented challenges and risks, and it required conquest (Ewert, 1998; Hall, 1992; Mullins, 2014a), and this reflects and perpetuates a traditional hegemonic and dominant Western masculinity (Bull, 2009). At the same time, this framing contributed to a discourse advocating 'deskilling' among some outdoor environmental educators and practitioners because of the assumption that technical skill development distracted from deeper environmental learning in

outdoor recreation and education (Brown and Fraser, 2009; Brymer and Gray, 2009; Mullins, 2014a). The term deskilling was used to suggest that recreationists' activities are separate from their environment, rather than situated within it. This study challenges the notion of deskilling and seeks to understand skill and its development as occurring within socio-ecological settings and relations. In addition, the field of recreation and leisure studies continues to explore relationships between gender and skill within outdoor recreation. Growing conversations are being had about the nature of gender and skill, and their "theoretical, pedagogical, and practical roles in participants' experience, place attachment, and socio-environmental responsibility" (Mullins 2014a, p. 130).

This thesis focused on the activity of fly-fishing to better understand the relationships among recreation specialization, gender, and socialization into and within the activity. Fly-fishing has been researched through many academic lenses: as "serious leisure" (Stebbins, 2007), serious tourism (Hannam & Know, 2010), ecotourism (Franklin, 2001), and consumptive wildlife tourism (Mordue, 2013; Lovelock, 2008). These perspectives offer insights to the ways fly anglers approach, experience, and understand the form of recreation/type of tourism. Additionally, these bodies of literature dive into psychological motivations and leisure constraints, and provide important considerations and strategies for managing use, access, and fish populations.

Fly-fishing can be practiced in many ways, and people use different styles, techniques, and terminology, comprising distinct sub-cultures that suit their desired experiences. The activity can be done in fresh, salt, moving, and/or still waters. It takes place in lakes, rivers, and oceans, and focuses on a wide variety of fish species, and fishers use diverse access-related equipment such as waders, boats, and float tubes or pontoons. This study focuses on freshwater recreational

fly-fishing in and around the city of Prince George, British Columbia. Participants who live and fly fish in the area visit lakes and rivers and focus on a variety of species including trout, salmon, arctic grayling, and rocky mountain whitefish. Fly-fishing in central and northern British Columbia is very popular, and people from all around the world travel to experience the bodies of water and fish that live among them. This translates to an economic impact of $389.8 million in provincial GDP contributions (BCStats, 2018). Most of the contributions to the GDP originate in angling-related expenditures by tourists and local anglers (BCStats, 2018). The fly fishery engaged in this research, particularly through the participant observation and field sessions, focused on a wild trout fishery in a local well-known river, the Stellako river, which also sees an annual salmon run.

This thesis is part of a broader research study being conducted by Dr. Mullins, and has been funded by The Social Sciences and Humanities Research Council (SSHRC) Insight Development Grant Program. The broader research study includes the development of a heuristic model to help inform outdoor educators about how people develop through skill in relation to their outdoor environment, social relations, intrapersonal experiences, and ecological knowledge. All participants involved were given a consent form, so that images and responses from interviews could be represented in the research. Participants are referred to using pseudonyms. The study explores recreation specialization through a relational perspective, using a qualitative approach.

Research Questions

This study explored gendered spaces and performances of skill characterized through the participant's socialization into fly-fishing in Prince George, British Columbia. Understanding and exploring recreation specialization as relational, my research question was:

1. How is gender expressed and operating in anglers' experience of fly-fishing across levels of recreation specialization, understood as a relational process of skill development and socialization within the activity?

    1.a. Which social relationships are involved and particularly important in participants' experience?

    1. b. How are socio-ecological spaces, places, and activities of fly-fishing being gendered by participants?

    1. c. Are there norms of practice that emerge as part of this process of specialization, what are these norms, and where and how do they appear?

This thesis will first review literature on socialization and gender, communities of practice, and gendered geographies. Later in the chapter I examine literature that connects the ecological, social, environmental, and intrapersonal relationships in outdoor activities. This large body of literature helps to situate the framework of the study and informs the heuristic model described in the methodology.

Literature Review

This literature review emphasizes socialization and gender as a way of understanding of how anglers interact and engage with others, and as important considerations within outdoor recreation activities more broadly. Gendered spaces, gender norms, gender identity connection to self and natural environments, perceptions of belonging, and other such topics interact with skilled outdoor activities and abilities. The notion of communities of practice, through which people are socialized and in which people learn particular skills and knowledge, is also an important concept for this project. The included review of literature on recreation specialization explains the concept, our conceptualizations of the various levels of recreation specialization, and recent critiques that have prompted new research directions into skill progression. The literature on skill development shows how skills help to establish diverse social and environmental relations, as well as enable learning and discovery of 'self' while participating in outdoor activities. Lastly, the literature on leisure participation drivers and constraints addresses leisure choice, experiences, and progressions in an activity. These various literatures are incorporated into a heuristic model introduced in the methodology chapter.

Socialization and Gender

Recreational activities do not occur in a social vacuum; they are dynamic, complex, and influenced by context. Understanding key aspects that influence certain people, and not others, to participate in an activity helps us understand the literature, and how this research project might contribute to it. The process of socialization into an activity impacts and influences people's understandings of their practice in outdoor recreation, as well as their skill development in natural spaces and places. Therefore, the literature reviewed here breaks down the processes of how people are introduced into an activity. More specifically, the literature reviewed articulates

how socialization contributes to gendered ways of being and performing when people are participating in outdoor recreational activities.

Socialization into recreational activities, and norms of practice

Socialization into leisure is the process by which children, teenagers, and adults "acquire the motives, attitudes, values, and skills that affect their leisure choices, behavior and experiences throughout their lives" (Kuehn et al., 2006, p. 225). Kuehn et al. (2006) suggest that fishing in particular is introduced through family, wherein a sense the skills and knowledge can be passed down through generations. This form of introducing people to fishing is thought to be the most common in activities that require a higher level of skill (Kuehn et al., 2006). Kuehn et al. (2006) propose that fishing socialization is comprised of three stages:

Initial Involvement Stage. In this stage people learn the initial skills to fish, or catch a fish, which is crucial to developing greater connection to the activity. Young people are introduced to fishing through the family network, and strong influential factors that contribute to the participant's introduction to fishing are supported, such as finances, time, and emotional support.

Social Attachment Stage. "Adequate support, successful skill development, and fishing enjoyment during initial involvement appeared to enable anglers to progress into the next fishing socialization stage—social attachment" (Kuehn et al., 2006, p. 123). Kuehn et al., (2006) found that female anglers became attached for social purposes, whereas males became attached for the 'competitiveness' and 'sporting' aspects of the sport.

Social Commitment Stage. Once individuals become attached to the activity, it appears that they become socially committed, meaning a connection to their social networks is prioritized and a larger motivation to continue participation within an outdoor activity. "Concepts

influencing this stage included the angler's strong commitment and continued social attachment to fishing, supportive and nurturing roles related to fishing, and strong appreciation for fish and/or natural resources in general" (Kuehn et al., 2006, p. 124).

Kuehn et al.'s (2006) approach highlights how people initially are introduced to fishing, and limitations to these stages seem to come from and represent a Western social perspective. Kuehn et al.'s stages of socialization do not account for various cultural, social, and economic backgrounds that may affect participation, accessibility, and ways of learning. Among these limitations is also gender, Kuehn et al.'s (2006) study does not include how gender influences these stages of socialization. Jackson and Henderson (1995) suggest that the ability of context to affect one's experience of leisure constraints demonstrates that gender roles, rather than biological sex, shape people's access, equipment, and learning opportunities for and in outdoor recreation. Henderson (1994b) described *gender* as a set of "socially constructed relationships produced and reproduced through people's actions" (p. 144), whereas *sex* refers to biological differences in chromosomes, hormonal profiles, as well as internal and external sex organs. People are faced with gender role stereotypes in recreation, and most of these stereotypes are influenced by a hegemonic and traditional Western notion of masculinity. This creates an expectation of or association with each, without much room for other possibilities, gender fluidity, or non-binary gender identities. This hegemony has implications for people who choose to participate, lead, or compete in outdoor recreation activities; it might also keep people from participating if they feel unwelcome. Warren and Loeffler (2006) spoke to challenges and discourses among women when presented with technical skill development (TSD) as related to women's participation in outdoor activities:

> Gender role socialization influences TSD by creating the perception that certain outdoor adventure activities are not considered as seriously for women as they are for men. The gender-based stereotypes caused by this socialization have both *descriptive* and *prescriptive* elements (p. 108).

These stereotypes not only describe supposedly static differences between men and women, but also prescribe gender roles and behaviours within, and characteristics of, places such as the home, the outdoors, and work environments. Such characterizations include some and exclude others. Siltanen and Doucet explain that ideas on 'gender performativity' is that "gender is performative in that it is made and remade in everyday practices that are shaped by the possibilities offered by contextually specific social norms" (2017, p 240). The importance of recognizing 'doing gender' and 'gender performativity' is that if gender is something that is established as a performance to then meet social norms, and continue to embed gender stereotypes, it then can be undone if necessary, to lead to social change within outdoor recreation (Siltanen, & Doucet, 2017).

People are introduced to outdoor activities in varying ways; from family members showing children how to participate in a sport, to learning online. Gender norms and stereotypes can greatly shape skill progression in an activity because they can influence who gets to participate, and how so, within an activity, which leads to socially 'normal' or 'appropriate' styles, skills, and techniques used by men and women within an activity (Warren and Loeffler, 2006). Such influences exist in all domains—whether people are introduced to outdoor activities via family members or via online learning. These considerations of socialization are important for this study because they provide insight into constraints and privilege related to recreation, but also because it is important to recognize that the research context and recreation activity (fly-

fishing) are gendered with already-established Western worldviews, which shape participants' ideas of behaviors, attitudes, and actions.

Communities of Practice

Learning a new skill is inseparable from social practices, and aids in constructing an individual's identity (Handley, 2006). *Community of practice* is a concept embedded in several theories concerned with learning within dynamic social situations, such as Situated Learning Theory (Vygotsky, 1978) and Socialization Theory (Wenger, 1998). Community of practice "locates learning, not in the head or outside it, but in the relationship between the person and the world, which for human beings is a social person in a social world" (Handley, 2006). Handley described a community of practice as the context in which an individual develops the behaviors, skills, values, norms, relationships, and identities appropriate to that community (p. 641).

According to Handley (2006), participation is "central to situated learning since it is *through* participation that identity and practices develop" (p. 643). As Wenger suggested, participation refers "not just to local events of engagement in certain activities with certain people, but to a more encompassing process of being active participants in the practices of social communities and constructing identities in relation to these communities" (Wenger, 1998, p. 4). Participation involves both action ('taking part') and social connection (Wenger, 1998, p. 55). Participation enables the negotiation of meaning, but it does not necessarily entail equality or respect, or even collaboration within or among social spheres. Processes of participation, socialization, identity construction, and practice occur within (and across) communities of practice, and can shape which communities people learn from, and how dominant norms of practice are passed on, resisted, and/or challenged, and where new forms might originate. However, many communities of practice could be described as heterogeneous in their

composition, practice, and involvement (Huzzard, 2004). This kind of community of practice can lead to dominant norms of practice, which may hinder some people from being involved in or introduced to an activity, learning environment, or community. Huzzard (2004) explains that power dynamics within certain communities of practice can be problematic, and full participation may be denied to novices by powerful practitioners. Thus, "the dynamics between identity-development and forms of participation are critical to the ways in which individuals internalize, challenge or reject the existing practices of their community" (2004, p. 75). By participating in a community, a newcomer develops an awareness of that community's practice and comes to understand and engage with (or adapt and transform) various tools, language, role-definitions, as well as various implicit relations, and underlying assumptions and values (Ibarra, 1999). Ibarra (1999) has shown how individuals develop practices by observing others, imitating them, and then adapting and developing their own particular practices in ways which match not only the wider community's norms, but also their own individual sense of integrity and self. Ibarra called this process "experimenting with provisional selves" (p.767).

Gendered Spaces: The Feminine and the Masculine

For more than two decades now, scholars such as Ekers (2013), Little (2003), Luke (1998), and Bull (2009) have turned their attention to 'rural masculinities.' Following feminists' interests in questions of masculinities, this move investigates how rural social and environmental landscapes—understood relationally and traditionally in opposition to the urban—contribute to the making of normative masculine identities. Ekers' (2013) work details how rural landscapes and associated forms of agricultural, outdoor recreation, and resource work underpin the popular notion of rural masculinity as 'rugged' and physically and emotionally strong (Ekers, 2013, p. 5). Further, as suggested by Pringle (2011) "increase[ing] the understanding of how leisure activities

are intimately connected with gendering processes induc[es] broad social impacts" (p.113). Although there has been a significant increase in women's participation in outdoor recreation activities, and contributions to academia surrounding discourses and portrayal of 'masculine' and 'feminine' skill, there is still a relative lack of recognition of gender and its impacts on knowledge and experiences in outdoor recreation. Moreover, there remains a need through academic inquiry to look at the effects of gendered spaces on outdoor recreation participation (Henderson & Hickerson, 2007). The limited, although growing, female participation in activities such as hunting, fly-fishing, scuba diving, and mountaineering suggests that significant parts of outdoor recreation remain 'gendered spaces' (Espiner et al, 2011) with significant barriers to participation. For example, women likely feel pressure (consciously or unconsciously) to conform, resist, and/or challenge hegemonic masculine spaces (Carter & Coyle, 1999; Shaw, 2001). Newbery (2003) shows how perceptions of success and ability with respect to portaging a canoe were typically measured in terms of physical strength, and the skill itself and proficiency in it were deemed 'masculine' and used to bolster masculine able-bodied identities. This literature demonstrates how some outdoor activities are structured around specific skill sets, and it is possible that practices may not be inclusive of all participants or support diverse identities. How success is measured and perceived is often gendered, and societal norms influence participation, a person's ability, and motives to progress in outdoor activities (Newbery 2003).

In recent, authors such as Fennell & Birbeck's (2018) have studied women's engagement and progression in fly angling, highlighting a change in motivation and desired experience among female anglers. Further, anglers such as Kate Watson (a fly fishing guide, instructor, writer, and environmental steward in British Columbia), Mary Atkinson, Angelica Talan, and

Heather Hodson (the founder of United Women on The Fly, and a Simms ambassador) are all paving the way in British Columbia and Canada by advocating for women and BIPOC engagement in fly fishing. They are doing this through diverse ways of performing on and off the water and defining spaces within natural settings as safe and accessible for diverse angling communities. Fennell & Birbeck's (2018) found that female anglers displayed characteristics of "commitment, identity, empowerment, freedom, lack of guilt, independence, adventure and the enjoyment of being a part of nature, anti-control and anti-domination, maintenance of feminine characteristics and acceptance, which is not contingent upon recognition by men (p.514). These findings contrast to what Bull (2009) found for male fly anglers (strength, resilience, violence and savagery, competition with other anglers, and domination of nature in the pursuit of trophies). Regardless of the contrast between Bull (2009) and Fennell & Birbeck's (2018) studies, the importance of both concepts is that gender expressions through fly angling are being defined more broadly, then before. Highlighting a movement between traditional masculine perspectives to a diverse and layered perspective to gendered geographies and gendered performances of fly anglers.

Physical environments are also often defined in gendered terms (Stoddard, 2011; Bryant, 2010; Little, 2011). In North America, rural masculinity has historically been associated with dominant rural culture, productive labour, and the public sphere of politics, while femininity has been associated with nature, reproduction, and the private sphere of the home (Stoddard, 2011). At the same time, men have often used 'wilderness' landscapes to perform adventurous masculinities through sports like mountaineering (Stoddard, 2011), in which "men probe wilderness, conquer mountains etc. feminizing virginial natural landscapes" (p.109). Mountain 'sportscapes' are often gendered through "discursively mediated, embodied interactions with

mountain environments" (Stoddard, 2011, p.108). These ideas of space are constructed in gendered terms and can have significant implications for the social activity that occurs in these places, as well as how gender stereotypes and norms play into and result from such activity. Stoddard also suggests that activities such as snowboarding, windsurfing, and mountaineering allow participants to perform "characteristics associated with athletic masculinities and femininities" (p.112). Outdoor recreation is also grounded in physical sportscapes, and natural environments both "incorporate and reflect bodily practices and showed how recreational gender relations are performed through the physical qualities and activities of the body" (Bryant 2010, p.657). Bryant (2010) argued that "bodies become gendered and indeed, sexed through the continued performance of gender and that women routinely perform particular brands of femininity and men masculinity" (as cited in Little, 2011, p. 669).

Geographers have also examined rural landscapes in terms of 'the rural masculine'. There exists a body of literature on the construction of hegemonic forms of masculinity within agriculture (Brandth & Haugen, 2005; Saugered, 2002), the military (Woodward, 2000)) and forestry (Cloke, 2005). The term 'hegemonic masculinity' originated in the work of Connell (1983), and it speaks to the power relations that define and perpetuate uneven gender relations and restrictive conceptualizations of mainstream masculinity. Connell recognised that there are multiple subject positions – some dominant, others subordinate – generating what is known as hegemonic masculinity. The hegemonic masculinity is not 'normal' in a mean, median or modal sense but it is normalised. It is upheld as known and expected culture and it becomes the socially and culturally accepted and expected way of being male (Bull, 2009, p. 449).

Bull (2009) adds to the concept of rural and hegemonic masculinities in his study of fly-fishing. He suggests that rural masculinity, in particular, is more than just the interactions

between male participants and the material rural landscape, wilderness, 'nature,' or animals. Rather, the social space of the rural is important to the "formation and perpetuating of masculinity" (p. 449). Bull's (2009) dynamic understanding of the rural masculine brings to light the role of 'the rural' in shaping masculinities. Bull (2009) discusses notions of the rural that are entangled in "the masculine", he explores the relationship between the rural male and nature, landscape, the environment, and animals. This concept encompasses the idea that man is set against the physical landscape through the traditional spaces of farming, military, and forestry. Such positioning encourages a utility-centered and often violent human relationship with 'nature' and animals. In his 2009 work, Bull discusses this relationship as part of male anglers' identity formation in relation to nature and the environment. Western society often frames the rural as a space where "when men are the most male" (p.448) and their actions are characterized in terms of strength, power, violence, mastery, and heroism. In this regard, Bull identified "the importance anglers placed on storytelling and trophies when narrating their encounters with nature, portrayed as a lonely setting" (p.450) as contributing to notions of rural masculine identities.

Djohari, Brown, & Stolk (2018) discuss the connection and relationship children build among waterscapes, and the practices associated with them. This provides an opportunity to understand the "experience and rhythmic patterns of spatial engagement within children's geographies" (p. 358). Their study found that young anglers find waterscapes to be safe spaces, when their *everyday life* become emotionally overwhelming. But it was not just the waterscape that provided these feeling alone, it was also the "act of angling, as unfolding, embodied practice developed within the environment that was significant to their feelings of wellbeing" (Djohari, Brown, & Stolk, 2018, p.340). Djohari, Brown, and Stolk (2018) study blends Bull (2009)

concepts around gendered geographies and Kuehn et al's (2006) initial involvement stage, thus helping to explain the significance of early involvement and engagement to fly fishing and natural settings.

In terms of how researchers should interact with notions of gender and rurality, Little & Leyhson (2003) suggest that the researcher's task is to "interrogate how particular forms of the body and bodily practice gain power within specific rural contexts by taking up and embodying constructions of the rural. Dominant constructions of nature coded as feminine (ex. Mother Earth) contribute to the domination of men over both land and women, because they 'other' the land and gender it as feminine, and then frame masculinity as 'penetrating', 'conquering', and 'controlling' the wild feminine other (Little, 2011). This leaves little room for other forms and expressions of masculinity (ex. kinder, gentler, more feminine versions). Such powerful suggested constraints on rural masculinity may be at work in fly-fishing and might impact participants' values and senses of self.

Through recreational activities, boys and men can learn through a "deeply embedded corporeal connection" (Norman et al., 2011, p. 159). This might connect them with the natural spaces in which they recreate, contributing to a culture that codes the 'outdoors' as a primarily masculine space, and the 'indoors' as feminine (Norman et al., 2011). Bull (2009) adds and responds to the discussion of masculine and feminine spaces and bodies—framed historically as a dualism—by recognizing variations within each. Bull (2009) suggests that there is a paralleling of rural masculinity, which adds more depth to understanding diverse ways of understanding and framing rural masculinity. Bull states that there are "masculine practices and performances of aggressive control of nature, and there are those that respond to nature, nurturing, shepherding and cultivating, rather than domineering" (p. 456). Bull recognizes multiple ways of 'doing'

masculinity and femininity in rural and urban spaces, and that traditional ideas of masculine and feminine are not necessarily the most portrayed and 'practiced' forms that people enact while engaging with the natural environment through outdoor recreation.

Research on gendered rural identities and spaces has yet to engage fully with ideas of mobility and address skill development in outdoor recreation (Little, 2011). Scholars such as Bull (2009), Little (2011), and Norman et al. (2011) emphasize the need for further work on skill progression. They identify it as a key area where research on rural masculinities and femininities needs to develop. This is particularly true of rural social spaces where a focus on embodiment needs to inform our understanding of the performance of gender identities (Little, 2011).

Recreation Specialization

Recreation specialization was originally described as a "continuum of behavior from the general to the particular, reflected by the equipment and skills used in the sport and activity setting preferences" (Bryan 1977, p. 175). Using predominantly quantitative research methods, recreation specialization has consistently been associated with an increase of environmental stewardship (Oh, Lyu, & Hammitt, 2012).

Scholars have sought to categorize and explain fishing and angling in terms of participant knowledge and dedication. Bryan (1977) originally identified four types of anglers positioned on a continuum ranging from lowest to highest levels of specialization: *occasional*, *general*, *technique specialist*, and *technique setting specialist*. Bryan (1977) framed the theory around a person's participation in an activity, assuming they will move along the continuum of specialization, potentially reaching the highest level of specialization, 'technique-setting specialist' (Morgan, 2006). Throughout recreation specialization research, authors have used different names to specify or adapt understandings of the stages of specialization. Typically,

researchers describe four degrees or categories of specialization along this continuum (Bryan, 2000), often providing most detail or information about the 'beginner' and 'expert' levels, and inferring transitions between these while providing fewer specifics regarding intermediary stages, or transitions between them. The four categories of specialization adopted in my research project are:

(a) Beginner (also referred to as *occasional*, Cottrell, Graefe, & Confer, 2004; *low stable*, Schneider, Thompson, & Virden, 2003; *newcomers/dabblers*, Bricker & Kerstetter, 2000; and *strangers,* Wöran & Arnberger, 2012);

(b) Intermediate (*beginners*, *active participants*, *decreasing/mixed*, *tourists*);

(c) Advanced (*technique-specialists*, *dedicated participants*, *stable*, *regulars*); and

(d) Expert (*technique-setting specialists*, *passionate experts*, *high stable*, *insiders*).

Importantly, recreation specialization theory and findings have helped to dismantle the assumption that anglers are homogeneous or monolithic in motivation, skill, commitment, and experience. Rather, recreation specialization scholarship suggests that anglers, and participants in other activities, are multi-dimensional and should be perceived this way for management and policy. Specialization research has, nevertheless, shown that participants with different levels or degrees of skill and commitment differ in their desired and lived experiences and their understandings of an activity and its settings (Bryan, 2000, 2001). In my study we used four categories named *beginner, intermediate, advanced,* and *expert.* These names were chosen because they are accessible and intuitive to readers and participants, and they reflect the shifts in skill and commitment that the researcher hoped to explore within angling. They also begin to better characterize the various relationships involved in the angling community (with other people, with places, with ecologies, etc.).

Over the past few decades, understandings of specialization have shifted from linear conceptualizations of a continuum of behavior and preference, to a broader understanding that specialization is multifaceted and multidimensional, involving a person's ways of participation within an activity and reflecting their circumstances (Scott and Shafer, 2001). Bryan (1977) believed that anglers progressed from one stage of involvement to another, with their motivations, resource preferences, and attitudes about management practices shifting as they progress through the continuum of recreation specialization. He observed that anglers in higher levels of specialization no longer focused simply on catching any fish they could. Rather they focused on catching specific fish under more-specific conditions and environments (Scott & Shafer, 2001a).

However, other researchers have challenged these findings, and found that characteristics of specialization differ when examined in diverse activities. Lee (2011) found that paddlers at different stages valued relaxation, social contact, challenge, and competition in different ways. Paddlers with higher levels of specialization were motivated by these factors and would seek out experiences that included relaxation. Lower level paddler motivations were more focused on social interactions and were more dependant on finding locations that matched their levels of skill. Relaxation was less of a stated concern for this group (Lee, 2011). Lee (2011) also found specialization-related differences with respect to facility preferences, social skill, new sites, and wilderness. As an example, specialized paddlers in Lee's (2011) study placed less importance on facilities and greater importance on "new sites and wilderness then those at lower levels of specialization" (p. 909).

Most of the recreation specialization research has been conducted using quantitative methods and has focused on informing management and outdoor recreational programming.

Additionally, most studies have conceptualized and operationalized recreation specialization as a "single additive index or as several multi-item indexes" (Waight & Bath, 2014) in order to examine how it relates to other variables such as motivations for participation (Smith et al, 2010), perceptions of crowding (Kuentzel & McDonald, 1992), activity and site substitutability (Needham & Vaske, 2013; Oh, Sutton, & Sorice, 2013), setting preferences (Bricker & Kerstetter, 2000), identity (Schroeder, Fulton, Lawrence, & Cordts, 2013), environmental attitudes and behaviors (Dyck, Schneider, Thompson, & Virden, 2003; Oh & Robert B. Ditton, 2008; Smith et al., 2010), and preference for management action (Kuentzel & McDonald, 1992; Salz, Loomis, & Finn, 2001).

Applying qualitative approaches to recreation specialization research offers an opportunity to deepen understandings of whether a continuum of specialization exists, and how recreationists 'move through,' or progress (or do not progress), through it. Scott and Shafer (2001) suggest that progression towards higher levels of specialization may be the least common path for recreationists within an activity. This idea highlights some of the critiques that recreation specialization theory has encountered, which have centered around whether it is as linear as it has been portrayed. Scott and Shafer call for more in-depth looks into the theory, to understand the intimate details and consequences of the processes by which participants move through specialization (2001).

Levels of Recreation Specialization

This section summarizes claims in the literature about levels of recreation specialization, moving from least-specialized to most-specialized.

Beginner Profile. Beginners partake in recreational activities with limited first-hand experience and direct knowledge. They may have a "try-it-out" attitude, and participate in other

activities (Kuentzel & Heberlein, 2006), without a particular passion for or dedication to the activity that they are newly trying out. Their skills and knowledge of the activity are initially learned from and introduced by others with more experience and skill (Kuentzel & Heberlein, 2006). Inexperience can represent a steep 'learning curve' for beginners when the activity requires specific skill development (Bryan, 2000; Scott & Shafer, 2001). Cottrell et al. (2004) found that beginners in boating activities and related sub-activities may have an 'open' mindset—they might want to know skills and techniques and might seek them from outside sources including online forums, videos, and magazines.

Decisions to buy equipment are important in early stages of specialization. For beginners, such choices are related to whether or not they want to commit to or invest in future involvement, and whether they feel the activity and social group is a good personal fit (Galloway, 2012). Equipment can also be used to compensate for lower skill levels, and it contributes to participants' learning and experience (Bryan, 2000; Cottrell et al., 2004; Galloway, 2012; McFarlane et al., 2004).

Beginners will often choose locations that are relatively easy to access and match their abilities and knowledge. This enables them to have an 'ideal experience' and helps to facilitate their learning (Oh et al., 2013). Management restrictions and conservation practices are reflected in beginners' attitudes and behaviors. Lastly, beginners often seek experiences that provide direct and relatively positive feedback, with immediate success or accomplishment, ex. "catching large amounts of fish," or "climbing to the top of the rock, or rock face" (Arlinghaus et al., 2007, p.95). This is because beginners negotiate the act of committing to the activity with the level of reward they experience during participating. Beginners may understand that an immediate positive feedback within an activity may not be realistic; however, they still seek to match their

expectations of the activity with a positive experience – whether that be catching a fish or having one on their line, for example. To them, this reaffirms that they may have the skill and ability to improve and continue to grow their expectations with larger goals and accomplishments.

Sub-optimal experiences, such as fishing in places with strong currents and windy conditions, can also shape how an individual is introduced to the activity, whether they feel it is a good fit for them, and whether their lived experience matches their expectations. Beginners' optimal experiences can be limited by incompatible settings, which are tied to challenging environmental conditions or required a higher level of skill, and which make 'success' less likely for the beginner (Salz, Loomis, & Finn, 2001; Bryan, 2000, Whittaker & Shelby, 2010).

In summary, beginners experience the activity and settings through initial stages of learning and exploring. We also know that they depend on other anglers to introduce locations and teach basic skills. As a result, beginners are also more likely to have positive experiences when they fish in settings appropriate to their skill level and learning needs.

Intermediate Profile. Intermediate participants are still novice or relatively new to an activity and can have limited understanding of the activity and the setting; yet they show more interest in the activity indicated by increased commitment, frequency of participation, and financial investment (Kuentzel & Heberlein, 2006). Increased interest is accompanied by movement from basic skills like identifying appropriate sites that match skill levels, to a wider knowledge of locations that best suit their particular needs, expectations, and/or objectives. According to Kuentzel and Heberlein (2006) intermediate participants are more likely to seek experiences that include aesthetically pleasing landscapes, and settings that combine social interaction with performance-based attributes that enable technical skill development. As with beginners, sites that intermediates perceive or experience as too challenging or inaccessible can

lead to issues in their skill development, unsatisfied expectations, frustration, and perceived lack of 'success' and enjoyment (Bryan, 2000; Kuentzel & Heberlein, 2006; Salz, Loomis, & Finn, 2001).

The literature provides limited explanation of intermediate and advanced participants, representing a gap in the literature. Intermediate participants are still focused on learning techniques but are also likely exploring and becoming more aware of their environment and diverse settings (McFarlane et al., 1998). Intermediate participants could also potentially be learning 'best practices' from the broader community through more-experienced participants; this may also relate, eventually, to greater awareness of resource management and conservation regulations, and the reasons for them (McFarlane et al., 1998).

Advanced Profile. The literature suggests advanced participants demonstrate commitment by increased participation. They evolve from dabbling in the activity to slowly decreasing participation in other recreation activities in order to increase their participation in their preferred activity, ex. Fishing, climbing, hunting, canoeing, etc. Advanced fishing participants become more goal-directed, focusing on catching bigger fish, and committing more time to the activity (Bryan, 2000, Salz, Loomis, & Finn, 2001, Kuentzel & Heberlein, 2006; Woran & Arnburger, 2012). Duration of involvement is indicative of the amount of focus and practice advanced participants undertake to better develop their craft and skills. Advanced participants have progressed beyond basic knowledge and ability (ex. casting a fly rod) and have become more technique-oriented (ex. concerned with the accuracy and consistency of their casts and fly delivery) (Woran and Arnburger, 2012). That is, they are interested in refining and testing their skills and knowledge (Salz, Loomis, & Finn, 2001). For example, an advanced

scuba diver can maintain stable buoyancy, a basic skill, and also make fine adjustments in order to navigate through caves or small crevices.

Advanced participants show greater specificity of site preference (White, Virden, & Van Riper, 2008; Oh, Sutton, & Sorice, 2013). They have gained greater knowledge of the landscapes and environment, have a better understanding of the site attributes that support performance and their preferred experience, and tend to feel more attached to their preferred sites (Bricker & Kerstetter, 2000; White, Virden, & Van Riper, 2008; Wöran, & Arnberger, 2012). With increased awareness of diverse locations and how to achieve different outcomes, advanced participants are less motivated to, or have lower tendency to, substitute activity sites (Bryan, 2000, Salz, Loomis, & Finn, 2001, Kuentzel & Heberlein, 2006; Woran & Arnburger, 2012). Site substitution refers to changing a site of participation away from a preferred site because of external factors such as changes that mean the site no longer suits expectations and needs (e.g. exceeded carrying capacity, crowding, environmental degradation, lack of natural resources), or closure of the site (ex. conservation management, loss of access to private property) (Oh et al., 2013). Recreationists are often pushed to substitute their preferred site for another. As participants progress and seek out new challenges, they explore niche subgroups and techniques, adapting the activity, and finding ways of participating that suit them best or express who they are. For example, Whittaker and Shelby (2002) show that kayakers generally start with either flat water or white water kayaking, but within white water kayaking for example, a person may further eventually find that play boating, creek boating, or river tripping suits them best (Whittaker, & Shelby, 2002). Further, advanced participants are more able and willing to purchase and choose equipment that facilitates specific skills, techniques, or experiences. Further

progress in the activity may demand more or different equipment, such as a boat to go upstream to reach 'better' fishing locations (Waight, & Bath, 2014).

Expert Profile. Experts have committed substantial resources to their ongoing participation in an activity, including frequent, often daily, involvement in the activity and even bridging into a participant's career (Bryan, 2000). Experts participate regularly and enjoy the activity. They show functional and emotional attachments to preferred sites and styles of participation. Experts are knowledgeable in numerous techniques and skills within an activity, and often seek novel practices. Experts have multi-faceted expertise and knowledge within the specific activity, but also concerning broader environmental conditions (Bryan, 2000; Mccarthy, 2002; Scott, & Shafer, 2001). For example, fly-fishing experts intuitively 'read' river currents and flows, as well as wind conditions, which inform their decisions about optimal sites and specific opportunities for angling; further, they have learned about fish and insect species behaviour, migration and hatch patterns, and ecological relationships (Whittaker & Shelby, 2002).

Experts are generally more supportive of direct conservation management strategies and regulations (MacCarthy, 2002)). McCarthy's (2002) study of all terrain vehicle (ATV) users' perceptions of enforced trail quotas and limits on party size in recreation sites or parks shows that as participants progressed in experience and skill, their respect for management practices increased. They were interested in supporting practices that ensured future participation on the trails and 'maintained' environments. Weight and Bath (2014) demonstrated that the participants classified as 'activity-specific' mountaineers exhibited greater support for low-impact practices, suggesting that they were more compliant with management practices that encompassed low-impact practices. Those who were not as specialized were less aware of restrictive management

protocols. Similarly, specialized anglers were more likely to favor fish size limits and mandatory catch-and-release programs (Lewin, et al, 2006).

The recreation specialization literature describes experts as more likely to be disrupted by human crowding, experiencing some sites as having too much social interaction and not enough focus on the activity. They are also more sensitive to environmental degradation of sites (Cottrell, Graef, & Confer, 2004; Dyck, Schneider, Thompson, & Virden, 2003; Lee 2011). Experts value their 'ideal' location, and they commit time to ensuring the environments they recreate in are managed properly.

Experts embody their knowledge (Lewis, 2000; Mullins, 2013) and identify with places deeply (Mccarthy, 2002; Kuentzel & Heberlein, 2006; White, Virden, & Van Riper, 2008; Oh, Sutton, & Sorice, 2013), meaning that their on-site experiences and engagement lead to greater mental, physical, and emotional understanding. The embodiment of their knowledge further contributes to an enhanced sense of belonging with a place (Kuentzel & Heberlein, 2006).

Experts are described in both the recreation specialization literature and broader outdoor recreation literature as deeply connected to their activity and its setting. Such connections are nurtured through extensive time and dedication to the craft, and often involve significant financial and lifestyle commitments. As shown through numerous studies (Galloway, 2012; Kuentzel & Heberlein, 2006; Seaman & Coppens, 2006; Lee, 2011), experts are 'trail blazers' in skill, setting or promoting trends, and adopting or supporting environmental ethics within an activity.

Limitations of Recreation Specialization

Recreation specialization is described as a developmental process; however, there are few studies that have tested the extent to which recreationists progress to more advanced levels (Scott

& Shafer, 2001b). Scott and Shafer (2001b) suggested looking at the "antecedents of progression" (p. 321) rather than framing recreation specialization only in relation to other variables such as motivations, attitudes, management practices, and so on. Scott and Shafer (2001b) have called for research that "compare[s] the dynamics of progression across different leisure activities" (p. 321) pointing to Bryan's (1977) position that activities would vary in terms of complexity and opportunities for progression. When specialization is understood as a process, it shows an underlying assumption that progression is directed toward a constant or 'real' level of involvement, and that the 'end product' of progression is an elite or privileged status within the recreational activity. Bryan (1977) highlights this status among fly anglers as "representing the end-product of a progression of angling experience leading to a more and more 'mature' or specialized state" (p. 177).

This linear conceptualization of recreation progression limits our ideas about how skill is understood and expressed through recreation specialization. Assuming people start equally and as 'beginners' and then progress through each stage is likely inaccurate, and not representative of many participants' lived experiences with recreational activities, and in settings that are always already socio-ecological. Scott and Shafer's (2001b) study suggested researchers will gain "fresh insight into the meaning of progression" (p. 137) and may be in a better position to understand the dynamics of leisure activities and the factors underlying progressions. In response, Bryan (2001) acknowledged that specialization has been interpreted as a linear concept comprising stages, and that progression needs to be examined further. Specialization can be pointing towards different destinations.

Bryan raises concerns that outdoor equipment and its marketing can lead participants to "jumpstart" (p.345) participation in activities such as hunting, fishing, climbing, and hiking.

With “jumpstarting,” people may enter an activity motivated to buy the newest and most technical gear, in order to ‘compete’ with others, rather than entering in a more traditional way, as a child taught by a parent, for example. Bryan was concerned that such issues may impact leisure experiences and personal development. Bryan (2000) asked “how researchers of specialization explain, for example, equipment-refined, well-conditioned backpackers who leave litter at campsites and show little concern for their impacts on delicate ecosystems; or highly skilled participants who display little concern for the ethic or the etiquette of their sport, whether it be mountain biking or fly fishing?” (p. 346). Bryan suggested that taking a more organic approach to learning an activity will enable a person to learn more about the activity, and environment. A more organic approach means developing slowly to better allow for learning behaviors and attitudes, technical skills, and building a sense of self, or identity to the activity and its settings.

These limitations regarding recreation specialization have varying implications for this research. To address Scott and Shafer’s (2001b) concerns regarding linear progression, this study used a qualitative methodology and relational approach to better understand and characterise recreation specialization from within the activity, across and within the stages, while exploring how gender and socialization operate in relation to skill development. This research emphasized a relational approach, trying to explore personal, social, ecological, and environmental relations involved in skills and across the stages of specialization. This was done by developing and applying a heuristic model (see Figure 3 in Methodology) that integrated research to date.

Understanding Skill

Within the literature of outdoor education, skill has often been conceptualized as technical and separate from other components of the activity such as personal growth, ecological knowledge, or other outdoor living skills. Mullins (2014) has suggested that

> Rather than a mode of engaging one's surroundings (be they wild, urban, rural, or other), skill has, for a long time, been framed in adventure education, recreation, and tourism as a technique of the body related to risk and apart from a relationship concerned with place and environment (p. 134)

Skill development can be described and understood in terms of human-nature connectedness. Educating for skill and place in outdoor recreation and education has gained momentum over the last two decades; however, exploring through an ecological and mobilities perspectives still requires further exploration. McCarthy (2000) used the terms 'ego-conscious' and 'eco-conscious' to note climbers' perception of "extending one's self so that identity is shaped by the interpenetration of the human and the natural" (p.188). These terms speak to an understanding of how the body and natural world 'intermingle' and connect to place, demonstrating how through situated movement and experience a participant's progression in skill can help them develop a sense of place and connectedness. Moreover, researchers such as Robinson (1996) and Brymer and Gray (2009) have theorized outdoor adventure sports as a means of transcending ego-centered subjectivity and delivering the recreationist to a "felt knowledge" (Robinson, 1996, p.254) of human integration with the natural world, an eco-consciousness. Robinson's (1996) research suggests more advanced participants may experience and develop deeper or different environmental connections.

Evernden (1996) suggests that intermingling between self and environment is a constant element of place, and that these relationships challenge assumptions and habits about the world as being inhabited by discrete beings. Evernden asserts that human lives are shaped by interconnection with the environment in ways that have been "obscured by our approach to experience, to science and to self" (p. 182). Beedie (2003) describes this well in mountaineering, where he suggested that to 'know' the mountains "equates to having spent time in them, undertaking walking, scrambling and/or climbing" (p.151). Doing so, mountaineers learn how to identify and examine landscape conditions, to differentiate trails, routes, wind patterns, sheltered valleys, and exposed ridges that enable their travel. Additionally, McCarthy (2000) describes how mountaineers provide "unique perspective on submitting the self to nature and thereby realizing an alternative version of self that apprehends the 'unity' of self and environment" (p. 187). Such experiences and realizations, occurring over time and practice, may be appearing among more advanced participants, whom the specialization literature has shown are more aware of their settings, management practices, and minimum impact ethics.

For someone to be understood as *knowing the mountains* is also a function of socialization into an activity: for the person to have spent time in the mountains, in particular ways, with other mountaineers who recognize this knowledge. However, such knowledge, performance, and social relations are not restricted to the mountains alone, but also extend into peripheral spaces where mountaineers gather (Beedie, 2003). These places include club meeting rooms, pubs, equipment shops, mountain huts, audio-visual presentations and events, symposia, and conferences. Beedie best describes this as a way to spend time with mountaineers to absorb patterns of behaviour relating to what to talk about, how to talk about it, how to dress, and what

mountaineering objectives one should aspire towards. Over time, this process of socialization generates its own particular forms of recognizable behaviour and knowledge.

In Western epistemologies, sight is often assumed to be the primary sense for experiencing, but Lewis (2000) described the importance of physical touch as a channel for gaining knowledge and making it corporeal. Lewis' (2000) study emphasized the engagement of a climber's hand touching the rock, making direct contact and feeling the hand on "nature itself" (p.59). This focus of corporeality suggests that as a participant spends time in a setting, they develop skills and knowledge that are more embodied, compared to when they start out as a beginner with limited exposure or experience with the activity and setting. Building on Lewis' research on corporeality and skill development, we can infer that as an individual enters a new outdoor activity they may feel that the outdoor setting provides an escape from their everyday, or work life, rather than a space or place that belongs within them. Further, researchers such as Newbery (2012), Beedie (2003) and McCarthy (2000) show that when beginners participate in outdoor activities they relate as visitors to the setting compared to relating as belonging with nature. This suggests that moving along the continuum of specialization, experience and skill development enables deeper environmental connections and senses of belonging.

Ingold (2000) describes skills as learned through practical hands-on experience and mediating human environment relations within specific settings. Mullins (2014) summarizes Ingold's notion of skill as involving "care, judgment, and dexterity in attuning one's abilities to perceive and act relative to a web of relations within ever-changing environmental conditions that present limits and opportunities for action in accomplishing something" (Mullins, 2014b, p.330). Ingold (2000) frames skill as being more than a tactile movement, disconnected from flesh and the natural world. He describes skill as "being developmentally incorporated into the

functioning of a body through practice and experience in particular environments and with particular equipment" (Mullins, 2014b, p.331). For the purposes of this study, I understand skill based on Mullins' (2014b) conceptualization, which summarizes and incorporates Ingold's (2000) notion with findings from wider outdoor recreation and education research, contexts, and practices. Skill is

> The intentional ability of an individual or group to create and/or maintain an outcome, product, experience, or relationship that is imagined in advance but can only be realized through performance of embodied capabilities of perception and action that involve the whole organic being(s) within a web of particular relations extending throughout and shaping an active environment and dynamic landscape that include other beings. (Mullins, 2014, p. 329)

Mullins' (2014b) further explains and clarifies skill by providing five implications of this conception of skill. Figure 1 summarizes each implication that he includes and how it may apply to fly-fishing, for this project.

Figure 1

Implications of Skill Applied to Fly-fishing

Implications	Description	Application for Fly-fishing Study
1. Skill is always uncertain	Settings and environments are not static and can affect an individual's performance of an outdoor activity. Uncertainty emerges because forces and elements that challenge the body require adaptation and different skill sets.	Settings for fly-fishing are dynamic. Lakes and rivers require different skills and present different challenges. Anglers require the ability to perceive and adapt to weather changes, flows in the environments, and fish behavior.

2. Skilled performance can be molded and limited in different ways.	The use of tools, technologies, and equipment can limit or enhance skill because they are additional pieces that contribute to skilled performance.	Fly rods, flies, waders, and other equipment can enable and enhance the experience. Effective skill and technique with tools and technologies can also prevent development of abilities to naturally read or intuit settings.
3. Skill relates to training and experience.	Individuals and groups develop skills through training and experience while situated in their activity environment. Skill is developed through direct guidance from others and can also be developed through indirect guidance such as media, stories, internet forums and so on	Fly anglers choose to participate in groups or individually, which can influence learning and skill development. Online fora and media also contribute to anglers' knowledge and influence their learning.
4. Enskilment is one way of understanding the environment around you	The process of becoming skilled results in familiarity with elements of the environment. Landscapes of various types provide opportunity for learning. Multiple flows interconnect landscapes, which are shaped to different degrees and proportions by both human and non-human forces.	Through experience over time in an area, fly anglers may learn to read their environment to enable success, including increased knowledge of where fish stay, insect hatches, river flows, as well as current and weather patterns.
5. Skilled performance is potentially powerful	Skill is a form of self-expression, but it also acts on various beings, their surroundings, and their ways of 'dwelling'.	Motivations for fishing change and reflect self-expression. Identity as a fly angler shapes how one acts and perform in the activity, leading to potential influences on environmental management and policy.

Note. Adapted from Mullins (2014b, p. 320-334), explaining various implications of an ecological conception of skill, here applied to the activity of fly-fishing.

Skill incorporates the body's movement and actions within a dynamic setting while a participant is trying to accomplish the objectives of the activity. Ingold (2011) used the term *wayfaring* to describe a fundamental kind of movement in which we use our bodies to perceive

and respond within our dynamic surroundings; wayfaring "is movement" (p. 150). Tools and equipment can also be essential to skill development and wayfaring, aiding and shaping the progression of skill within an activity (Ingold, 2011; Mullins, 2014b).

Developing skills may seem, on a superficial level, to merely be a matter of hand-eye coordination, balance, physical strength, and agility. Lewis (2000) suggests, however, that skill-related work can challenge the mind, body, and spirit and allow participants to change, leading to self-expression and embodied knowledge:

> The body has the propensity to physicalize and convey its own sensibility, to become a matrix of, and for, inscription. Such a standpoint of conscious mutability highlights the body-centered battle within modernity, that the body feels changes in both its material and ideational environments (Lewis, 2000, p. 63)

Lewis (2000) examines the climbing body in various settings and expressions. He uses the example of the climber's hands as a way to 'feel' and understand their movements and relationships with environments; hands are capable of being a "mediator, [they have] the capacity to resolve or transcend subject/object dualisms such as 'man' and 'physical thing'" (Lewis, 2000, p. 71). Lewis also explains how climbers' hands process information and knowledge of the world. A climber, through their own physicality and navigation on the rock, intrinsically learns to sense their material world, and this shapes their ideational environment – how they understand the world and knowledge. Explaining embodied knowledge in climbing, Lewis (2000) claims that:

> Tactile navigation – the kinaesthetic moving/touching of the body – is the total embodied awareness of a body in an environment. Knowledge is made corporeal with the sense of touch replacing that of sight as the primary mode of gathering data (p.71).

Guides, instructors, and mentors play an important role in skill development. Many outdoor experiences are guided, particularly for beginners or participants challenging themselves in new or unfamiliar settings. Such guiding plays an important social and environmental role in skill development and overall experiences. Choreography is a term that has been used to describe how outdoor educators and guides frame and conduct an experience for others (Beedie, 2003). In most cases, guided outdoor recreation is choreographed to meet the objectives of the participant's perceived expectations of the experience. As a result, a guide can be considered as "a choreographer of social experience" (Beedie, 2003, p. 162). As a beginner participates in a choreographed outdoor activity, the expert frames and demonstrates the norms of practice and understanding within the settings and activity. Novices attempt to mimic these. Choreography creates and shapes social spaces and physical settings in which individuals and groups learn, experience, and practice technical and social skills (Mullins, 2014). Therefore, social interactions and sharing skills and experiences shape peoples' perceptions of an activity and environment. In Beedie's paper on mountain guiding, he illustrates how leisure participants observed, followed, and adopted norms of attitudes, behaviours, and practices established and displayed by professional guides. Participants viewed these elements as measures of acceptance into an activity, and incorporated them into their own identity. Guides are therefore 'gatekeepers' and informal teachers of norms, attitudes, and practices within the context of the activity. Their conduct can shape, respond to, and/or perpetuate normative and stereotypical identities (Beedie, 2003).

Newbery's (2003) description of solo canoe portaging illustrates how the typical assessment of success in terms of physical strength can lead the skill to be gendered as masculine. Structuring learning to include assessment also privileges able-bodied male

participants by holding able-bodied men as the standard for successfully learning a skill. Such power relations, therefore, shape the skilled practices learned, identities developed, and experiences had by participants (Fox, 2008; Humberstone, 2000; Kiewa, 2001; McDermott, 2004). Such dynamics also help to explain why some participants progress beyond beginner while others may not.

Literature on recreation specialization, and outdoor recreation and education more broadly deal differently with the use of technology and purchase of equipment. Recreation specialization literature focuses on equipment as an aid for lack of skill development, and possible hesitations to purchasing equipment as a beginner (Bryan, 2000). Outdoor education literature often describes equipment, tools, and technology as complex and dynamic aspects of experiencing settings and participating in outdoor recreation (Mullins, 2014b). Moreover, tools and technologies are a way to shape a person's experience and sense of connection with an activity and setting (Bryan, 2000; Michael, 2000). However, Ingold (2011) described tools as transducing the users' perceptions through or into different mediums (air, water, rock) within their environment. Ingold's understanding of tools suggests that compared to beginners, more specialized participants will better be able to perceive their environment through their tools, such as their fly rod and line, since the tools extend their bodily perception into and allow interaction and experience of the river environment.

Understanding outdoor recreation skills offers new ways of understanding self in connection with surrounding environments. Little attention has been given to the ways gender informs skill development in such contexts, however. Bringing concepts of gender and socialization into this project necessitates a broader look into how fly anglers develop skills, and into how social relationships and interactions influence specialization. It is also likely that

popular media and professional guides communicate norms, practices, and meanings that influence participants' understandings and skill development, so that should be considered as well.

Drivers and Constraints

Participation in outdoor recreation and leisure activities is driven and constrained in various ways that shape how people engage and maintain involvement. A review of basic research on 'leisure constraints' is therefore relevant to this study's foci on socialization, gender, and specialization. Actual and perceived drivers and constraints differ with specific geographies, and research on privilege and diverse accessibility has highlighted discrepancies in access to and use of recreation services across a range of characteristics including race/ethnicity, gender, socioeconomic status, place of residence, education level, and age (Garcia, Gee, & Jones, 2016). Although some drivers and constraints may be similar across genders, they can often manifest differently and impact certain people more profoundly, compared to others.

Drivers

Two predominant types of driving forces are identified in the literature: those that encourage an individual to begin an activity, and those that drive people to progress within an activity. A driver described in research on recreation specialization is increased time availability due to 'empty nest syndrome' or retirement (Lee, 2000; Kuentzel, & Heberlein 2006; White, Virden, Riper, 2008). Although this is not the primary reason why recreationists begin a particular activity, life stages influence leisure time, choices, and opportunities. Other drivers include the desire for a personal challenge through a new activity or joining peers or friends in an activity (White, Virden, Riper, 2008). Social relationships and social connection through leisure participation are often key. Participants receive multiple positive benefits through a feedback

loop: that is, they are enriched by the social dynamic as well as the physical activity, which further encourages participation. This concept is very predominant within leisure and well-being studies, and the concept of leisure well-being is linked with quality of life (Sato et al. 2014), or more specifically subjective well-being (Kleiber 1999; Diener 1984; Diener et al. 1999). Definitions and conceptualizations of leisure well-being are mostly based on the assumption that "aspects of cognition, affect, and behavior are associated with subjective well-being as a result of engaging in recreational activities, passively or actively during one's leisure time" (Sirgy et al., 2017, p. 207). Sirgy et al. (2017) defines satisfaction with leisure life based on how people engage in certain activities, and the "affective experiences related to those activities are segmented in a life domain we call leisure life" (p.208).

Mordue (2013) suggested that media and marketing also motivate participation in new activities. For example, whereas rock climbing was once a relatively "underground" sport, it is becoming an increasingly commercialized mainstream activity. Media and marketing can drive participants to start or progress through an activity, and Mordue highlights that they are also "strongly connected to and influence social norms and discourses about activities" (p.111), which shape choices for people's leisure and recreational pursuits (Mordue, 2013).

The second category of drivers influences progress through the recreation specialization continuum. Individuals who are geographically closer to activity sites have potentially greater opportunity to participate, they are less constrained in this sense, and therefore can gain more experience (White, Virden, Riper, 2008). Financial resources also enable participants to gain experience and progress through specialization; financial resources enable equipment purchases and lessons, for example (Galloway, 2012; Cottrell et al., 2003). Bryan (2000) was particularly

concerned with motivation, challenge-seeking, and boredom as driving progression and specialization within an activity.

Constraints

A leisure constraint is defined as anything that hinders people in their ability to engage or remain in leisure activities, to access leisure or recreation services, or to achieve a desired level of satisfaction in an activity (Jackson and Henderson, 1995). Time and money are considered by Anderson (2005) to be the most prevalent constraints on leisure activity participation, including in recreational fishing. Participating in many activities, and not choosing or being able to focus time and money on one activity, may constrain specialization (Kuentzel, & Heberlein 2006). Walker and Virden (2005) demonstrated through a leisure constraints model (see Figure 2), how macro- and micro-level factors contribute to real and perceived leisure constraints. Additionally, recreationist relationships with safety, fears, self-consciousness, and family commitments are some of the intra- and interpersonal constraints that exert powerful influences on individuals' leisure decisions in addition to structural constraints like finances and accessibility.

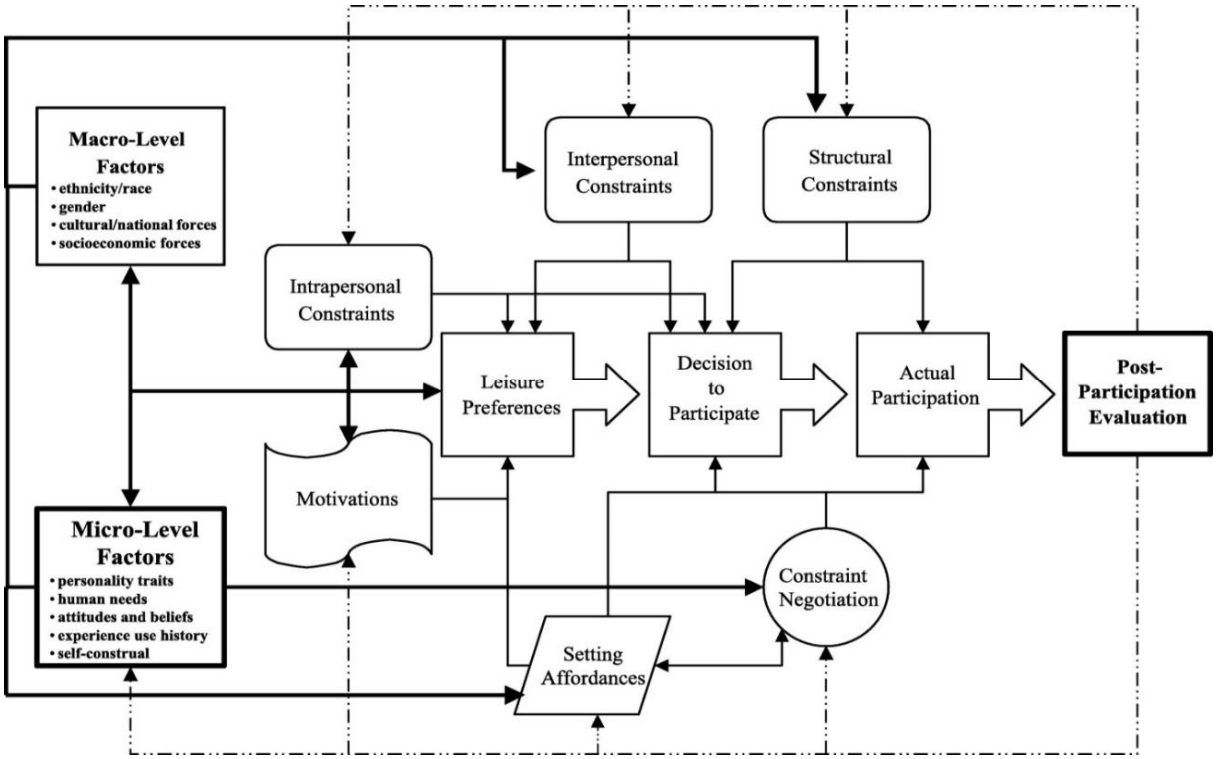
Constraint negotiation (how people try to alleviate the effects of constraints) impacts various stages of leisure involvement, including setting leisure budgets, decisions to participate, and actual participation. Such negotiations deal with "intrapersonal, interpersonal, and structural constraints, and differs with gender and other social factors" (Hinch et al., 2005, p. 156). Minorities may also face economic, accessibility and social barriers that prevent them from pursuing outdoor activities such as mountaineering, fishing, or mountain biking. Those barriers can increase with the intensity of activity as cost of gear, access and acquiring essential skills also increases (Valdez, Drake, et al., 2019; Xiao et al. 2017). As seen in the literature, recreational fishing is embedded in a gendered culture that prioritizes men's experiences

(McKenzie, 2005); and leaves women underrepresented in academic study of recreational anglers (Fennell & Birbeck, 2019). These combined institutional and cultural factors may "influence women's lived leisure experiences through gendered expectations that arguably limit, constrain, or negatively impact their relationships with fishing" (Yerkes et al., 2018, p. 9). Constraints and social relationships operate in various ways and on different levels. They can represent barriers to starting an activity, within or across skill levels of anglers, and/or in norms of practice and perceptions of risk. Gender is particularly important in constraints research; constraints can be interpreted as intimately associated with skill and with socialization.

Other constraints on participant involvement and progressing through levels of specialization include fears and risks. Lewis (2000) showed that by having to cope with the possibility of death when rock climbing, participants had to address feelings of fear, ultimately pushing the participant to "experience their bodies in intensely organic, physical, and tactile ways" (p.72). This combination of experiences resulted in participant's experiencing senses of connectedness with the activity and environment, further enabling the climber to climb the route. Lewis's study does not, however, include every participant in every activity and focuses more on embodied skill rather than dealing with their psychological fears and perceptions of risks.

Figure 2

Leisure Constraints Model



Note: Adapted from Walker and Virden (2005), the model reflects Jackson and Scott's (2000) contention that both interpersonal and structural constraints intervene between leisure preferences and actual participation.

Constraints can also include the availability of facilities, personal perception of skills and abilities or their past development, and access to transportation and recreation resources (Anderson, 2005). Since much of the literature is heteronormative and supposes straight relationships and nuclear family scenarios, this is reflected here. Much work needs to be done to increase coverage of the gender spectrum and relationship possibilities in this literature. Scholars suggest that adult women often experience an interruption in their leisure activities when their children are born, and such interruptions can continue until the child leaves home (Bialeschki, 1994). Although women are traditionally more burdened with family-related

constraints on leisure time, men also experience constraints and barriers with family responsibilities – leading to decreased time and commitment to recreational activities. Duda (1999) suggested that many women are not committed to active angling participation until adulthood, and often either drop out of the sport or fish less frequently than men (Duda et al., 1999). Both Duda (1999) and Bialeschki (1994) showcased how men and women have varying constraints at different times of their life.

Intersectionality is a term used to capture the "operation of power and how it frames social difference (gender, race, ethnicity, caste, class, and disability, among other markers of difference)" (Nightingale, 2016, p. 2). Intersectionality highlights the ways that different dimensions of identity come together to shape how social difference operates and forms everyday experience for both individuals and groups. Nightingale (2016) describes how a co-emergence captures the way that societies and environments are intertwined and internally related. Further, Nightingale (2016) claims that outdoor recreation is:

> steeped in colonial thought that promotes rugged individualism and encourages participants to conquer the challenges before them, such as mastering the environment, without significant consideration of how their actions feed into a dominant narrative that ignores people who have a different lived experience (p.5)

A review on what intersectionality means is important to understanding leisure constraints among individuals and groups. While there are many common constraints people may all experience, race, sex, and class need to be emphasized within the literature, as there are many more systemic barriers that contribute to real constraints in outdoor recreation participation. For example, research on recreational site preferences suggests people with greater familiarity with undeveloped recreational sites tend to view them more positively (Valdez,

Drake, et al., 2019). Based on Valdez, Drake, et al's. (2019) concept of familiarity-preference logic, they suggest in their study that Black and Hispanic anglers in the US may prefer developed fishing sites (ex. with docks, decks, etc.) because they are more likely than Caucasian anglers to fish within urban boundaries where such amenities are available (Ditton and Hunt, 1996). Limited access to transportation or perceived barriers to accessing transportation may also limit people of colour from visiting more distant outdoor recreation sites that they may otherwise prefer (Xiao et al., 2017). Further, ethnic and racial minorities use of recreation settings may be constrained by fear of crime and discrimination (Ditton and Hunt, 1996). Briefly touching on racism here is important. Racism goes beyond establishments typically associate with it, like law enforcement, and is engrained across many institutions and systems, such as recreational sites and settings (Powers, Lee et al., 2019). Understanding the intersection of racism, policy, segregation, and access within the outdoors, Powers, Lee et al (2019) argue that outdoor and recreational activities in general, have traditionally served white communities in North America. A combination of "economic inequality, legalized segregation, and other forms of historical and present-day overt/covert racial violence has perpetuated a diversity gap in the outdoors" (p. 256).

To address this gap and better understand constraints on diverse groups of people I turn to the body of literature on intersectional research which suggests that it is "important to consider the additive effects of different demographic classifications on various life opportunities" Markides, Liang, & Jackson, 1990, p. 120). This means that engagement in multiple groups (women, elderly, BIPOC) can compound one another and exacerbate inequities in access to recreation services and participation in outdoor recreation activities. One framework from which to understand and address these compounded inequities is known as the multiple hierarchy stratification perspective (MHSP) (Markides, Liang, & Jackson, 1990). This perspective

illustrates how “access to valuable social resources such as housing, jobs, and social welfare is determined by the intersection of various demographic attributes” (Markides, Liang, & Jackson, 1990, p.122). The MHSP is particularly valuable because it examines intersectionality through a social hierarchy lens. The MHSP suggests that combinations of statuses associated with privilege, such as being Caucasian, a male, university educated, and having a high income, correspond with greater access to various recreation opportunities while multiple disadvantaged statuses such as being a person of color, a woman, not having a college education, and living in a rural area correspond to reduced access and participation (Powers, Lee, et al., 2019). These privileges play out in terms of time available in one’s week for leisure and its quality (long duration, fragmented), differential domestic and child care responsibilities, as well as access and transportation to and from natural settings that are often remote and difficult to get to (Xiao et al., 2017).

Complex processes influence participation in recreation and affect people differently based on gender, race, age, physical/mental abilities, and class. The literature on a person’s life cycle, intersectionality, and social factors describes various ways people experience real and perceived constraints, and their ability to participate in leisure and outdoor activities. In addition, there are multiple factors that drive participation and commitment in an activity, such as curiosity, media, and finances, and ease of access to recreation spaces.

Conclusion

The literature review acts as a foundational body of information for this research. Kuehn et al’s (2006) work on socialization into an activity shows that there are three stages of social interaction and engagement (initial, attachment, and commitment). Kuehn et al. describes how through the various stages that acquire motivations, attitudes, values, and norms of practice. This

is further expanded on in the Communities of Practice literature, where Handley (2006) describes that participation is where identity and practice start to develop. In addition to knowing an activity, a person must take part and socially connect with those in the activity to truly learn and embody the knowledge.

Warren and Loeffler (2006) speak to the challenges and discourses among women when presented with technical skill development (TSD) as it relates to women's participation in outdoor activities. The various ways people are introduced to outdoor activities, from learning alongside family members, to learning online, are affected by and can affect gender norms, stereotypes, and participation. More work is needed to examine the effects of gendered space on outdoor recreation participation (Henderson & Hickerson, 2007). The literature on socialization and gender demonstrates how some outdoor activities are structured around specific skill sets, and that some practices may not be inclusive or support diverse identities. How success is measured and perceived, as Newbery's work shows, is often gendered, and influenced by social norms. Literature from Bull (2009) shows the complexity of masculinity as it is portrayed in outdoor spaces and conceptualized into the landscape. Bull draws on two concepts within gender geographies; the first reflects the rural in the masculine as it discusses the particular relations between the rural male and nature, landscape, the environment and animals. The second reflects the "masculinities of the rural as it discusses the social spaces of the rural" (p.447) and responds to the male/female dualism by recognizing variations within each.

While there are many reasons to continue progressing in an activity, there are also many factors that might limit progression. Scholars employing recreation specialization theory have helped to dismantle the assumption that anglers are homogeneous or monolithic in motivation, skill, commitment, and experience. Rather, anglers and participants in other activities are multi-

dimensional and should be perceived this way. Specialization research has, nevertheless, shown that participants with different levels or degrees of skill and commitment differ in their desired and lived experiences and understandings of an activity and its settings (Bryan, 2000, 2001). Skill development is not just a physical component to learning; skill can transcend understandings and highlight connection of self and environment. For example, beginners' experiences may not fully include a sense of awareness or connectedness with their body and environment. Rather, the participant may experience their settings through a more cognitive and visual capacity, distanced from the setting, whereas spending more time in an outdoor environment with a particular activity may lead to expressions of self and understandings of the outdoors through whole-body approaches (Lewis, 2000).

Research on drivers and constraints completes the literature review by examining motivations for and barriers to engaging or continuing participation within an activity. White, Virden, and Riper (2008) discuss how personal challenge can be a *driver* to participate, alongside starting a new activity, or joining peers and/or friends. Participants can receive multiple positive benefits through a feedback loop which Sirgy et al. (2017) describe as leisure well-being. Constraint negotiation (how people try to alleviate constraints) is equally important when understanding recreationist desire to engage in an activity and their ability to participate in it. Leisure constraints can impact people at various stages of leisure involvement.

Methodology

This project is based on interviews and participant observation, and I attempted to include the notion of working together within ongoing practice. Such an approach allows for qualitative description that help to uncover meanings, perspectives, and complex social relationships including socialization. I considered how gender norms are understood and portrayed using elements from mobile methodologies that recognize human relationships, space, time and place as "mediated by our movement through material and social worlds" (Fincham, McGuiness, Murray, 2010). Feminist theory, such as White et al. (2001) principles of feminist research, further underpinned my research, and complements this approach because it ensured that gender was understood as central to human relationships to each other, space, time, and place.

Theoretical Approach

I chose a qualitative approach because I felt it the best way to investigate and report on how angling and skill development within it are experienced and learned both individually, and collectively. I agree with Fincham et al.'s (2010) claim that qualitative research develops and innovates techniques to better understand and represent the complexities of a world in movement, as well as experiences in which movement is crucial and takes different forms. Understanding participant's actions within dynamic settings helps to frame this research as a cross-section of how people understand gender, socialization, and skill development in fly-fishing. Additionally, using a mobility paradigm (Urry, 2007) to better understand the social and gendered relationships of fly anglers' skill development contributes to understanding how various relationships are enacted through outdoor recreation. Büscher and Urry (2009) suggested the mobile methodologies crucially connect how people make their world and their knowledge of it. According to Fincham, McGuinness and Murray (2010) a mobile methodology recognizes that

human relationships ‘to each other, space, time and place are mediated by our movement through the material and the social world’ (as cited in Mullins, 2014b, p.568).

Participatory Ecological Approach

An ecological approach to skilled outdoor activity supports interactions within outdoor settings and integrates place and sustainability because “(a) movement is embodied, (b) experience is choreographed, and (c) personal and landscape meanings can be cultivated through travel” (Mullins, 2014, p. 321). Payne and Wattchow’s (2009) notion of *organic bodies* is important in understanding a participatory ecological approach. Individuals are interacting, experiencing, and connecting with the world around them, whether urban or rural. A participatory ecological approach combines bodily mobilities and ecological understanding through skill and participation in outdoor activities (Mullins, 2014). An ecological approach situates human development, activity, and experience in relation with an environment that is always already social and biophysical (Mullins, 2014; Beringer, 2004; Gibson, 1986; Ingold, 2000). Mullins (2014) argues that outdoor adventure theory has

> not readily explored the centrality of skill despite it being a key educational and experiential element common to outdoor and adventure recreation, education, and tourism. A nuanced focus on skilled practice, approached ecologically, could help researchers and practitioners understand, critique, and improve the learning, meanings, and relations bound up in participants’ outdoor activities (p.322).

Further to Mullin’s contributions to a participatory ecological approach, Payne and Wattchow (2009) described a turn towards corporeality and “sensual engagement aimed at fostering embodied understanding of self in relation to the environment [as] the precondition in which meaning, identity, and culture form” (p.323). People develop greater senses of self and more

intimate relationships with their environments through skill and learning. McCarthy (2002) showed that participants who experienced dynamic environments and conditions, such as different weather while mountaineering, were better able to connect with the settings and build an embodied identity through those experiences.

A Feminist Framework

The feminist framework included in this project gendered identity and gender's relationships with meaning, space, and place. There are many feminist methodologies and frameworks that could be used to focus on individuals and social groups (McDowell, 1997). Recent feminist and postmodern critiques of feminist work have raised complex questions for research that incorporates a feminist lens. My research challenges the binary notion of gender and, rather, approaches gender and gendered geographies as diverse and multi-dimensional (Beckman, 2014). More distinctly, I understand that characteristics of femininity and masculinity are not fixed, but are multiple, diverse, and variously related to biological distinctions. Furthermore, feminist geographers have noted that the binary distinction between women and men, has been replaced with a notion of gender as fluid and open to change through self-reflexive practice. For example, Butler's work on gender identities as embodied performances (1990, 1993), and other analyses of the construction of masculinities and femininities as impersonations (see Simpson, 1994), have greatly influenced feminist scholars in the social sciences (McDowell & Court, 1994a, 1994c; McDowell, 1995a).

Weaving a feminist praxis into my research means combining theoretical discussion of feminist methodology with detailed accounts of practical research processes (Stanly, 1990). This blend of the practical and the theoretical contributes to "understanding the relationships between theory, method, and feminist epistemology" (Stanly, 1990, p. 21). Stanly (1990) understood

praxis as a way to accomplish three interconnected things. First, it should not be reduced to a superficial "glossy for any one particularly feminist position", but should rather represent a continuing commitment to feminist positions in which knowledge is understood as "knowledge what" and also as "knowledge for" (Stanly, 1990, p. 26). The second is to acknowledge and interconnect theory and practice in the process of social science research. Thirdly, instead of 'method' as a second-hand thought in research, Stanly asserted that

> both method and theory sit on a primacy of 'how', or rather they insist that 'how' and 'what' are inseparably interconnected and that the shape and nature of the 'what' will be the product of the 'how' of its research investigation (1990, p. 32).

Other researchers such as Gringeri, Wahab, and Anderson-Nathe (2010); Jayaratne and Stewart (2008); White et al. (2001), and Beckman (2014) used these three interconnected concepts to ground their feminist approaches to methodology and epistemology.

Feminist research is not merely a 'perspective,' a way of seeing, or an epistemology, a way of knowing, "it is also an ontology, or a way of being in the world" (Stanly, 1990). Underlying feminist research and its principles is the most basic of the feminist views: equality for women and men (White, Russo, & Travis, 2001). Many academics, particularly in social research, have adopted White, et al.'s (2001) principles of feminist research: "inclusiveness and diversity, the importance of social and historical context, combating power and privilege, and social activism" (p. 267). White et al. (2001) grounded feminist methodology and epistemology in eight principles of feminist research:

1. Power imbalances
2. Expand the questions asked
3. Listening to women's voices and experiences

4. Emphasis on diversity and intersectionality
5. Multidisciplinary and mixed method research
6. Reflexivity
7. Social relationships during the research process
8. Use of research results

These principles show the importance of multiple methods, asking new questions, and the role of language in framing and naming issues and concerns. The eight principles also recognize that gender is but one of a set of social identities that must be recognized in research conceptualization, analysis, and interpretation (Beckman, 2014).

Reflexivity

Reflexivity, through a feminist methodology lens, refers to the process by which individuals use their self-reflections both about themselves and their reactions to others to uncover different types of knowledge (Lykes & Hershberg, 2012). Additionally, Reflexivity, as defined by England (1994), is a process of "constant, self-conscious scrutiny of the self as researcher and of the research process, as well as acknowledging rather than denying a researcher's own social position and asking how my research interactions and the information collected are socially conditioned" (Hay, Pain, 2010, pg. 37). Through critical self-reflection about one's own thoughts, feelings, values, biases, experiences, and theoretical models, the researcher can reveal hidden privilege, identify power differentials that limit participant involvement, illuminate ethical concerns, heighten understanding and create more egalitarian relationships (Hesse-Biber & Piatelli, 2012). Through Hess-Biber & Piatelli's (2012) work, they attempted to recognize what they, as feminist researchers, brought to the research and how participants may interpret what they, the researchers, bring. Behar (1996) speaks to the level of

reflexivity in her research and what she deems acceptable. She asks "do you, the observer, stay behind the lens of the camera, switch on the tape recorder, keep pen in hand? Are there limits- of respect, piety, pathos- that should not be crossed, even to leave a record?" (p.2).

In social science it has been debated and discussed to what extent reflexivity and subjectivity should be present in a study. There is a fine line between a researcher's personal connections with their study and maintaining a separation from research participants. One approach to subjectivity and reflexivity is through Clifford's (1986) discussion on 'partial truths' and 'rigorous partiality'. Understanding the limitations of a study and identifying the researchers own subjectivity in their interpretations, helps to frame a study in a more honest and rigorous way. This gives readers an understanding that the interpretations are from experiences and data collection that may not represent the whole truth- as it is impossible to convey it all or tell it all. Thus, "the simplest cultural accents are intentional creations, [and] interpretations constantly construct themselves through the others they study" (Clifford, 1986, p. 10). This study aimed not to seek out the exact truth or reality, but to acknowledge that reality is perceived in many ways. As such, the findings are presented as the researcher and participants claim to have experienced them. The practice of reiterating meanings with participants through the field discussions helped to ensure interpretation that fit with participant understandings. Exploring gendered spaces, identity, and social norms as factors influencing angler experiences was important because of the historical and contemporary male dominance of fly-fishing, in terms of participation and representation. I kept in mind Pederson's (1998) analysis of outdoor 'lived experience' using ethnographic fieldwork (p. 394). Her work highlighted the many dimensions of doing 'field' work as a female researcher, including how she approached power relationships among male participants, as well as representing female participants without generalizing or unifying their

stories. Pederson describes being uncomfortable being in a male-only setting when "in wilderness" (Pederson, 1998, p.398). She often had to assume a role of 'beginner' within the activity and had to learn to manage "varying degrees of interactions with her male participants, such as seeing her as a sexual object, needing to teach her skills, and assuming a paternal role" (ibid, p. 399). Field research is a process of personal interactions, of complex relationships and of partial knowledges and flawed understandings. I agree with what McDowell (1997) notes in her research on gendered spaces - that nobody is disembodied or ungendered. She acknowledged that 'we', the researcher, enter the field bringing with us a set of social characteristics and assumptions. It is now recognized that it is "impossible to disguise our gendered identities, to dissemble and become the disinterested and neutral observers of positivist methodologies. Instead, we need to take them into account (McDowell, 1997, p. 391).

In the outset of this research, I believed that I would be exploring and learning about the experiences of fly fishing from an equal percentage of men and women, a limitation I discuss later in the thesis. The reality was that my sample was mostly men, and the fact that this was a male dominated activity became clear early in the research. I wanted to be able connect with the participants in a relational way, and as a young female researcher working with mostly male anglers through semi-structured interviews and participant observation, I experienced advantages and disadvantages. One advantage was being female; where anglers perhaps felt more comfortable sharing certain aspects of their experience, compared to if I was male. From a power dynamics perspective, I may come across a less intimidating, solely based on my gender. Whereas if I was a male researcher, I may have been seen as threatening, or in competition. Thus, perhaps limiting what the anglers felt comfortable sharing in relation to their childhood, challenges while learning to fly fish, and family dynamics. I made sure to remain curious and

open to participants' stories, taking Penderson's (1998) approach to not generalize or unify responses and behaviors of the anglers. Being a female researcher also positioned me in particular ways. For example, gathering information on expressions of gender and gender performances through interviews and participant observation placed me as an 'outsider' able to observe male anglers talking about catching fish, their family life, and various other related fishing topics. Many of the terms, and connotations were gendered, and participants may have held back some use of words or stories because of my female presence, and may have more freely expressed themselves around a male researcher. If I had been a male, there may have been potential for deeper insight and inclusion into those moments. However, as a woman I was also positioned to notice these sorts of behaviour and language. These are examples of my position as a female researcher and how power differentials played out in my research, as Hess-Biber & Piatelli (2012) suggest.

I also identify as a beginner angler; this was a unique and unanticipated aspect that fed into my research. While interviewing beginner anglers I could relate to many of their experiences, more so than advanced and expert anglers. That said, the novelty of the activity also allowed me to notice the skill and behaviour of the advanced and expert anglers as different from my own. Had I more skill and familiarity, I might not have been so able to see this. This highlights Clifford's (1986) discussion on *partial truths* and *rigorous partiality*, where my own lived experiences help to shape my understanding and interpretations of the findings. It was easier to describe and relate to those who shared my personal skill level then those who described skills and knowledge that I had not yet experienced myself. While I do not think this impacted my ability to interpret other levels of recreation specialization, I do think that it helped to strengthen my skills in data analysis to ensure rigorous partiality.

Heuristic Model

The heuristic model (see Figure 3) represents an attempt to characterize the continuum of recreation specialization and outdoor skill development in terms of personal, social, ecological, and environmental dynamics and relationships. It initially developed through the review of literature from outdoor education, recreation, leisure and tourism, as well as from sociology, anthropology, and human geography. Academic journal articles were coded to determine themes in relation to social, personal, ecological, and environmental relations relative to skill development. NVivo10 was used for this because, as Cabraal (2012) explained, (a) it helped to organize and identify patterns and input information into categories, (b) it allowed for simple changes in formatting, such as groups (nodes) can easily be altered as you progress, and (c) the information was always linked to the source. These qualities made the literature review and, later, the data analysis easy to organize. The coded literature was used to draft the heuristic model, in order to integrate various concepts and relationships identified as relevant to stages of specialization in outdoor activities.

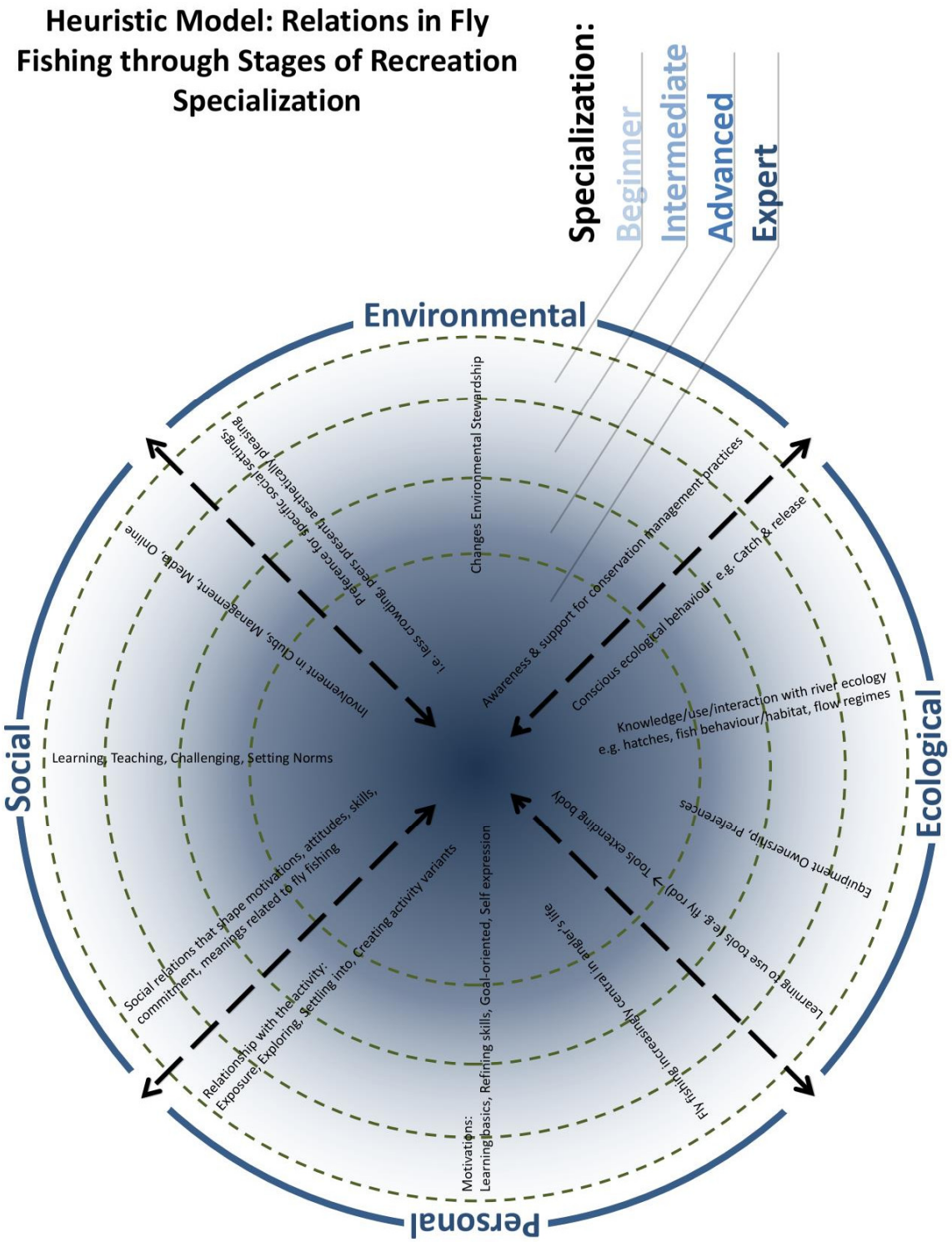
The model serves to conceptualize and investigate how specialization and skill within an outdoor activity may involve and structure diverse relationships, potentially shaping people and places (Mullins, 2014). I used the heuristic model in my research as a framework to guide and interpret connections between participants' lived experiences, and how these relate to the social, environmental, personal, and ecological dynamics of skill development and progression.

The stages of recreation specialization (beginner, intermediate, advanced, expert) are represented by the four concentric rings of the model, organized from least specialized on the outside, inwards to the most specialized. The levels of specialization are characterized by four relationship types: intrapersonal, social, ecological, and environmental. These relationships are

represented by four quadrants on the model, sectioned by dotted arrows. The pie-like image illustrates that the relationships are not separate from one another. Rather they are complex and may ‘bleed’ into each other as different aspects that are part of the whole. Further findings and implications from the literature reviewed (ex. regarding equipment, involvement in clubs, etc.) were positioned within the relationships and along the continuum of specialization as well as possible.

Figure 3

Heuristic Model of Relations in Fly-fishing Through Stages of Recreation Specialization



Methods

This section reviews the methods used to design the data collection, recruit participants and analyze data. Data collection included administering a brief questionnaire to determine level of specialization, conducting semi-structured interviews with each participant, and doing participant observation during invited field days (by level of specialization). I analyzed the data using NVIVO to thematically code transcriptions of the interviews by using a coding tree; themes were derived from coded material and informed by the participant observations, and then further synthesized into main findings. To ensure that my methods continued to stay grounded in my theoretical framework, participants were invited to review the heuristic model prior to the field days. The hope was that they would reflect on their actions, thoughts, and behaviours during the field days, with the model in mind. This impacted the way participants shared their knowledge and explained their experiences on the water.

Recruiting Participants

Participants were recruited through online forums and local Facebook groups that focused on fly-fishing, outdoor recreation, hunting and fishing in Northern BC. Emails and posters were also used throughout the University of Northern British Columbia and in the wider Prince George community to attract eligible participants. Additional participants were identified through snowball sampling (Stratford, 2007), in which participants referred friends and acquaintances who might be interested in the study. In addition, following Patton's (1990) recommendation, purposive sampling was incorporated, meaning that participants were not chosen at random. Rather, they were solicited because they had existing knowledge, experience, or understanding of fly-fishing, at a particular degree of skill and/or experience in the activity. Upon inquiry, all participants were given a formal information letter about the project. If they

agreed to participate, consent was recorded so that images and responses from interviews could be represented in the research, and each participant mentioned in the research is referenced using pseudonyms. The project was approved by the University's Research Ethics Board (#E2014.0827.068.02).

Profile of Participants

Twenty-three participants agreed to being interviewed, of the 23 participants three were female and 20 were male. Participants ranged from the ages of 19 to 60 and all lived in Prince George and region. Occupation of the participants varied from working within the Trades industry, being an entrepreneur, a student, and University professors. Salaries were not disclosed by participants; however, I inferred through stories of their upbringings that, in general, participants were middle to upper-class and affluent with disposable incomes for leisure activities.

National and Provincial Profile of Fresh-Water Anglers

In 2015, more than 3.2 million adult anglers actively participated in a variety of recreational fishing activities in Canada (Fisheries and Oceans Canada, 2015), and most active anglers in 2015 were residents fishing within their home province or territory (roughly 2.6 million people). In British Columbia, 247,582 active anglers participating in fresh-water angling, and of the active resident anglers 71% were male and 21% were female with an average age of resident anglers being from 44-48 years of age (Fisheries and Oceans Canada, 2015). Specific demographics of fly anglers within Canada and BC were not found; however, the general angling statistics provides an insight to how popular fresh-water angling is within the country and province of BC and confirms that angling in a predominantly male dominated activity. Lastly,

the statistics from Fisheries and Oceans Canada (2015) align with the sample of participants I collected for this study.

Recreation Specialization Questionnaire

Upon agreeing to participate in this study, participants were given a brief recreation specialization questionnaire (see Appendix A) to determine their level of specialization. The questionnaire used an index developed and tested by Salz, Loomis, Finn (2001), and further validated across recreational activities by Hawkins, Loomis, and Salz (2009). The questionnaire offered participants a selection of categories describing combinations of various dimensions of specialization in an activity, and then asked participants to select a category that most accurately described them. The tool used Bryan's (1977) main criteria of recreation specialization (centrality to life, equipment, involvement, experience, and financial investments). The questions were "ordered from least specialized (response option = 1) to most specialized (response option = 4) along a 4-point scale" (p. 243). The idea was that each participant would choose the response item that best suited their level of specialization. The least-specialized participants would select response option 1, and the most-specialized participants would select response option 4. The sum of the four responses (least specialized: 1 + 1 + 1 + 1 = 4, highly specialized: 4 + 4 + 4 + 4 = 16) was then used to locate anglers along the recreation specialization continuum (Salz, Loomis, Finn, 2001).

I administered the self-classification questionnaire to participants prior to interviewing them. Past studies demonstrated that self-classification through a simple tool was an accurate way to determine level of specialization. For example, research with ultimate Frisbee players (Kerins, Scott, & Shafer, 2007) and scuba divers (Sorice, Oh, & Ditton, 2009) had found self-classification measures to be effective for "segmenting recreationists along a continuum of

specialization because the measures are easier to administer, analyze, and interpret" (Needham, et al, 2009, p. 449), as was the purpose within our methodology.

Semi-structured Interviews

Once the participants filled out the short questionnaire, semi-structured interviews were conducted at a later date. A total of 23 semi-structured interviews were completed using the interview guide (see Appendix B). The guide was used to explore deeper meanings of anglers' fishing experiences, gender, and social understandings either explicit or implicit (Henderson, 1990). The questions related to components of recreation specialization (ex. setting preferences, equipment, resource management) and were organized around the four relationships (i.e., personal, ecological, social, and environmental). Within each relationship section, the questions addressed topics such as how social interactions are part of participants' fishing, how they were introduced to the sport, and how environmental awareness and responsibility relate to fly-fishing. More specifically, questions in the social relationships section addressed or prompted for responses regarding the participant's interactions with people of different/same gender while on the water, their personal experiences and observations with men and women learning and demonstrating skill, and their awareness of social norms and norms of practice in fly-fishing.

The semi-structured interviews were conducted face-to-face- and took place at the University of Northern British Columbia. The interviews lasted between 45 minutes and 2 hours, depending on participant interest in the questions or knowledge shared. Interest in responding to the questions (besides the innate passion for fly-fishing) was encouraged by building a rapport with the participants, because the "relationship established between interviewer and informant is often critical to the collection of opinions and insights" (Dunn, 2010, p.113). All interviews were recorded with a 2015 Sony recording device and a cellphone as a backup. In addition, detailed

notes were taken during the interview to ensure key concepts were remembered and revisited during the discussion. Dunn (2010) advised researchers to maintain a "critical inner dialogue" (p. 116) during an interview. This means that the interviewer is constantly analyzing what is being said and simultaneously formulating the next question or prompt. Notetaking was used to write key words and thoughts to gain insight from the participant responses and maintain a critical inner dialogue. This practice also allowed for a natural flow from topic to topic during the interviews and encouraged a natural dialogue between the participant and researcher. Moreover, this process allowed the participant to continue a train of thought, enabling them to describe an experience in greater detail.

Fieldwork and Participant Observation

Once interviewed, all participants were invited to attend a day of fishing. Four field days were organized by level of recreation specialization (beginner, intermediate, advanced, and expert). Based on participants' willingness and availability, the four days each had three participants, except the beginner group (conducted last), which had two participants due to a 'no show' at the field day. The first field day was in early August, and the rest were in September and early October. To provide context and enable better comparison within the progression of specialization, we sequenced the days so that we could observe and record the experts first, and then work backwards to the beginners during our last field day. Table 1 shows the date, specialization level, and notes regarding the river and weather conditions on the day.

Table 1

Field Day Dates and Observed Conditions

Date and Specialization Level	Weather Conditions and Environmental Observations
August 15, 2015 EXPERTS	21.5 degrees C **River conditions:** high water table, clear visibility, current was strong **Surrounding environment:** mosquitos, flies, and other insects around river edges, small breeze throughout the day, trees along river are lush and seem to be home of many bird species: grouse, eagles, and osprey
September 12, 2015 ADVANCED	16.4 degrees C **River conditions:** lower water table, a few sockeye were noticed in the river, clear, current was strong, trout seem to be rising to the surface of the water **Surrounding environment:** raining through the morning, windy causing leaves to fall, autumn conditions, leaves and grass turning colors. Osprey observed during the afternoon.
September 19, 2015 INTERMEDIATE	17.2 degrees C **River conditions:** lower water table, a lot of sockeye in the river (can clearly see them along the riverbed, spawning and finning in the water – a lot of action), current was strong **Surrounding environment:** partly cloudy, very windy-warm winds, fall day, bear in area (viewing in the afternoon), slightly frosty in the morning
October 3, 2015 BEGINNER	12.6 degrees C **River conditions:** lower water table, less sockeye in the river from week before (can clearly see them along the riverbed, spawning and finning in the water – slower moving than week before, can see more dead sockeye along the riverbed), current was strong **Surrounding environment:** mist/fog above the river in the morning, fairly chilly in the morning, afternoon warmed up and was a sunny day

Participants were picked up at 6:00 am from the University campus; participants and researchers were transported to the Stellako River by a rented shuttle bus. Having all the participants in one vehicle allowed time for briefing and bonding before the arrival at the field site. Table 2 shows the schedule for the day including the different activities; this was emailed to participants in advance.

Table 2

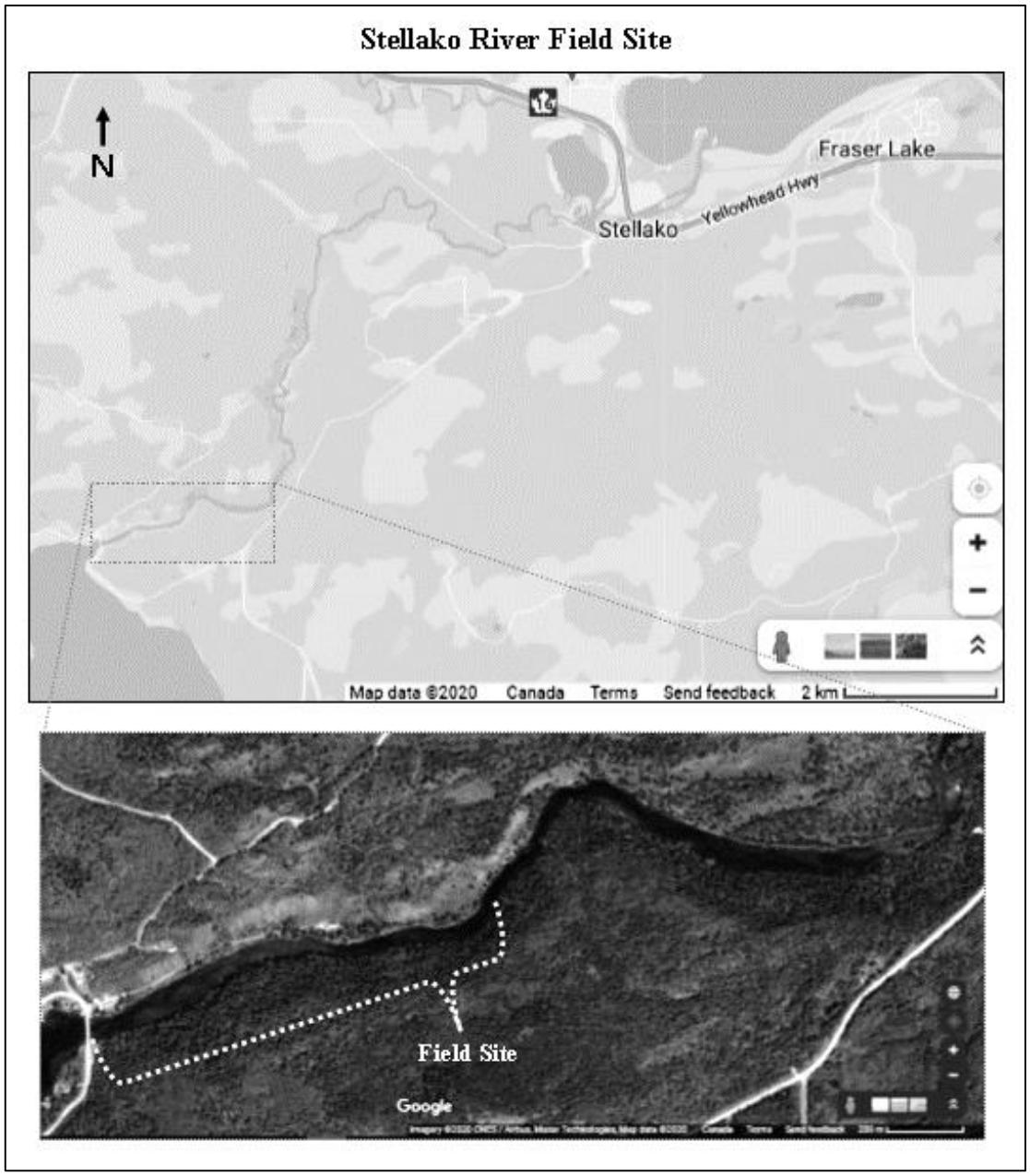
Schedule for Field Days

Time	Activity
6:00 am	All participants and researchers met at the university bus loop for the scheduled shuttle service
8:00 am	Arrive at data collection site (Stellako River).
8:00 – 8:30 am	Orientation to the participants and explanation of the day's activities.
8:30-12:30 am	Participants were asked to attach a 'Go Pro' camera to their person and to verbally explain their processes to approaching the fishing site, what they observed, how they evaluated the site and what their steps were to prepare for the activity (for larger study).
12:30-1:15	Lunch
1:15-3:15pm	Participants were asked to go back onto the river and continue fishing, this time without the 'Go Pro' gear. Rather, participants were given a set of prompts to think about while fishing which were later discussed as a group
3:15-4:30pm	Participants came together as a group to discuss the heuristic model in relation to their experiences, guided by the prompts, and focused on their respective degree of specialization.
4:30pm	Return to university bus loop

Field Site. The Stellako river is known among anglers for its wild rainbow trout fishery; in fall it also hosts a sockeye salmon run and spawning area, and the trout are known to eat the salmon roe. Wild rainbow trout are the main attraction for fly-anglers; the wild stock draws anglers from all over BC, Canada, and internationally. The combination of plentiful fish and ease of access to the 11 km river, which flows from Francois Lake to Fraser Lake in BC, Canada, makes parts of the river accessible to all skill levels. Some parts of the river are difficult to access, and more suitable to higher skill levels. The reach of the river used for all groups in this study was accessible by road, and located at the head of the Stellako river, very close to Francois Lake, about 10 km from the Highway 16 (Yellowhead Highway) turnoff, near the small community of Fraser Lake, 150 km west of Prince George. Figure 4 shows a map of the Stellako river, and the location of the field days.

Figure 4

Map of the Stellako River Showing Field Site



Note. Map show location of Stellako River running from Francois Lake, in SW, to Fraser Lake, in NE, in Northern British Columbia, west of Prince George. Satellite image shows enlargement of area with field site indicated. Map adapted from Google Maps, data ©2020, accessed April 15

2020; satellite image adapted: Imagery ©2020 CNES/Airbus, Maxar Technologies, Map data @2020.

Participant Observation. Participant observation was used during field days to record participants' dialogue, movement, gestures, skill, and interactions they had on and off the water with people and surrounding natural elements and spaces. To capture and understand various parts of a day of fishing, and the interactions among participants, observation continued over the whole day, from initial meeting until drop off at the end of the day, and included driving to and from the fishing site. Observations were recorded by hand in a field notebook, as well as using a camera to capture pictures of the participants on and off the water (see Figure 5). By using detailed notes from the field, the data were able to represent unspoken knowledge or understandings, displayed in behaviour and shared in comments and conversation. Spradley (1980) used participant observation in his studies and noticed that this method puts "social scientists in a position to infer participant's inferred knowledge from their sayings, doings, and equipment" (p. 11). Additionally, DeWalt and DeWalt (2010) learned that through participant observation they could monitor and record implicit aspects of their subjects' life routines and their culture. For such aspects to be collected from individuals' actions; they need to be "experienced as performed" (p.649) in order to be understood (Hastrup & Hervik, 1994). I incorporated Zahle's (2012) four types of observation into my process so that clear and detailed notes were included in the process, and so that participants' practical and tacit knowledge were recorded. In addition, prompts were used as an observation guide to ensure focus and meticulous observation throughout the day (see Figure 6). The prompts helped to ensure thorough observations and notes were made in several areas of focus, such as language used and knowledge of place.

Participant observation was an appropriate choice for this project because it allowed me to try and see participants' lived expressions of social norms, gendered traits, and qualities of specialization as they participated in the activity. Many social behaviours, expressions of gender, and ecological and environmental relations were not explicitly recognized by participants—or had become normalized for them—and this method helped bridge gaps recording and understanding lived experiences and expressed knowledge.

Figure 5

Notebook and pictures were used to record detailed notes and images during participant observation

Note. Pictures were taken to illustrate participants' actions, decisions, and implicit understanding of fly angling.

Figure 6

Prompts for Participant Observation

1. Skillful interaction/correspondence:
   Examining/reacting/accounting for water, air, fish, insect life, equipment (e.g., switching equipment, keeping flies dry).
   a. Describe how they appear to be fishing – ease, frustration, relaxed, excited (by what)
   b. What is easy, difficult, frustrating, important? Thinking about line, rod? Paying attention to what?
2. Etiquette and norms of practice:
   Ecological, social, environmental – examples of adhering, breaking, reinforcing
3. Knowledge of place and setting:
   Where to fish, geography of the place, how they move through and around the setting, environment, each other, and the fishing spots, different for times of year/seasons, fish species…
4. Language used:
   How do they talk about the place, environment, fish, activity – what sort of language do they use? What sense are they evoking, imparting? What stories are being told, when, why? Emphasis? Personal position? Point and effect of the story?
5. Embodied knowledge:
   How they cast, sense their env, how/why they adjust casting, presentation of fly, style of angling (nymph, dry fly, streamers), spots on river, position. How their bodies are changed, used to the environment, clothing, technology – sensual perception and/or technical focus.
6. Social & Personal:
   How they interact with/describe/perceive other anglers? Examples of their self-perception as anglers, descriptions of others (different specialization).

Note. These six prompts and brief descriptions were used during participant observation while anglers were fishing to remind me to attend to these types of evidence and relations.

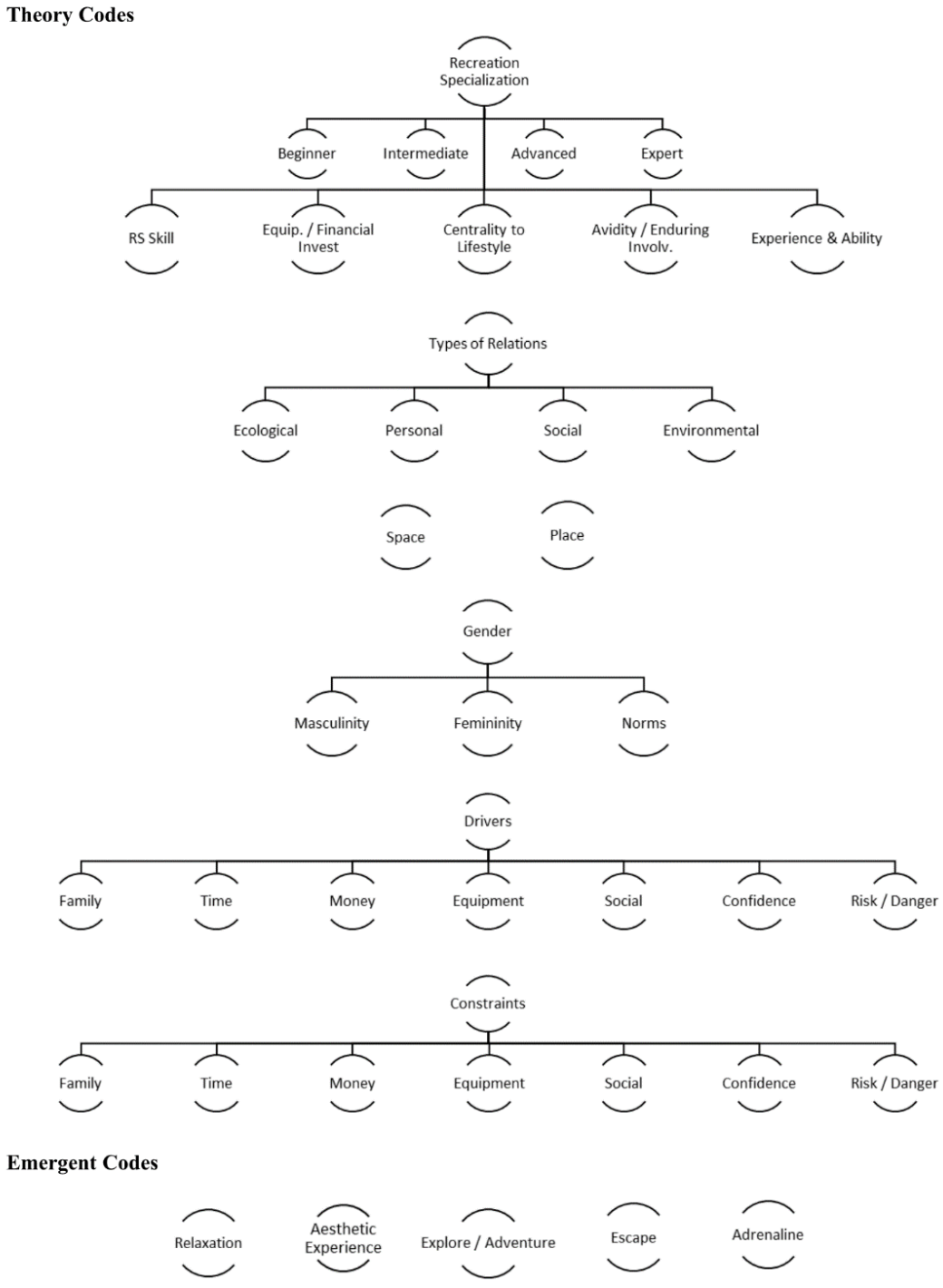
Data Analysis

The 23 semi-structured interviews were transcribed verbatim, using a transcription key from the Qualitative Research Methods in Human Geography book (Hay, 2005) (Appendix C). This included attention to participant tone and voice. Then all transcripts were thematically coded using NVIVO computer program. In addition, notes taken during participant observation were included in the thematic coding process to help establish connections between the interviews and field work; to link what was said with what was done by participants.

A codebook was created (see Appendix D) to organize the descriptive, analytic, and emergent codes (MacQueen, 1999). Initial codes were created before the field day and related to theory and grounding concepts, such as recreation specialization, socialization into and within the activity, and gendered norms of practice. Emergent codes were added and adapted as each read-through occurred to proper capture what the participants had expressed in their interview responses (see Figure 7). Earlier transcripts were then revisited to ensure coding was applied evenly.

Figure 7

Code Tree



Note. The image shows the codes used in analysis, organized by 'parent' and 'child' node in NVIVO.

Each transcript was read six times, with the researcher focused on reading for and applying codes related to particular elements. This allowed me to clearly identify themes and patterns within the data. I conducted the following readings and rounds of coding:

1. Recreation specialization characteristics and overall recreation specialization level
2. The four relationships (social, ecological, environmental, intrapersonal)
3. Gender

    Explicit references to gender, norms of practice, and socialization

    Implicit references to gender, norms of practice, and socialization
4. Motivations and constraints
5. Emergent themes
6. Counter examples of the above

Once the transcripts were completely coded, codes from the recreation specialization reading were examined to understand their relationships to the four relationships codes, and to levels of recreation specialization, socialization, and gender. This examination was done by reviewing which codes matched, and reviewing which codes connected and which ones did not in the NVIVO program. Through this process I could see predominant relationships and sub-relationships within the transcribes and start to build themes and findings.

Upon completing the coding in NVIVO, the content of each code was reviewed. Key words, concepts, and relationships within the main and sub-codes were recorded (see Figure 8), which were used to sort and interpret the meaning, significance, and relations within and between the content of the transcriptions. This helped with identifying themes, sub-themes, and creating a clearer image of what the data were ‘saying.’

Figure 8

Sticky Notes for Data Analysis

Note. Sticky notes were used to help analyse the emergent themes and to help remain focused on the main research focus areas. The top sticky notes highlight the three key areas of the study: gender, socialization, and recreation specialization. The middle column illustrates the four levels of specialization and details the main content coded from the transcriptions. The predominant or main concepts are represented by the large sticky notes; from there, medium sticky notes illustrate subthemes from the main concept or theme. Smaller sticky notes around the main

themes represent detailed information along with tiny sticky notes to highlight key information or emergent information found from the coding process. The sticky note process helped organize the information from the coding of the transcripts and lay out the initial themes, information, and relationships from the data collection.

Once the sticky notes were organized into main themes, with sub-themes identified and connected to their proper code(s), further analysis occurred by creating a table for each recreation specialization level. This helped to describe the relationships that emerged from the data by adding the information from the sticky-notes into the tables. Populating the tables helped to further identify how each level of recreation specialization engaged and understood their relationships with the environment, skill, the activity, and social spheres etc. (see Appendix D). In addition, going through this process allowed me to interpret how themes that emerged from the data played out by level of specialization. This helped to clarify findings that addressed the research questions and spoke to the dynamics within the community of anglers and across levels of specialization.

Limitations

In any research study, there are limitations, and this study has a few. In this section I identify two main limitations to my study, first the geographical scope, and participant demographics. Throughout the research process many lessons were also learned, in particular, how to design a qualitative research study and align interview questions so that participant's responses can relate to my research question. Once the literature review was complete, I found it difficult to create an interview questionnaire that would help to answer my main research question. As a novice researcher it is hard to grapple with some of the larger theoretical concepts and translate them into interview questions that elicit from the participants responses that speak

to your research query. At the time of this process it was still very abstract, and as a result one of my larger lessons and a limitation to this research.

Geographic Scope of the Study

The field site, and overall study was conducted within the Prince George, BC area. This could be perceived as a limitation since the geographical area in which this study takes place is relatively small. However, this is also an interesting aspect of the study, because it provides an in-depth look into a small community of participants in rural outdoor recreation. While larger studies may support and inform broader management and policy in outdoor recreation, this study offers a unique look into the anglers in northern BC, and can provide much insight for management, education, and policy in the area.

Participation demographics

Very few anglers who identified as beginners agreed to participate. Even after taking the self-assessment questionnaire, participants usually identified as an intermediate. One theory for this outcome is that beginner anglers are not yet comfortable engaging in the angling community (as demonstrated in the literature), or do not have the confidence to identify as a fly angler yet. One way we approached this limitation was to focus the recruitment of beginners through purposive sampling. We also used snowball sampling and asked existing participants if they knew of any beginners who might be willing to participate. In addition, introductory fly angling classes held at the University provided a recruitment opportunity, particularly for beginners.

While recruiting participants, there was also an assumption that there would be a fairly equal sampling of both men and women who fly fish. However, that was not the reality, and the participant sample was mostly men. Of the 23 interviewed participants, 20 were male and three 3 were female. For the field days, there was only one female participant. This is a limitation

because the data from the participants mostly shows a male perspective and does not include a strong sampling of female voices. To address this limitation, I acknowledged the disproportion of male to female participants and focused on the examination of how male anglers express and portray masculine and feminine expression within fly angling. The representation of participants contributed towards the findings and is further discussed in the findings and discussion chapters.

Lastly, getting participants that had been interviewed to attend field days was difficult. For the field days there was a relatively small (but dedicated) group that provided practical insights and allowed for participant observation.

Findings

The findings from this study provide an understanding of how participants from the Prince George, British Columbia area and different levels of recreation specialization experienced and understood fly-fishing in a relational way. Findings speak to this particular geographic area and fly-angling community, and I do not assume that the findings represent the thoughts, actions, motivations, and values of broader fly angling communities across British Columbia or elsewhere. The main findings in this study are:

- First, participants' social relations move from dependence on other people to do the activity, participants intentionally structuring relationships that match their desired experiences. This also led to self-expression on the water.
- Second, anglers learned to belong socio-ecologically through skill development; beginners were learning to cope with equipment and a dynamic river that felt foreign, whereas experts' proficiency allowed them to feel a sense of unity and responsiveness as they experienced a setting.
- Third, anglers' description of fish shifted from framing fish as a detached object of possession that affirmed their ability, to framing fish as another being with whom they communed and connected through fishing.
- Fourth, the anglers generally described fly-fishing as a way of escaping everyday routines in order to engage with different aspects of themselves and socio-ecological environments.

Finding 1: Social Relationships Shift from Dependence to Intentional Self-Expression

The importance of social exchanges that occur throughout the early and later phases of skill development highlights the multiple ways anglers can depend on people for learning,

building confidence in their technique, and how to read the environment around them. Many anglers, whether they preferred to be around people or away from people while fishing, shared stories of having a person(s) who guided their knowledge and skill development. On the river, the primary leisure experience shifted from friends and family mentorship being central, to social relationship being peripheral to the leisure experience.

For beginners, social relations in their early involvement started as central. These early relationships with friends or family enabled initial exposure and practice in the activity and were key to learning skills and building knowledge. Beginners were quick to express how they depend on others in many situations, especially mentors and influencers. Through the early stages of skill development, fundamental skills of fly-fishing were often introduced, shown, and nurtured by a family member or friend, who may have introduced the beginner to the activity.

> Oh it was so long ago, umm but honestly fishing has been a part of my family for a while, and yeah… I guess it would be my grandpa who first took me out fishing. I mean it was just spoon, or um gear fishing, but he was the one with the fly rod. It looked like more fun, yeah know?…with the long strong (line) waving back and forth haha. He let me try, it was a disaster, but I didn't uh, know any better, right? (Dennis, participant 8, beginner)

Participants stressed that they were more inclined to pick up the basic skills if they were shown by others, and they continued those types of interactions to absorb and learn fundamental skills.

> I'm just a beginner (laughs) so I don't really know much, and my cast would not be goo-where it's at now if it wasn't for Stuart. I like going out with him because each time is different…and uh I know that he will show me how what I uh am doing wrong, like with my casting, or like finding the fish – that sort of thing. I would be lost if I didn't ummm go out with him (Hunter, participant 18, beginner)

As participants progressed along the continuum of specialization, engagement with their mentors was less about a necessity related to dependence. It was often described as a social experience rather than an instructional one, emphasizing influence. Beginners strongly associated the quality of their fly-fishing experiences with the social components of the activity, and without those social connections, participants shared that they would likely not be going fishing. Beginners spoke about the social interactions with their friends as being just as important to the experience as the practical aspects of fly-fishing. As important as the social friendship aspect was to the experience, beginners also saw such relationships as resources for information and decisions about fly-fishing locations and suitability.

> I really only go when Dave goes haha, he is the one that takes us to the hot-spots. Umm… I also have some friends that invite me out here and there, and I usually try to go urr- with them too. But.. I dunno like with Dave he knows where I can fish, like the water and the fish are easy there. Sometime when I go with the others - like the other group - I get nervous since I don't always know where we will be going. (Laurence, participant 15, beginner)

Another respondent answered that:

> Yep…I pretty much like fishing for the social aspect….I like throwing a line back and forth, shoot'n the shit haha and yeah maybe having a beer at the end of the day. That's what it's all about, sure…I might not catch anything but a couple good laughs and it's worth it for me… (Wayne, participant 14, beginner)

Advanced and expert anglers were likely to avoid areas perceived as over-saturated with other anglers, and rather would fish with a select few friends or family members who fit into

their desired experience. They would often seek out less-accessible locations, with a specific setting or species to catch.

> I don't really go with anyone anymore, haha. I used to fish with a few buddies… and if they call me, sure I'll go out on a Saturday and toss the rod around… but usually I just go by myself. (Bert, participant 5, advanced)

For expert's the practice and meaning of angling was centered on self-expression, through a desired experience, which depended on their skill, competence, place knowledge, and intentional structuring of their social relationships.

> To me that's, I don't lake fish at all, just only rivers and it's the adventure of getting out, hiking, seeing what's around the next corner, checking out new areas. I have maybe one or two buddies that I bring, they can keep up… That's what fills my cup…. Uh when you learn a new river, the fish tend to hold in the same spots so when you get to know a river intimately, you can go for a hike and not waste time fishing the entire river when you know you're going to get fish in each spot so..... yah I guess I sort have a desired experience haha. (Jose, participant 20, expert)

For the experts in this study, these desired leisure experiences were predominantly centered on ecological relations, such as engaging a species or population of fish. Experts also involved intentional structuring of their social group, meaning that they will invite other anglers who match their skill level and desired fishing experience, and will limit the group size to a small one when they do invite others to participate. Expert anglers described having a central group of people with whom they fished for the day; and they experience other such groups on the river as peripheral groups. On occasion, experts focused their leisure experience on being a mentor and teacher for other anglers, interacting, sharing knowledge and/or information in a way that usually

flowed from advanced and experts to the beginners and intermediates. Experts acknowledged their changes in motivation from socialization and high interest in sharing knowledge to newer anglers (as a part of their overall experience), thus shifting towards a mentorship role in the activity. From learner to teacher, the findings show many expert fly-anglers were motivated to engage in the activity by the positive outcomes of teaching others. This quote is illustrative of the bonds and satisfaction formed via teaching and mentoring:

> Researcher: *so what has been the most rewarding part of your fly-fishing skill progression?*
>
> Participant: Actually now I would say probably the most rewarding thing is teaching a good friend of mine how to fly fish, he just got into it last year and I have been there since the very first day he got into it and now I've seen him progress and it's probably been the most rewarding. (Jose, participant 20, expert)

Exchanges between beginner and more advanced levels of recreation specialization occur simply through communication, beginners generally stick to their central group on the water, and experts give pointers/advice to others. The peripheral social groups (those that were not in their immediate fishing group) were described by beginners as intimidating. But participants said that it was common for more experienced anglers to approach them on the water to give them a quick pointer or suggestion. This was framed as the other coming up to them, and not the beginner necessarily reaching out.

> Quote 1. Ohh no haha nuh uh hahaha that's too scary! I guess I could, but I uh don't …no not usually. I don't know why, I don't want to bug someone who wants to just fish… (Dennis, participant 8, beginner)

> Quote 2. I actually go to Northern Hardware, yeah that guy is easy to talk to, but uhh no not really anybody on the water…I see people once in a while giving tips, like here and there…I don't mind that – that's happened before… but in general I don't really see any kind of that interactions uhh no. (Laurence, participant 15, beginner)

Nuances in the way fly anglers socialize on and off the river can be related to their skill level, and influence skill and knowledge development on and off the water. My observations suggest that beginners experienced social relations through a sense of dependency, as they relied on their close/central social group to support participation in the activity. Advanced and expert anglers structured and limited their socializing as part of self-expression and curating a desired recreation experience on the water. Experts did socialize with peripheral individuals or groups both on and off the water in order to share knowledge, provide 'tips', instruct skills, or even offer lessons. They typically framed this as an experience that was different from their typical recreational fly-fishing. Socializing occurs differently on the water and through media channels, yet both offer different learning outcomes for anglers, and play different roles within the larger process of socialization. Socializing on the water enables more embodied knowledge transfer, where bodies, equipment, and environments are not static, thus providing an immersed skilled learning opportunity.

Off the water, media also enable learning and help skill development, but through a more *static* experience, where knowledge and skill are understood conceptually, and would need to be experienced, practiced, and developed later. Beginners and intermediates in this study tended to be intimidated by more advanced anglers and would not typically request guidance or advice from them while on the river. For example,

> When I first started uh, going on the river it was all so new – yah know?.... You see others there and yah they clearly know what they are doing eh hahaha – it uh, yah was like intimidating to be there with them, yah know? – wouldn't approach them to ask a question…maybe just observe haha like uh look over kinda haha what fly are they using haha. (Wayne, participant 14, beginner)

Off river, beginners and intermediates reported seeking guidance and information from sources like YouTube, online forums, magazines, shops, and fly tying get-togethers. They reported using online resources to gather specific information on something they needed to know about, such as a fly-tying technique, where to get affordable gear, or how to problem solve in a specific section of river. Such knowledge exchanges were important for beginner and intermediate anglers off the river. Learning and skill development on the river, however, provided opportunities for embodied knowledge and learning in situ. Thus, it appears that the on river social relations between anglers at different levels may be preventing some skill development and knowledge exchange from happening in situ, in a more direct and embodied way. Beginner and intermediates' description of social dynamics suggests that some opportunities for learning on the river remain unrealized, such as how to navigate a fly rod during windy conditions, or understanding the currents in the river, and where fish like to rest.

Finding 2: Participants Learned to Belong Ecologically and Socially Through Skill Development and Equipment Use

In the practice of fly angling, participants developed and experienced an ecological congruence, moving towards fly-fishing related social and ecological identity and affinity. For some, self-identity as a fly angler appears to have developed reciprocally with learning to cope with equipment and the natural environment through practice. Participants learn to belong

ecologically and socially through skill development. This was expressed through (a) the *presence* of their equipment in their experience; (b) their comfort and mobility within the dynamic environment, and (c) their focus on, and proficiency with what they perceived as a skill or technique central to their practice. Interestingly, this central skill shifted from casting, for beginners and intermediates, to the ecologically appropriate presentation of a fly, for advanced and expert anglers. Beginners tended not to self-identify as anglers, whereas intermediates did once they had become proficient at casting. Beginners and intermediates framed casting as the central skill/technique that concerned them, and which defined fly-fishing.

> Quote 1: Oh man! Casting is hard haha I still don't have it down…I think I do, and then something changes…the wind…how I am standing – who knows. And then I don't have it, I can't cast for the life of me sometimes.. (Dennis, participant 8, beginner)
>
> Quote 2: I think getting that feeling of having that "ahh haa" moment, ok getting the feeling that this is working, and that THIS is what Derick was teaching us! this is what Kathy has been on my case about for so long haha, yeah so having that ah ha moment where all that comes together…knowing I got the cast technique down… and then maybe you even get a fish?" (Barb, participant 22, intermediate)

Casting was among the most challenging aspects of fly-fishing for beginners. Casting techniques were practiced on and off the water and were described by participants as "all I could think of" and "my main focus." Beginners tended to be awkward with their equipment, which most often was borrowed or previously used. Intermediate participants had typically purchased equipment, yet it did not necessarily mean that the equipment suited their skill level or desired experience.

> Yeah..haha..umm it's hard! My rod, I think is too big or heavy—one of uh the two—and I think that it makes it harder for me to get the line out…it used to be my brother's, and he wasn't using it anymore; but I think it's probably older and, uh, not the best material – who knows? (Josh, participant 16, beginner)

Beginners described their on-the-water habits and choices as relating to their skills and abilities. These habits related to tying on flies, knowing and using various knots, willingness and ability to select and change flies, and the use of different types of casts to access spots on the river or respond to conditions.

> Ummm- no I don't usually change my fly…haha yeah, I guess not really. It's hard once you are out on the water- it probably doesn't help…maybe that's why I don't catch many fish haha but yeah it's hard and I don't want to lose any flies. (Matt, participant 17, beginner)

Transitioning from beginner to intermediate appeared to involve or include a new self-identification as participating in fly-fishing among intermediates. This seemed strongly related to casting ability. Participants emphasized (interviews; observations) the progression in casting and knot tying between beginner from intermediate anglers, effectively placing themselves on a recreation specialization continuum. When recruiting for participants, the intermediate level of specialization was difficult to determine through the self-assessment questionnaire, with only one or two points differentiating them from the beginner level. However, during the field day, while conducting participant observation, casting technique was clearly the visible detail and skill that distinguished Intermediate fly-anglers from beginners. Furthermore, participants who classified themselves as Intermediate described transitioning from beginner status once they were comfortable with casting.

> My casting is still pretty crappy hahaha but uh, I remember…… I felt like I "got it" ya know? I was pretty excited too haha it felt like I had this ah ha moment, like…oh I get it, with my arm and wrists…. I think that is probably when I felt like I could say that I fly-fished, before ummm it was always like, yah…I try to fly-fish…barely hahaha. (Sandra, participant 10, Intermediate)

While learning to cast was a key step in self-identifying as a fly-angler among intermediates in this study, advanced and expert anglers also framed casting as contributing to an angler's identity. Advanced and experts shared that it was the technique of the cast, and practice that is central to their identity and sense of belonging within the angling community. This represents a shift of placing the fly and being ecologically appropriate as the 'real catalyst' of being a fly angler. The focus and central skill among experts were the presentation of the line and fly in a way that mimicked natural food, was ecologically appropriate, and would most likely result in a fish strike. Experts were able to perform key skills, and skillfully use their equipment in a dynamic environment. Navigating elements of the environment was part of their learned skill.

> You know, I can remember at first, when I started casting – it felt uh… so tricky…getting hung up on logs or the trees behind me haha now though, ummm it's different, casting for me isn't about how far I can cast, but yah know where I want it to go…having that exact place, where umm you want to place the fly…..haha otherwise what else are you doing out there….just tossing flies on the water and praying you'll get a bite haha. (Patrick, participant 7, expert)

> So. You know the very rewarding day was being able to walk onto the river, and being able to see what the bugs are doing. I can see the fish rising. And being able to just go

> and tie a fly on, first shot and being able to, you know, do a nice presentation of a drift. And you know [whiting] a few casts be able to successfully land a fish. And then do it again. And then being able to move to a different location? Change tackle? And, be able to successfully land another fish. So what I did - is I just walked down river? Into the large riff hole; there was a big boulder? And it's just text book, drop, you know, a quick flick of the fly? Let it roll over the rock, and around into the dead spot behind the rock? And sure as hell, you know? There's a Bull Trout on! Nothing beats that feeling when you feel them bite – uh that second is golden…and then there's more skill involved to land her properly. (Doug, participant 19, advanced)

The shared language and common narratives among anglers in higher levels of specialization had them expressing and reflecting upon embodied understandings that have come with practice and familiarity. Such embodied understanding is reflected here:

> It's really hard to describe… I don't know how to really tell you how I became good at it haha I guess it's about practice….the more you do it the more natural you feel doing it…..it's been so long I don't even remember the exact challenges I felt when I was first starting out. (Charlie, participant 3, expert)

Experts highlighted a sensory coordination that I refer to as the dance among angler, river, and fish. The dance provided a sense of congruence and a level of refined embodied skill in the dynamic environment, as seen here:

> I had hatches down to like within a matter of days, knowing when and where they were going to occur – knew when the waters were going to be muddy and when they weren't things like that based on rain fall...and like you can name a creek within 50 km of my house and I would know what kind of fish where in it, and what kind of river it was

> haha….I go to this one place, and man….I am always in my zone there – no bad days! I can pull out any rod on this stream and just hit fish all day…. Its easy to read em, I find, I can tie on a caddis fly or uh maybe a small nymph… and I just place em right on the edge of the water line and they love it. (Larry, participant 20, expert)

This finding reveals that learning skills within the activity affected participant sense of belonging, and self-identity as an angler. The skills that were held as central to the activity also shifted from casting (beginner moving to intermediate), to ecologically appropriate presentation (intermediate moving to expert). Thus, a shift from a leisure experience focused on friends and casting to one focused on ecological mimicry and attention to environment, involving body and mind.

Finding 3. Anglers' Relationships with Fish Moved from Possession to Communion

The finding here explores how anglers perceived and understood their relationships with the fish they engaged. Their relationships were included in descriptions of their interactions with settings and the fish (caught and not caught). Evidence of the relationships lies within a) their chosen descriptive language, b) the focus of their leisure experience, c) their stated values or ethics related to fish, and d) practices used to enact these elements. Participants perceived and described fish in many ways. According to them, fish are a mystical creature to be pursued, a 'trophy' or object to be won, and a wild being deserving great respect. Some fish were also anthropomorphized by anglers through their use of gendered language (he/she). Observations of the participant anglers showed that anglers shared some terms to describe the fish; however, the meanings of these shifted with anglers' descriptions based on knowledge, thinking, and treatment of the fish. They also seemed to be employed differently across levels of specialization.

This finding is rich in information since the words used were often associated with participants' desired experience and level of specialization. Word choice and patterns of word use also offered insights into the ways anglers are socialized and express gender through the activity. A more detailed discussion about this will follow in the discussion chapter.

Language used reflected participant relationships with the sport and its context. Through observation for example, beginners appeared to not know much about the meaning of the terms used to describe fish. Rather, it seemed that they were trying out certain terms and expressions as part of attempting to assimilate or to act like a fly angler. For example, beginners often framed fish as a trophy that they desired, revealing that catches signified and affirmed a level of achievement and learning for them. Beginners' relationship with fish can therefore be interpreted as self-centered—it is about them as an angler, and not necessarily about the fish:

> I think it was last year uh when I finally caught a trout…..haha I was like woah it's working – finally got it to the edge and was telling my buddy to get the shot…this is is my prize yah know! Had to capture that moment to prove that I was successful haha…(Chris, participant 12, intermediate)

Participants often used terms such as "trophy fish" (Mark, participant 8, Beginner) or "the unicorn" (Brian, participant 18, intermediate) to represent "the fish that would change their lives, the fish that you would never believe to bite your line...." (Brian, participant 18, intermediate). Beginners and intermediates had already adopted the perception or imaginary of an intangible, idealized, and elusive fish to be desired, sought, and if possible experienced through 'playing' and catching.

Commonly, beginners would respond to the question "what is your ideal experience" by describing a "trophy fish." Yet, it seemed that in reality, any fish—regardless of size or

species—was a trophy. This is also a utilitarian framing of the environment—fish matter for what they mean or might bring to fishers. And the catch aspect is about dominion over nature too. These are, according to ecofeminists and other critical scholars of the environment, very masculinist and capitalistic framings of fish. Moreover, simply catching a fish provided, to beginners, a benchmark and validation that their casts, knots, and fly choice had worked well enough to lure a fish to bite their hook. For intermediate participants, their goal was to catch numerous fish consistently. In this case, however, it was about the frequency or repetition—the fisher was being validated by the fact that they could repeatedly successfully place the fly and hook fish:

> It's a good day when you're hook'n them haha…I love when you go out and your fly is hot- right- those days are what make it for me… (Tyler, Participant 11, intermediate)

In the move from intermediate to advanced levels there was a significant shift. The relationship with the fish moved from a solely utilitarian one emphasizing human capture and skills, to one of respect and unity from angler to fish. Having acquired skill and comfort in their angler identity, advanced anglers' relationship shifted away from their own ability, and centered more on the fish. Advanced anglers were particularly concerned with fish species, size, rarity, and health. They were not immune to trophy culture and in fact, they still emphasized catching 'trophy fish' as validation of their time and effort. Advanced anglers also appreciated, celebrated, and respected the fish and respected the fish's ability to move through the environment without getting caught. Their conceptualization of the relationship had shifted to include interest in preserving the life of the fish by understanding and respecting catch and release practices. This was done for the fish and the environment but also to maintain the fishery so that trophy fish can be caught again another day. A participant explains here:

> I dunno, ummm I don't normally keep the fish I catch anymore…it's not because I don't like eating them…umm occasionally I do but I think it's more important to release it back so that it has a chance to spawn, live, haha uh and maybe be experienced by another angler. (Douglas, Participant 19, advanced)
>
> Researcher: *oh interesting! Like when did that transition occur for you? Umm…Was there a moment in your skill development when that behaviour and attitude changed for you I guess?*
>
> hmmm… I don't really know when, I never was the kind of guy to always keep fish when I first started, but when I was a kid we always kept our fish and would go back and cook them…it was something my dad and I would always tend to do….so maybe that's it like where it changed?...
>
> I also think it's about the calibre of fish too um… if I'm catching monsters on the river, there can be reg's around them…and I dunno I think they deserve to live….haha I guess the small ones do too…(Douglas, Participant 19, advanced)

For advanced and expert anglers, appreciation was built upon these types of successes, and the anglers spoke to the rarity of catching fish they were catching. They spoke to past experiences and time committed to fly-fishing. Going further, the experts also showed and described an appreciation of simply doing the activity and being in the setting:

> When I first started fishing, it was all about slaying fish right, ah know…going out and having a few maybe, see how many you can catch. It was fun back then, but ummm yah, it's not what I look to do now…that's not really why I am out there…(Richard, participant 23, expert)
>
> Researcher: What does it look like now for you?

> Yah its changed, ummm I think it's more relaxing now, or I feel that way…umm it's about getting out there and just being you know? Like now, ummm I don't go there to necessarily catch a fish…. Ya know, there is always that 'unicorn' you hope to catch….and you know she's out there but that's not what it's about. For me, hmmm it's just getting those casts out, being happy to be out there with no one else, just you, the fish and whatever else crosses your way...an eagle…a bear… (Richard, participant 23, expert).

This reflects a turning outwards during skill development, perhaps even a centering or orienting toward the fish. It is also an opening up to the setting and its various inhabitants, and an evolving understanding of the elements being together, resulting in the creation of participants feeling a deeper bond with the fish. Experts described their experiences in ways that appear to suggest a sort of communion with the fish and setting:

> Every time is my ideal fishing experience. These days it's just about uh being out there – there is nothing better then arriving at your site and the conditions are great, there's a hatch, fish are rising, and yah you just get out there and start casting. Its almost rhythmic….like ummm…. In sync I guess…yah even when the fish bites and you reel it in, there's a moment haha sounds funny I guess uh yah hmmmm you take the time to unhook the fish and you make sure the little buddy is all good before you put em back into the water…..
>
> yah those are the times – I really enjoy…when it uh haha yah just all comes together and I am super grateful to be out there just as is by the river with the fish.. (Frank, participant 7, expert)

Communal connections, as described by participants, often seemed to extend beyond the self and to the natural world, to the very wind, rivers, rocks, trees, birds, and of course fish with whom the fly fisher hoped to merge through the practice. Communion with the fish for expert anglers was about this intrinsic and ritual-like experience with the fish and the activity. The whole body was involved, and it almost seemed to be a spiritual experience. Experts described a sense of belonging and connection with the fish they caught, and shared details of great care and attention while participating in the activity. Furthermore, experts paid attention and responded to the environment in which they were angling. A sort of correspondence was described and was observed in the way anglers moved in the water. They were paying attention to the water temperature and using an appropriately sized fly rod. Such actions were referred to as part of anglers' personal morals, ethical actions to support the fish/river/fishing, and part of their responsibilities. They spoke to a normative approach to the activity, and recognized their roles as socializing others into fly-fishing:

> I remember this one time…umm my friend took me to his favorite fishing hole haha … it was a beautiful hot day…uh no clouds in the sky…
>
> This is why I don't go here (smirk)…
>
> And these guys upstream were just chucking flies all over the place, and we uh downstream and one after another we were seeing these fish go belly up…it pissed me off yah know…these guys had no clue! See, uh That's what happens when you play her too hard, the fish exhaust…..they just don't bounce back….and the water was warmer too…so yah. (Brick, participant 23, expert)
>
> Researcher: *yah that's upsetting, so how do you think those guys learned how to catch and release, or what were they doing that caused umm the fish to die downstream?*

> Well I had to say something eh, I think when you see that kind of uh behavior on the water you can do one of two things… say nothing… or say something. Fly-fishing is different – there are codes ya know… (Brick, participant 23, expert)
>
> Researcher: *like…*
>
> Don't cross another man's line or move up on the river in front of him….
>
> Don't play the shit out of the fish, and don't just throw it back in the water without care… (Brick, participant 23, expert)

Experts geared their experiences by carefully selecting equipment, sites, and fishing partners to feel that sense of communion with fish, their habitat, and the natural setting. Expert participants spoke about their engagement with place, attention to and appreciation for the fish, as well as love and deep respect for the activity. Anglers reported that over time and experience this connection was integral to their dedication to and participation in fishing.

> Oh man I am addicted haha uh yah something about being out there – its uh my favourite! It's not just about chuck'n flies for me anymore – I go to this one spot, 25 minutes uh away from here eh [Prince George] and it's golden….haha the fish play hard, and they aren't over fished there either haha I love it, everything about it – the place, the fish I catch.. yah…Those fish are special to me- I feel pretty protective about that spot haha I uh think I only go there with one other bud too eh, I know that will treat it with uh the same respect as I have haha uh yah. (Frank, participant 7, expert)

This loving and respectful relationship between anglers and the fish and setting was also evident through catch and release practices that appeared centred on preserving fly anglers' own recreational experiences, and from observation, also highlighted empathy and care for the health of the fish. Catch and release practices are not just about the way a fish is unhooked and returned

to the water--these are learned skills that reflect the angler's knowledge. According to participants, care for the fish and surrounding area is part of this as well. If done neglectfully, fish can be injured and die from the trauma of being caught and/or released. On the water, beginners who caught fish reacted nervously, and often fumbled around with the fish. These anglers struggled on the water and looked awkward, but still often discussed a desired to use the 'right' process to ensure as little damage as possible.

> Shit, half the time I don't know what I am doing haha – but that doesn't mean I don't know how its supposed to be done …right!? Like uh, when I do have a fish on my line I try not to over play it – but yah haha that's uh hard most of the time, cuz I am all over the place haha. (Matt, beginner, participant 17)

Participants that were less aware of best practices in catch and release would often move faster and more behave aggressively: they would over-play the fish, fumble with it, and have the fish out of the water and in their hands for too long, and then release it too quickly without aiding its recovery. These were some of the observed differences between beginners and advanced anglers in terms of their catch and release practices.

Catch and release practices relate to participant relationships with fish and provide another example of how anglers learn to belong in particular ways through skill development (see Finding 2). Social norms also influence structure behaviour, skill, and ecological relationships. Catch and release practices are in part an ethical element to the relationship, but also a managerial one. Outside of catch and release regulations in place at the Stellako River, anglers spoke beyond the compliance aspect of catch and release and shared how catch and release is also a learned skill that requires a proper handling of the fish, technique of reeling in a fish, removing the hook, and re-acquainting the fish into the water.

> Catch and Release is a pretty big deal, its not just about tagging a fish right… I think it's our responsibility to make sure that the fish are released back into the water in a healthy way so that they can survive another day….
>
> Researcher: *So what does that look like – in a healthy way?*
>
> Hmmm like not playing it too hard…right- you don't want to exhaust the fish before getting it into the net….having a net haha and yah…what else? …removing the hook is pretty important too, some dudes out there just rip'em out and that's not cool.
>
> There is also like how you put the fish back into the water….chuck'n em in is fine I guess what I dunno, it feels a little heartless and I've definitely seen them go belly up from that.
>
> Researcher: so how do you release them into the water?
>
> Good question haha I don't think I've ever really described it before haha…hhmm gently I guess? Making sure that the fish is in my hands until it moves away naturally…that's how I know shes ready to go (Blake, participant 6, advanced)

The relationships observed from the beginner and intermediate participants with fish and the environment seemed to be limited. This was further described by the participants as having a focus on tactical skill development in early phases of skill acquisition, where the motivation to catch a fish is high, where fishing alone does not necessarily translate to having a deep and respectful relationship with fish, yet tends to be one focused on self, curiosity, possessiveness, and personal goals. Expert participants seemed more refined in their catch and release practices. They also described the process as almost ritualistic. Expert participants also seemed to share a great sense of appreciation and respect for the fish in every aspect of the activity, meaning that the expert anglers curate their experience with consideration, from the gear they use, to the style of fly, to how they hook a fish and release the fish. These anglers were not only reflecting their

relationship to the fish, but also demonstrating their embodied knowledge through their skills relating to the setting, the fishing conditions, attempting to catch a fish to releasing a fish.

Finding 4: Escaping to Engage and Connecting with Place

Escaping to engage and connecting with place refer to a larger motivation for participating in fly-fishing, or the role the experience played in anglers' lives, which was shared across levels of specialization and shaped their ability to connect with outdoor settings. From beginner to expert, participants expressed an interest in "getting out of town" or "escaping the everyday life" to an outdoor setting or place, to re-centre themselves, and/or socialize with others. Participants highlighted that fly-fishing allowed for a sense of escape. The notion that the physical activity and environments of fly-fishing fostered positive feelings of relaxation and "escape from everyday life" was shared across all levels of specialization. For anglers, "escaping the everyday life" meant a break from their normal routines of every day, family, and/or professional life.

While all the participants seemed to value and desire such escape, their engagement differed with respect to how they sought to learn, connect socially, relax, and/or explore. A crucial shift among participating anglers was in how they reported connecting with place and how they understood conservation and environmental protection. Participants showcased this connection to place, and their dedication to this was exhibited by the angler's routines, and time spent on management efforts.

Beginners associated fly angling with benefits for their overall physical, spiritual, and mental health. Further, beginners used fly-fishing to explore places and natural settings (river edges, rocks, forests, etc.) that they would otherwise not necessarily go to. Beginners also

recognized feelings of relaxation, clarity, and increased focus as benefits of angling that they experienced after getting off the water. As one participant put it:

> It's nice to just escape from the daily grind…fly-fishing does that for sure.. uh just being out by the water and fresh air is really nice and peaceful. I do find that fly angling is one of those activities that just relaxes you eh. (Andy, participant 18, beginner)

For beginner and intermediate anglers, being able to go out and participate in fly-fishing provided an avenue to further engage settings and to build connections to places they fished. This was done via positive experiences, accessibility, and often included a social dynamic. Beginner and intermediate anglers seemed to report a greater connection with locations that fostered their success at catching fish and enabled them to have the social interactions they desired in their fishing experiences. While these were desired attributes in a location for beginners specifically, they seemed also to be the foundation for connecting to that fishing area; for intermediate participants, site attributes were connected to their comfort level, and supportive settings aided their path to identifying as a fly fisher. This conversation speaks to that:

> I only go to one spot to fish hahaha I don't know of any others, and so far umm it seems to be a good spot for me…(Darrel, participant 9, intermediate)
>
> Researcher: *Why is that?*
>
> I dunno….umm it's where my buddy first took me, I only go when he takes me…so I dunno there could be better spots out there but I seem to have some pretty good luck out there haha (Darrel, participant 9, intermediate)
>
> Researcher: *Can you describe what's so good about this place? Why you like it?*
>
> yah, I like it because it feels easy, the water isn't too crazy, I can cast without too much hassle…..yah I don't know what else… it doesn't seem to busy but yah there are def a

> few people on the water, so you know you aren't alone.. that's nice too I guess… ummm but if I had to boil it down….it's because its pretty close to home and I have a good time out there. (Darrel, participant 9, intermediate).

Expert anglers further emphasized the importance of such breaks or escapes, describing their experiences as meditative, and healing.

> Quote 1: It's just fun. It's relaxing. Um. I mean you do things because you enjoy them. And if I didn't enjoy it; I wouldn't do it. Ah, over the years fishing has kind of evolved into a more of a, I just like hanging out on the water with people now? I'd rather, I just as much like to watch people catch people catch fish? And when I do fish, it's pretty relaxing, it's umm almost like being in a state of meditation….um. Like the casting, back and forth, and the sound the fly makes, hitting the water haha it's not a big sound but it's there, it's all of it coming together….it's peaceful. (Charlie, participant 3, expert)
>
> Quote 2: Well it's basically how I spend my past time yeah it's where I preferred to be 24 hrs a day, 7 days a week … It's my passion, it heals me and keeps me going… (Loran, participant 2, expert)

For the advanced and experts, getting onto the water to fly fish was a priority in their life, and their main way to 'escape'. Their involvement and commitment to the activity is, perhaps, related to the central role the activity plays in their life as a way to disengage from daily routines, and find time 'for themselves'. Furthermore, participants connected this feeling of escape with geographic boundaries and feeling the mundane. 'Everyday life' was usually framed as being within urban environments (office, home, transportation, grocery stores, etc.), and 'escaping' meant leaving to a more-natural setting that offered reprieve from stresses and obligations. This is illustrated below:

Researcher: *So when you say it's an escape, what does that mean to you? How does Fly-fishing allow you to 'escape'?*

hmm…good question, it's not like I'm trying to run away…its like fly-fishing allows me to have the space I need, it's separate from the daily grind… going to work, watching TV in the house, driving to work or dropping the kids off.

Researcher: *Yah I get it, so fly-fishing gives you a feeling of space or a break from 'your normal'?*

yeah, fly-fishing is the tool to escape I guess…ha…yah, its everything though, going out to the river, drop a few flies…. and being the only one out there for a couple hours…it's a re-set for me. (Forest, participant 19, advanced)

Anglers participate in fly-fishing for several reasons. This research shows that for many participating anglers, fly-fishing is a way to break away, temporarily and geographically, from daily routines and places. However, escaping to fly fish is only part of the experience felt and sought by anglers. Rather than just escape from routine, anglers were seeking a way to engage with places, environments, themselves, and with like-minded others.

Including family as part of the angler's fly-fishing experience is also important to address here. Although escaping daily life was important, doing so did not always mean being apart from family. Anglers from various levels of specialization expressed that involving family members provided a distinctly different, and valued, leisure experience centered around teaching, socialization, and introducing others to the activity. For expert anglers, such activities were very rewarding, and the role of mentor was a component of many anglers' desired experiences on the water.

> Fishing these days is all about enjoying my time out there….it umm doesn't necessarily mean my ideal day is slaying massive fish in some uh remote area….but haha ahh… I find myself really liking takin' the kids out too…it's cool watching them slip over the banks and my one kid haha doesn't even really want to fish…he is just looking under rocks and in the grass for bugs….haha its funny because he wants me to fish with them…umm and I think it's kinda cool…(Blake, participant 6, expert)

Including family in the activity changed the predominant description of anglers escaping to connect. For some anglers, they were engaging in fly-fishing to be alone, and to have time to reflect and relax from the daily stresses and routines (this included family life). Involving family in the activity provided a different experience that was based on quality time with the family, teaching family members, and enjoying the social aspects of the activity, thus, altering the way anglers usually described their engagement with the activity, others, and the environment.

In addition, a clear distinction was found between anglers introduced to the activity in childhood, and those who became involved later in in life. This seemed to particularly impact participant place connection. Participants who learned how to fish as a child described childhood memories fishing, which led them to feel attached to those outdoor places; and they described their ongoing fishing activity as a conduit for that continued place connection. Anglers who had been fishing since they were children often felt deep connections in nature and loved the environments and settings that provided ideal fly-fishing experiences.

> There are so many places that I love to fish at, each one offers a different experience, lake fishing, river fishing, brown trout to rainbow its all a different experience but all ones I love to have. Ummm I don't think I have one favorite spot, I've had so many cool

> experiences, it's hard to just pick one…but I am attached to many of them and keep umm going back.
>
> Researcher: *What makes you attached to them? Why go back to some over others? Hmmm*
>
> You go back to the ones that you know fit….like the Stellako…I've been fishing there since I was a kid, with my dad…it's a magical place you know…..the water is perfect, and it holds a lot of great memories for me…..so yah I'm attached because I have those family connections and it's world class fishing. (Darren, participant 1, expert)

Participants who were introduced to the activity later often shared that they grew to care for the environments in which they fished after being introduced to the activity. However, from observation, they did not share explicitly the same sentiments around their connection as those who were introduced to the fly-fishing from childhood. Values differed slightly around how participants described environmental protection and conservation, best practice around waste, and overall low impact practices while engaging in the activity. Where those values and practices might have been acknowledged in the interviews, it was not a clear focus for them or included as part of their practice/experience while fly-fishing necessarily.

> My friend taught me how to fish when I moved up here, before that I had not really ever tried…maybe a few times back when I was a kid at summer camp haha…I think I caught a little sun fish haha…but yah – umm it wasn't until I moved up here that I got into it. It was cool getting to see so many places outside of Prince George, I had no idea how beautiful it was…. I also noticed that some places have more garbage than others…. It wasn't until I started going out regularly that ..uh.. like, that I wanted to help keep the places I fished clean, yah know?

Researcher: *yah I get it, its not cool going to a place and seeing garbage everywhere, so what did that mean for you? Like, what do you mean you wanted to keep the places clean?*

Yah…uh, like I started to bring a plastic bag with me…every time I seen a piece of line or a can I just grab it and pack it out. (Sandra, participant 10, intermediate)

Some advanced and expert participants declared a responsibility to be stewards of the land and described their connected to these environments, and species that inhabit them as an avenue to connect deeply, and have an engaged and active voice promoting environmental stewardship, conservation, and leave no trace ethics. For some participants, this deep connection and desire to continue recreating led to significant life choices such as involvement in higher education and academia, as well as in environmental groups that support the restoration and protection of wilderness areas, as is seen here:

Haha yah I might be obsessed but it's like really what I love and care about….I think like ultimately fly-fishing has been the reason why I have decided to focus my schooling on natural resources and stuff like that….I love learning about fish ecology, like what makes a happy and healthy environment for them, and how I can make a positive impact so that I can keep fishing in these great areas.

Researcher: *That's awesome, I love that! Did you actively know that when you applied for school that it was because of your love for fishing, or was that a connection you made afterwards?... also are you involved in the fly-fishing community in other ways, umm not just in school…like groups and stuff?*

Hm, yah good question…

I don't know to be honest, yeah like I guess to some degree I knew, but I think, think I said it out loud or anything ahaha

Researcher: *no haha*

Yeah no, I knew where my interest laid but like I didn't know how involved and complex it would become….umm and yah for organization, like I volunteer for the 'Habitat Conservation Trust Foundation' they do like work around habitat restoration and stuff….it's been cool to see that side of things….(Milo, participant 21, advanced)

While perhaps not evidence of escaping to connect, this participant's comment illustrates that connection to the activity, and care for the environment in which the activity takes place are rooted in many aspects of the participant's life.

This finding reveals the complex ways participants engage with fly-fishing and the benefits fly-fishing provides in their lives. Participants described fly-fishing as a way to 'escape' the normality of their everyday routine that provided time and space to connect with nature, relax, and feel a sense of belonging with self, nature, and sport. Whether participants were introduced to the activity as children or later in life seemed to impact experiences and expressed values of environmental sustainability and place connectedness. In addition, through escaping regular life routines, participants connected with place, perhaps leading to a deeper ethic of care and stewardship.

Conclusion

In this chapter I present four main findings derived from data collected during the semi-structured interviews and participant observation. These four findings provide insight into (a) the differing social relations within levels of specialization, (b) how anglers learn to belong in the socio-ecological setting through skill development, (c) how relationships with fish appear to

change, and (d) the role fly-fishing plays in providing an escape from every-day routines, and engaging with settings, self reflection, and self expression.

In the first finding *Social Relationships Shift from Dependence to Intentional Self-Expression* I show the importance of social exchanges that occur throughout the skill development of fly anglers, and how that shapes an angler's identity and ability to engage in the activity. At the beginner and intermediate levels of specialization there is a dependency on central social spheres, where anglers require and seek friends and family to show them how and where to fish. From there a shift occurs in the angler's social development, where advanced and expert anglers move away from social dependency and begin to select fishing partners who match or enhance their desired fishing experience.

Finding two, *Participants Learned to Belong Ecologically and Socially Through Skill Development and Equipment Use Within a Dynamic Environment,* demonstrates how participants developed and experienced an ecological congruence, moving towards social and ecological identity. Participants learned to belong ecologically and socially through skill development, and this was expressed through (a) the *presence* of their equipment in their experience; (b) their comfort and mobility within the dynamic environment, and (c) their focus on, and proficiency with, what they perceived as the skill or technique central to their practice. A focus on casting is described in the earlier levels of specialization, where beginners and intermediates focused on learning how to cast effectively with the goal of catching a fish. A disconnect between corporeality, equipment, and the leisure setting is highlighted in the beginner's and intermediate's descriptions, and further shows the importance of appropriate gear, continued practice, and dependency on others to demonstrate appropriate techniques for skill development. The central skill of casting remains prevalent among advanced and expert anglers

but shifts from learning how to cast - to casting for an ecologically appropriate presentation of a fly, and/or placement on the water. This shift from casting to correct placement illustrates a jump in skill development from experiencing tension with equipment and environment to a dynamic experience and embodiment with equipment and environment.

Finding three, *Anglers' Relationship with Fish Moved from Possession to Communion*, explores how anglers perceived and understood their relationships with the fish they engaged with. Evidence of the relationships seems to comprise participants' a) descriptive language, b) focus of leisure experience, c) values or ethics related to the fish, and d) practices used to enact these elements, such as catch and release. Through the data analysis, I noted that across all levels of specialization terms such as 'trophy' or 'the monster' are used to describe the fish; however the words had different connotations depending on the level of specialization. Beginners and intermediate level anglers used these terms to describe a fish that they had not yet or typically experienced. To these anglers it was still an achievement to be experienced, an idealized version of the fish they could experience upon more skill development. At the advanced and expert levels these types of words were used to describe a particular fish they had experienced or that matched their preferred fishing experience. This finding describes how respect, connection to the fish, the surrounding environment, and others is depicted through experiences with the fish anglers caught or did not catch. This finding in particular, speaks to the ways anglers are interacting and engaging with the fish and setting, where socialization into the activity and throughout could impact the way an angler uses certain words or terms, thus leading to a progression that highlights deep connection and respect to the fish, the activity, and the settings in which anglers engage.

Lastly, in finding four, *Escaping to Engage and Connecting to Place*, I describe that across levels of specialization, participants expressed an interest in "getting out of town" or "escaping the everyday life" to an outdoor setting or place, to re-centre themselves, and/or socialize with others. This finding speaks to rural and urban geographies, and the actions, feelings, and behaviours within them. Participants highlighted that fly-fishing allowed for a sense of escape. The notion that the physical activity and environments of fly-fishing fostered positive feelings of relaxation and "escape from everyday life" was shared across all levels of specialization. In this finding we also saw how escaping from daily routines to enjoy leisure activities led to participant's feeling very connected to the places they fished. This was further described by participants who had been introduced to the activity at an early age. In comparison, those who adopted the activity later in life did not seem to express the same level of connection to place, or rather did not emphasize it in their descriptions of their fly-fishing experiences.

Socialization, the relationship with the fish, and the ability to use equipment and navigate through dynamic environments all play a role in how and when anglers can participate in the activity. Exposure to the activity plays a significant role in how an angler connects to a place, learns the techniques, and speaks about the activity.

In the next chapter, I discuss how the findings relate to each other, and how they contribute to theory, the literature, and the greater community of outdoor recreation management. In the discussion chapter is where I draw on concepts of gender and socialization to respond to the research questions.

Discussion

The discussion chapter will review the research questions and purpose of this research, interpret how the findings relate to the literature, and theoretical concepts, expand on how this research contributes to existing knowledge, and conclude with broader implications for outdoor recreation and management. The purpose of this research was to explore gender and socialization through recreation specialization among fly anglers. The main question for this research is *how is gender expressed and operating in anglers' experience of fly-fishing across levels of recreation specialization, understood as a relation process of skill development and socialization within the activity*?

Addressing the Research Question

Gender is understood, lived, and acknowledged by anglers on many levels. Gender is a dynamic process where gender is an ongoing emergent aspect of social interaction and is created through interactions and lived performances. Outdoor recreation provides opportunities to both reinforce and resist gendered norms (Mansfield et al., 2018), and the participants' stories reflected both these processes. In this study gender is expressed through structures that enable participation through socialization into fly-fishing, media representation, language used to describe the setting and fish, and through fishing as a space of escape from domestic responsibilities.

In the finding *Social relationships shift from dependence to intentional self-expression,* gender norms and stereotypes are influential to anglers as they are introduced and socialized into the activity; often perpetuating the social construct of the activity being male dominated. The structure of social dependence among beginners is a pathway in which social norms can be passed along and shared as participants are socialized into the activity. This is true of the

behaviours and language used, but also of the perception, representation, and access to a diversity of anglers (or lack thereof) for beginners and intermediates.

Unsurprisingly, masculinity dominated the gender dynamics of this project. Most of the project participants were male. They would reflect on their mentors' and teachers' lessons on the water, often sharing that their mentors were also male. Kuehn et al. (2006) described the social commitment stage as the last level of socialization, in which people continue participation in an activity because they have become attached to a social network that supports and nurtures their fishing. Through these social interactions, participants further described that this led to a greater environmental commitment - creating a strong appreciation for fish and/or natural resources in general.

Male dominance of the activity may limit a diversity of teaching and approaches to the activity as well as more-diverse people achieving social connection within the activity. This might also perpetuate mainstream teachings or approaches to an activity and limit who progresses to what Kuehn et al. (2006) described as 'social connection level'. If men are the main participants in an activity and are portrayed through media, then that potentially impacts women's interests and opportunities to want to engage in an activity. There may be little space created for men and others from diverse backgrounds, cultures, sexual orientations etc. if no other aspects of identity are explicitly addressed, and representation is primarily white and male. Literature on motivations and constraints highlights how women often do not prioritize outdoor activities above home and work life, often because of perceived home-life responsibilities and burdens (Duda et al., 1999). I suggest that through more visual representation of women engaging in outdoor recreation activities and having their voices elevated through digital and print media could help to break down perceived barriers of home-life and encourage regular

participation. Further, male dominance may perpetuate common teachings or approaches to an activity and limit who is ultimately socialized to connect with the activity. This research helps to further understanding of the participant landscape of who is engaging in fly-fishing in Prince George, British Columbia, and an understanding of how leisure activities are "intimately connected with gendering process" (p.113) which includes broad social impacts. The following quote speaks to the claims I make above:

> Yah know…its' funny, I always went with my dad out to the river and it uh always seemed like an escape or for the guys to be yah know…..I remember him being like "let's go fishing, mom needs a break" or uh haha I don't know when they were fighting and he just needed to get out….haha yah uh and now sometimes I find myself doing that now – right. Oh the wife isn't happy, get out of her hair …you know haha you need your space, so my space was the uh river. (Jose, participant 20, expert)

Literature on communities of practice helps show how power dynamics relate to fly-fishing and skill progression. Huzzard (2004) explained that the dynamics of power within certain communities of practice can be an issue, where full participation may be denied to novices by powerful practitioners. While this study did not record explicit denial of information or knowledge by advanced and expert anglers, there are still power dynamics at play. Beginners and intermediate anglers were dependent on others to show them where and how to fish – placing the responsibility and choices onto the mentor/teacher. Interviews with the advanced and expert anglers showed the importance of fishing spots that matched their preferred experience; often being more remote and less crowded. Further, advanced and expert anglers were secretive when sharing their fishing location(s); cautious of not wanting to give exact locations in fear of others who are less skilled impeding on *their* area. This is an example of how some power

dynamics are at play, where beginners and intermediates are potentially being denied access to unique places because of their level of skill. This could potentially impact an angler's progress and their forms of participation. Furthermore, Handley (2006) sees participation as "central to situated learning since it is *through* participation that identity and practices develop" (p. 643). In summary, participation enables the negotiation of meaning, but it does not necessarily entail equality or respect, or even collaboration within or among social spheres of fly anglers.

Participant anecdotes of fathers, grandfathers, and sons out on the river or lake also speak to how masculine notions of fly-fishing and related behaviours and skills as gendered are transmitted. In these fly-fishing spaces, and social norms or practices being taught, there is an implied if not explicit homogenous, and potentially exclusive message about who the fly fisher is (and who is less welcome). For example, beginner and intermediate participants communicated that talking with others on the water can be intimidating, pushing some to prefer 'external' interactions in digital or print media form. Considering aspects like this and employing a gendered lens to do so can offer insights into the types of social interactions occurring, and which ones are not (Warren and Loeffler 2006). Building on the work of scholars studying women's participation in outdoor activities, such as Warren and Loeffler, I argue that men are also subject to gender-related challenges and constraints in the field. As participants indicated here, communication can be awkward or intimidating so the norm on the water is *not* to necessarily reach out to others on the water for assistance – a masculine non-communication model. Although knowing not to disturb other anglers can be seen as a form of respect, I also see this as a potential constraint to skill development, and barrier to inclusivity and social exchanges. These results potentially suggest that fly-fishing, while traditionally masculine-focused, is transforming into an outdoor recreational activity that is starting to cross gender borders at a

slightly broader scale. That being, men and perhaps others are learning to fly fish, and continue to participate in diverse ways, while performing gender in non-binary ways. Normative gender expressions could gradually be removed by men, and women's perceived constraints could be lifted because of the growing communities of diverse anglers who provide a relatively stable network of like-minded anglers (Fennell & Birbeck, 2018).

The literature on drivers and constraints (Mordue, 2013) has suggested that media and marketing play an important role for people participating in new activities. When men are predominantly represented within the activity, as observed through our participant sample, this indicates a potential impact on people seeking to get involved in the activity. Mordue (2013) highlighted that marketing and media are also strongly connected to, and influence, social norms within activities, thus impacting and forming the way people behave, and potentially value the activity. This project suggests that beginners and intermediate anglers are looking towards media to learn techniques, seek out equipment, and engage in the fly-fishing community. The importance of who is represented among these peripheral groups could influence accessibility of fly-fishing and the social norms that are taught during the earlier stages of recreation specialization.

Despite obvious gendered constraints and barriers shown via observation and in participant interviews, such as free time, family roles, and finances, participants claim that fly-fishing is an equal opportunity endeavour, meaning that they did not perceive or believe that gender was a factor in fly fishing participation and continued participation.

> I see women fishing too, uh I don't know if I would say there are as many women out there – but yah, umm it's not like they aren't allowed haha shit why not eh, get out there and rock it I say! ((Milo, participant 21, advanced)

> Reseacher: *Interesting, do you feel like there is as much opportunity for women to learn to fly fish? Like, why don't you see as many female anglers, and do you think there are uh… gender constraints related to this?*
>
> Uhh.. yah I mean…I seen my friends teach their kids, both boys and girls but yah I guess you kinda see the boys picking it up or uh haha liking it more and stickn to it. But! Man, there are some rad spay fishers further north and they will kick your ass man. It's funny haha I actually think that women are probably even better at casting yah know….they are better at the finer skills, and casting is that haha…. (Milo, participant 21, advanced)

Participant responses to the interview questions often differed from their actions in the field across all levels of specialization. There seemed to be a disconnect between how participants perceived gender in fly-fishing, and what I observed in the field. For example, participants did not recognize many gendered norms such as the activity being male dominated, the words used to describe fish, and the ways people are socialized into the activity (through mostly other men). However, when the participants were engaging in the activity, there were several examples of gendered language and norms, such as referring to the fish in female terms. This suggests that socio-ecological spaces, places, and activities of fly-fishing continue to be gendered by participants through their language and whom socialize newcomers into the activity, even as they may not recognise this, and desire to challenge it. This is similar to what has been demonstrated by researchers such as Warren and Loeffler (2006), Henderson and Hickerson, (2007), Espiner et al, (2011), Newbery (2003), Stoddard (2010), and Bull (2009).

Stoddard (2010) suggested that activities such as snowboarding, windsurfing, and mountaineering allow participants to perform "characteristics associated with athletic masculinities and femininities" (p.112) and the author demonstrated how outdoor recreation is

grounded in physical sportscapes. Stoddard found that mountain 'sportscapes' are often gendered through "discursively mediated, embodied interactions with mountain environments" (p.108), and these ideas of space being constructed in gendered terms have significant implications for the social activity that occurs in these places, as well as how gender stereotypes and norms play into and result from such activity. Among all levels of the recreation specialization continuum, participants exhibited an embodiment and "performed traits associated with masculinities and femininities" (Stoddard, 2010). This was most evident while navigating the water in the river and interacting with fish. Participants in this study portrayed these masculine and feminine-associated traits in two ways:

1. Through physical movement, and technique while fly-fishing; and
2. In describing and talking about the settings, experiences, and successes/challenges of fly-fishing.

The fly anglers provided an opportunity to observe how people and natural environments "incorporate and reflect bodily practices and to show how recreational gender relations are performed through the physical qualities and activities of the body" (Bull, 2009, p.447). The participants demonstrated that that there is more than one way to interpret expressions of masculinity and femininity in paces of outdoor recreation. While observing participants fly-fishing, they would show how physical movements of the rod required a refined movement of the hand, wrist, and shoulders to place the fly in the intended spot on the water. My findings suggest that these participants construct fishing as a gendered activity, and in particular men perform masculinity and femininity through fishing by (a) navigating the environment in dynamic ways, (b) expressing knowledge and expertise though social interactions and engaging

with fly-fishing communities, and (c) gendering fish as an expression of possession and potentially dominance.

When participants described fish they caught or played, many of the men frequently used lines such as “We slayed them”, “she was a beast”, “I got the unicorn”. Often, participants would go on to replace “slayed” with “killed,” “clobbered,” or a host of other words connoting death to the fish. Surprisingly, many participants would use these even when they do not keep their fish. Even though they carefully release their fish alive, they present the act of tricking and fighting fish with their rod as a dominating act. The effect, intentional or not, maintains fishing as a masculine act, an act of control and power, that reinforces the conception of fishing as the domain of men. Further, these narratives employ sexualised terms to symbolise fish in a strongly feminine way, contributing to a polarization of angler as masculine, and nature as feminine.

Ekers’ (2013) work on gendered spaces relates with Finding 4*, escaping to engage and connecting place*, where a divide exists between home, work, urban life and participant’s ‘escaping’ to natural setting to engage in fly-fishing and connect with the environment. In this study, the hegemonic concept of men on the water as ‘rugged’, ‘independent’, and ‘capable’ to navigate dynamic environments. However, this dominant notion of masculinity is being challenged by angler’s sharing their holistic health benefits of fly-fishing, these being relaxation, clarity, and re-centering of ones self. Anglers from across levels of specialization discussed fly tying as a way of engaging in the activity outside of the fishing season. Several participants described fly tying as a ‘man crafting’ activity, this speaks to the need to dis-associate crafting from femininity and to re-invent it as something manly and related to the ruggedness of the outdoors. Fly tying also offers the opportunity to move rugged masculinity indoors, and to escape via manly crafting (a contrast to more feminine-associated craft-based escapism like

knitting). Anglers incorporate bodily practices to connect with dynamic environments, and these bodily practices become engendered over time. Interestingly, fly tying is an important activity for many and considered a primary aspect of angling. The act of fly tying anthropomorphizes the experience, and with these fake flies, anglers seek to reach into the natural world by imitative attempts to mimic the processes of nature by drifting flies down the river. I see a dualism between the gendered spaces in which these flies are created (indoors) and the gendering of the landscapes in which the activity is performed (outdoors).

Bryant's (2010) research demonstrates how natural environments both "incorporate and reflect bodily practices and to show how recreational gender relations are performed through the physical qualities and activities of the body" (p.54). This study suggest that gender is performed and incorporated into the body (and fishing) in a relational way—and this process has aspects that are social, ecological, environmental, and intrapersonal. For example, participants described how they were introduced into the activity, and by whom (note the key roles of fathers, and grandfathers), and how anglers learned how to belong socially and ecologically within dynamic environments via skill development and equipment mastery.

In summary, the findings suggest that in the case of the group of participants I researched (n=23) in Prince George British Columbia, fly anglers are mostly exposed to and socialized through male figures and mentors. Expressions of gender are characterized by and operate through a predominantly masculinized perspective. Going back to Kuehn et al.'s (2006) work on levels of socialization with fly-fishing, particularly the *Initial involvement stage*, where the key for connection to the activity and longevity of involvement. The findings of this research project suggest that gender roles significantly affect fishing participation, including early in life. The

socialization of anglers, and the norms of practice suggest that men and women often participate and progress in the activity differently.

If the rest of the fly fishing community in North America shares similarities with the sample of participants who participated in this Prince George, then implications of this finding could mean that:

1. Findings point to the ability to overcome male dominance in fishing by fostering and representing more diverse mentors and experts. Developing and sharing diverse modes, skills, and experiences will allow for specialization among more diverse populations,
2. Social norms and ways of practice for fly-fishing will continue to be constructed and perpetuated through a hegemonic male lens, and
3. Advanced and expert levels may not be easily attained by women, men who do not express or perform hegemonic masculinity, and others who do not conform. Conformity includes expectations of bodies, stature, aesthetics, and the dominant perspective that skill development and progression are primarily physical.

In the next section of the discussion, I relate the findings of this study to outdoor recreation practice and considerations for future research.

Relating to Practice

As participants are socialized, they were seen to move from dependence to self-expression. Lee's (2011) study on paddler's levels of specialization relates to this study in that the participants in this research expressed the same motivations, where more specialized anglers would seek out experiences that included relaxation, and matched their preferred level of challenge, and the less-specialized anglers were more motivated by social interactions. Understanding the needs and actions of beginner and intermediate fly anglers is important for

recreation planning and managing recreation sites, because if not carefully managed, it could impact the health of the ecosystem, and potentially damage the health and populations of the fish. As beginners learn proper catch and release practices, for example, and how to read the water, they will need conditions that allow for their skill progression and potential changes in desired experience. Importantly, recreation specialization theory and findings help to dismantle the assumption that anglers are homogeneous in motivation, skill, commitment, and experience. Through recreation management, planners could adopt recreation specialization as a model to support strategies for environmental sustainability, access, and visitation by understanding that, depending on their level of specialization, recreationists will seek different experiences. Specialization research has shown that participants with different levels or degrees of skill and commitment differ in their desired and lived experiences and understandings of an activity and its settings (Bryan, 2000, 2001).

Further, understanding that skill development and specialization is relational suggests management policies could be created to address diversity, and inclusivity. An example, visual media, or campaigns could include a broad representation of people, like a mother showing a son how to fish or including different ethnicities within the imagery. Additionally, recognizing the diverse and distinct perspectives of BIPOC, women, and differently abled people determines what type of fishing landscapes diverse anglers prefer (Valdez, Drake, et al., 2019). Valdez, Drake, et al (2019) show that fishing landscape choices is a critical step towards developing fishery resources that cater to "shifting angler constituencies, suggesting that minority anglers may differ in site preferences, angling behaviors, and their general perspectives of nature" (Valdez, Drake, et al., 2019, p.129). This suggests that including diverse groups of anglers into strategic development for fishing sites may help fisheries managers better meet interests of

growing and underrepresented angling communities. Including more infrastructure such as docks, picnic tables, and trails may help others to feel safer and more welcome – while also not assuming that *unmanaged* natural landscapes and water beds are the ideal fishing environment for all anglers.

Beginners and intermediates particularly rely on their central groups for skill development and learning; this information could be applied to programming or initiatives by creating spaces that allow for knowledge transfer from more specialized anglers. This supports Cottrell et al.'s (2004) findings that beginner boaters have an 'open' mindset and desire to learn knowledge and skills. Cotrell et al. also identified that beginners and intermediate boaters often used outside sources, including online forums and videos to further develop their understanding of the activity. This study found the same, that beginners seek outside sources, described as peripheral groups, to further build their knowledge. Educators, practitioners, and managers could include online education to integrate important foundational information to these beginner groups. Including information on sustainability, best practices, codes of conduct, etc. could be the most efficient way to influence key social norms and behaviors that are desired within outdoor recreational settings to ensure ecological integrity of the area. Based on these findings, a best practice that could be incorporated would be encouraging new anglers to engage on recommended forums or social media groups to support initial learning and connecting with anglers who are more experienced. This could also help bridge the interaction gaps seen on the water, characterised as intimidating for beginners and intermediate anglers.

Having a management plan focused on 'gender and nature' could create and advance actions to address the dichotomy of rural masculinity and femininity and help to dismantle the current and entrenched dominant gendered norms and stereotypes within fly-fishing. This is

particularly true of rural social spaces where a focus on embodiment needs to inform our understanding of the performance of gender identities (Little, 2002). Based on the study's findings, those who are developing management plans could employ a gender-based analysis and specifically create strategies to involve a more diverse range of people into the activity. This also leads to implications for the broader outdoor recreation community. Including ways to encourage diverse and inclusive programs, marketing, and lessons to support the inclusion of different genders and ethnicities could lead to new ways of 'doing' the activity and ways of understanding the environment as already socio-ecological.

Bryan (2000) raised concerns that outdoor equipment and its marketing can lead participants to "jumpstart" (p.345) participation in activities such as hunting, fishing, climbing, and hiking. The relationship between equipment and participant varied in this study, where beginner and intermediate participants shared that they adopted equipment from friends and family, bought used, or bought new. Those who bought new expressed that they did not know exactly what they were looking for and shared that some of the equipment was not best suited for them at the level of skill they were currently at. For advanced and expert participants equipment purchases were very intentional and often described as an obsession. The more experienced anglers purchased equipment that not only met the needs of 'doing' the activity, but that would emphasize their desired experience and often support their niche interests. I agree with Bryan's (2000) suggestion to taking a more organic approach to learning an activity. A more organic approach means developing slowly to better allow for learning behaviors and attitudes, technical skills, and building a sense of self, or identity, to the activity and its settings. From an 'in practice' and consumer perspective, this could look like fly-fishing group's developing an equipment sharing co-op, and guide's and educators reinforcing the practice of skill before the

purchase of newer equipment. Further, fly-fishing brands could be more explicit about the sophistication of their equipment and perhaps provide resources and purchasing guides to support 'slow/holistic learning'. Advanced and expert anglers have a different between their equipment, as mentioned above. The relationship between the consumption of equipment and identity are intertwined, and the portrayal of angler identity that is seen in the practices of fly-fishing needs further exploration, meaning there needs to be a clearer understanding of the niche media's effect on the forms of identity in this activity. It is necessary to analyse the experiences of a larger participant sample among advanced and expert anglers.

Future Research

This research is an attempt to contribute to better understanding relational and participatory ecological approaches within outdoor education, particularly via fly-fishing in this case. The findings of the study address and add to the discourse of gendered norms and gendered spaces in outdoor recreation, providing more context for healthy expressions and understanding of gender in recreation participation.

Working on this thesis has alerted me to future research that should be considered or expanded on. This includes:

1. A continued exploration of how rural gendered identities and spaces engage within a mobility paradigm, and how skill development and progression are influenced in a relational way for all genders.
2. An expansion of qualitative research studies on recreation specialization, where participant's descriptions and understanding of intermediate and advanced recreationists can be further developed and contribute to recreation specialization literature.

3. A gender-focused analysis of marketing and media content for outdoor activities, to investigate who is being representing in these activities and spaces. Over the last couple of years fly-fishing has seen an emergence of women, differently abled people, and ethnically diverse people advocating for equitable representation and participation within the activity (Burkett & Carter, 2020). Groups like 'United Women on the Fly', 'Brown Folks Fishing', and the 'Awkward angler' are building safe and inclusive angling communities that help to educate, provide resources, and encourage participation. The recent development of newer angling communities may allow for the creation of new styles and norms of practice in the activity (Powers, Lee et al., 2019). In understanding the emergence of these newer fly-fishing communities, scholars should explore the critical ways cultural power is reproduced within outdoor recreational activities.

In this chapter I discuss my findings within the context of related literature. I emphasize social relationships and the norms that emerge during specialization. First, I address how the findings relate to my research question. I argue that gender is expressed mainly through levels of socialization as well as through a predominantly male perspective. Performances of the participants within natural settings further provide insight to how landscapes and the environment are gendered. Secondly, I relate the findings to outdoor recreation management and implications for practice. This includes addressing issues of representation of those who participate in fly-fishing and how the consumerism of equipment influences engagement within the activity.

Conclusion

Fly anglers engage in a dynamic and multifaceted activity that requires them to know and be able to perform skills with social, ecological, and environmental aspects. Recreation specialization is described as a "continuum of behavior from the general to the particular, reflected by the equipment and skills used in the sport and activity setting preferences" (Bryan 1977, pg. 175). However, recreation specialization has been critiqued for its 'linear' approach to understanding participant's lived experiences of skill development and does not critically explore participant's own corporeal understanding of engaging in dynamic environments, representing humanity as belonging within environments, as "always already socio-ecological" (Mullins 2014). Acknowledging that skill is understood as "incorporating the body's movement and action in a setting while performing an activity" (p.323), and that it occurs in particular contexts is key towards evolving analyses of sport and recreation. In this project, I emphasize that skill can be further understood through relational and social constructs of both physical and rhetorical masculine and feminine expressions and performances, whether realized by participants or not. The purpose of this thesis was to explore the gender norms and the social relationships that occur through skill development in fly-fishing as they relate to recreation specialization theory. This research sought to explore gender in way that incorporated the understanding of embodied knowledge (Lewis, 2000) or whole-body approaches (Brymer & Gray, 2009) to skill development. I investigated these relationships as influenced by gender and socialization, using the case study of a small group of anglers fly-fishing in Northern British Columbia, and being interviewed about fly-fishing.

The methodology used for this research drew from mobile methodologies (Urry, 2007) which recognize that human relationships, space, time and place are mediated by our movement

through material and social worlds (Fincham, McGuiness, Murray, 2010). Feminist theory underpinned this research by understanding gender as central to human relationships to each other, space, time and place. Included in the methodology was a heuristic model, drafted as a way to characterize the continuum of recreation specialization and outdoor skill development in a relational way (personal, social, ecological, and environmental).

Data collection included administering a brief questionnaire to determine level of specialization, conducting 23 semi-structured interviews, and finally doing participant observation during invited field days organized by level of specialization. Data were analyzed using NVIVO to code transcriptions of the interviews, themes were derived from coded material and informed by the participant observations, and then further synthesized into main findings.

There were four main findings from this study, they are as follows:

1. Participants' social relations move from dependence on other people to do the activity, participants intentionally structuring relationships that match their desired experiences.
2. Anglers learned to belong socio-ecologically through skill development; beginners were learning to cope with equipment and a dynamic river that felt foreign, whereas experts' proficiency allowed them to feel a sense of unity and responsiveness as they experienced dynamic settings.
3. Anglers' description of fish shifted from framing fish as a detached object of possession that affirmed their ability, to framing fish as another being with whom they communed and connected through fishing.

4. The anglers generally described fly-fishing as a way of escaping everyday routines in order to engage with different aspects of themselves and socio-ecological environments.

These findings suggest anglers move through and perform fly angling by learning to cope with dynamic environments as they develop skills. Additionally, anglers rely on two main social groupings to gain valuable techniques and skills for fly-fishing, central groups and peripheral groups. Beginners and intermediates depended on the central groups as a key method for gaining access to fly-fishing areas and learning fundamental skills, where advanced and expert anglers shift their social groups to being more specific and focused on their ideal fly-fishing experience.

Responding to the research question, gender was discussed as a dynamic process where characteristics of gender are an ongoing emergent aspect of social interaction and are created by participants through interactions and lived performances. In this study gender is expressed through structures that enable participation through socialization into fly-fishing, media representation, language used to describe the setting and fish, and through fishing as a space of escape from domestic responsibilities.

In the discussion section I highlight the ways gender is ‘an ongoing emergent aspect of social interaction among anglers, whether through introduction to the activity and/or throughout. This research contributes to the growing body of literature within outdoor recreation, gender, and leisure by exploring dynamic, holistic, and relational approaches to outdoor and environmental practices. Key concepts addressed in the discussion were focused on the ways gender was expressed and operating in anglers’ experiences of fly-fishing across levels of recreation specialization. The importance of how and by whom anglers are introduced to fly-fishing influences their social, ecological, and environmental understanding and skill progression.

Through a predominant male lens, anglers are mostly introduced by other men in their lives; however, influences such as media and marketing also play a role in participant engagement. These observations allowed for analysis and discussion focused around gendered performances on and off the water as well as the role of the angler's actions, behaviours, and values in shaping gendered rural and urban settings.

This thesis contributes to the scholarly work of masculinities and further emphasizes that outdoor activities can also be a space where men can break away from traditional notions of 'the masculine' and perform multiple masculinities. I interpreted the act of 'doing' gender as expressed by participant's performances on and off the water. Through socialization into the activity most of the male participants acknowledged that they were taught and learned formative fly-fishing skills and norms of practice through a male mentor (father grandfather, male friend). This shaped the way anglers learned to identify not only as an angler, but how their identity and gender was formed through outdoor recreational activities. Thus, when participants are expressing gender norms, they may be perpetuating their ideas around 'being a man in the outdoors' by the need to be accountable in public spheres – both among inside and outside spaces. "Perpetuation of traditional gender norms of behaviour in the outdoors has far reaching consequences not only in the context of gender socialization but also people's relationships with nature" (Kling et al., 2018, p.234). Fly-fishing in Prince George, BC is a male dominated activity; however, one positive outcome that may come from an increase in diverse anglers participating would be the opportunity for others to learn how to navigate dynamic environments and develop their environmental skillsets, thus encouraging deeper, more mindful and meditative human-nature relationships.

There are changes in the fly-fishing landscape that are emerging as of the last couple of years. While the data were collected before the emergence of equity and diversity movements in fly-fishing, I see the links between this thesis and how it can help to inform future studies and help to create opportunities for masculinity and femininity to be embodied, or 'performed' in a variety of ways through outdoor recreation.

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Appendix A: Recreation Specialization Questionnaire

Living and Learning Social and Environmental Relations
Recreation Specialization Questionnaire

Recreation Specialization: A "continuum of behavior from the general to the particular, reflected by the equipment and skills used in the sport and activity setting preferences" (Bryan 1977, pg. 175)

You are invited to participate in our questionnaire to help categorize participants into the most appropriate level of recreation specialization. It will take approximately 5 minutes to complete the questionnaire.

Please only circle one of the four possible answers for each question. Answering honestly/accurately will help us group participants for the field portion of the study, and lead to more trust-worthy results.

Contact/ Participant Information:
Name: (first) _____
(Last)_____
Email: _____
Phone: _____

** All Information provided here will be kept confidential. Contact information will be used only to reach you to confirm your level of specialization and arrange participation in the field portion of the study.

Thank you for your participation and time, if you have any concerns or question please use the contact information below to reach us

Sincerely,

Phil Mullins, PhD
Ecosystem Science and Management

Outdoor Recreation and Tourism Management
University of Northern British Columbia
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Genevieve Huneault
MA NRES Student
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1.When I participate in the sport of fly fishing I feel like:

I. A beginner. I don't really feel like I am part of the fly fishing scene.

II. An occasional or irregular participant. Sometimes it is fun, entertaining, or rewarding to fly fish.

III. A habitual and regular participant in fly fishing.

IV. An insider to the sport. Fly fishing is an important part of who I am.

2.During a fly fishing experience, I can best be described as:

I. Having very little understanding of fly fishing. I am often unsure about how to do certain things when I am fly fishing.

II. Having some understanding of fly fishing, but still in the process of learning more about the sport. I am becoming more familiar and comfortable with the activity.

III. Being comfortable with fly fishing. I have a good understanding of what I can do while participating in fly fishing, and know how to do it.

IV. A knowledgeable expert in fly fishing. I encourage, teach, and enhance opportunities for others who are interested in fly fishing.

3.My relationships with others who fly fishing are:

I. Not established. I really don't know any other people who fly fish.

II. Very limited. I know some other people who fly fish by sight and sometimes talk with them, but I don't know their names.

III. One of familiarity. I know the names of others who fly fish, and often speak with them.

IV. Close. I have personal and close relationships with other people who fly fish. These friendships often revolve around the sport.

4.My commitment to fly fishing is:

I. Very slight. I have little connection to fly fishing. I may or may not continue to participate in the sport in the future.

II. Moderate. I will continue to fly fish as long as it is entertaining and provides the benefits I want.

III. Fairly strong. I have a sense of being a member of the activity, and it is likely that I will continue to fly fish for a long time.

IV. Very strong. I am totally committed to fly fishing. I encourage others to participate in the sport and seek to ensure that the sport continues into the future.

Complete, Thank you!!

We will be contacting you shortly regarding the next steps of the study ☺

Appendix B: Interview Guide

Semi-Structured Interview questions for Living and Learning Social Relations Research Study

As a semi structured interview, the following questions provide starting points that will be further probed and discussed with participants.

We will start with questions about your own personal experience fly fishing, move into social relationships involved in angling, and then examine ecological and environmental understandings related to your career and progress in fly fishing.

Personal: '*Personal*' questions may include how you got into fly fishing, what your ideal experience is, the meaning and significance of the activity in your life, and your approach to learning skills.

1. Tell me about how you got into fly fishing?
    a. What attracted you to the sport?
    b. How did you get involved and progress?

2. Why do you fly fish? What role does it play in your life?

3. Tell me about your skill progression in fly fishing?
    a. What has been most rewarding?
    b. What has been most challenging?
    c. What factors enabled and constrained your skill development?

4. How do you measure success or accomplishment in your fishing?

5. Tell me about your dedication to and participation in fly fishing since you started?
    a. Has it changed?
    b. What factors enabled and constrained your dedication and participation?

6. Have you noticed a change in the way you connect with fly fishing, since you started?

    For example your passion for it, your desire to fish or your focus when you fish, the centrality of fishing in your life, your sense of accomplishment?

7. What is your ideal experience when you fly fish?
    a. Has this changed over time? What were the most significant changes in your ideal experience, or how you understand fly fishing?

8. What does it feel like to fly fish? Has this changed over time or with your progression in the activity?

9. What does fly fishing do to your body, mind, spirit?

10. Has developing skills and techniques in fly fishing contributed to feelings of attachment and connectedness to sites or environments in which you fish? Explain?

11. In what ways do tools and technologies help and or hinder your developing or practicing fly fishing skills?
    a. Do tools and technologies shape you understandings of the places you fish?

12. Have you become more specialized within fly fishing over time (particular species, style of fishing, locations, type of equipment)?
    b. What motivates? Factors involved?
    c. What rewards?

13. Has your emotional connection to fly fishing changed with your skill development? Are they related?
    a. Are there factors outside of the activity itself that influence this?

14. What do you enjoy about fly fishing? What do you not enjoy?

Social:

'*Social*' questions may concern the relationships and resources that support or constrain your learning and participation, norms of practice, your involvement with fly fishing clubs and conservation organizations, and any differences you may have observed or experienced based on gender, class, or race.

1. Who has been influential in your involvement in fly fishing, how did they or do they influence your participation?
    a. Have you introduced anyone else to the sport?

2. Do you use any outside resources (magazines, YouTube, forums etc.) for learning and developing your skills and why? Are there differences among these?

3. When you fish do you go alone or with a group? How and why do you choose with whom you fish?
    a. Are there specific reasons why you prefer to fish alone or with others?

4. What kind of interactions occur between anglers of different skill levels? For example friendship, mentorship, competitiveness, annoyance etc. What has your own experience been with this? Can you provide some examples?
5. Do you think men and women experience skill development in fly fishing differently? What has your experience been?

6. In your experience, have you learned from and/or taught both men and women how to fly fish? Have you experienced differences in settings that involved single gender (i.e. women teaching women, men teaching men) vs different genders (women teaching men or vice versa)?

7. Norms of practice are established or expected ways of doing things within the fly fishing community. Can you identify some of the norms of practice you've noticed, and whether these impact or are experienced differently for men and women?

8. How would you characterize the population who participates in fly fishing around Prince George in terms of education, ethnicity, gender, class, and/or physical ability? Is there diverse participation?
    a. What is it about fly fishing that attracts/limits diverse participation?

Ecological:

I want to talk about '*Ecological*' relationships, these relate to what you know and how you interact with the ecology of fishing. For example, your knowledge of fish and insect populations, specific sites or niches, river environments, management practices, and how you feel about catch and release and/or eating fish.

1. To what degree, and in what ways, are understanding ecological elements such as water flows and patterns, fish habitat, and the geography and timing of insect hatches part of your fly fishing?
    a. What sort of ecological relationships do you pay attention to? How/when?
    b. Why, and for whom, is ecological knowledge important?
    c. When did it become part of your fishing experience?

2. Has fly fishing led you to learn more about ecology, or has knowing and valuing ecology contributed to your interest in fly fishing?

3. How is ecological knowledge related you your development as a fly angler?

4. Which, if any, ecological relationships are essential to fly fishing?
    a. Which are the hardest for beginners to learn?

   b. How is this knowledge expressed?
   c. What ecological knowledge is related but secondary to fly fishing?
   d. Has your ecological knowledge/interaction changed as you progressed in the activity?

5. What do you think about stocking fish, catch and release practices or eating fish you caught, and other management measures to enhance or mitigate ecological changes related to fly fishing?
   a. Has your perception shifted over time and involvement in fly fishing?

Environmental:

Now I want to talk about '*Environmental*' questions related to how fly fishing expresses or has shaped your understanding and relationship with the natural world, other species, and environmental issues.

1. Do you think your understanding of the environment and your role in it has changed from when you started angling to now? How? Why?

2. Have the ways in which you understand the places/settings you fish in changed as you advance through the activity? How? Why?

3. Are you aware of a variety of locations available for you to fish that fit your skill level and desired experience? Can you name some for me? What factors contribute to suitable sites?

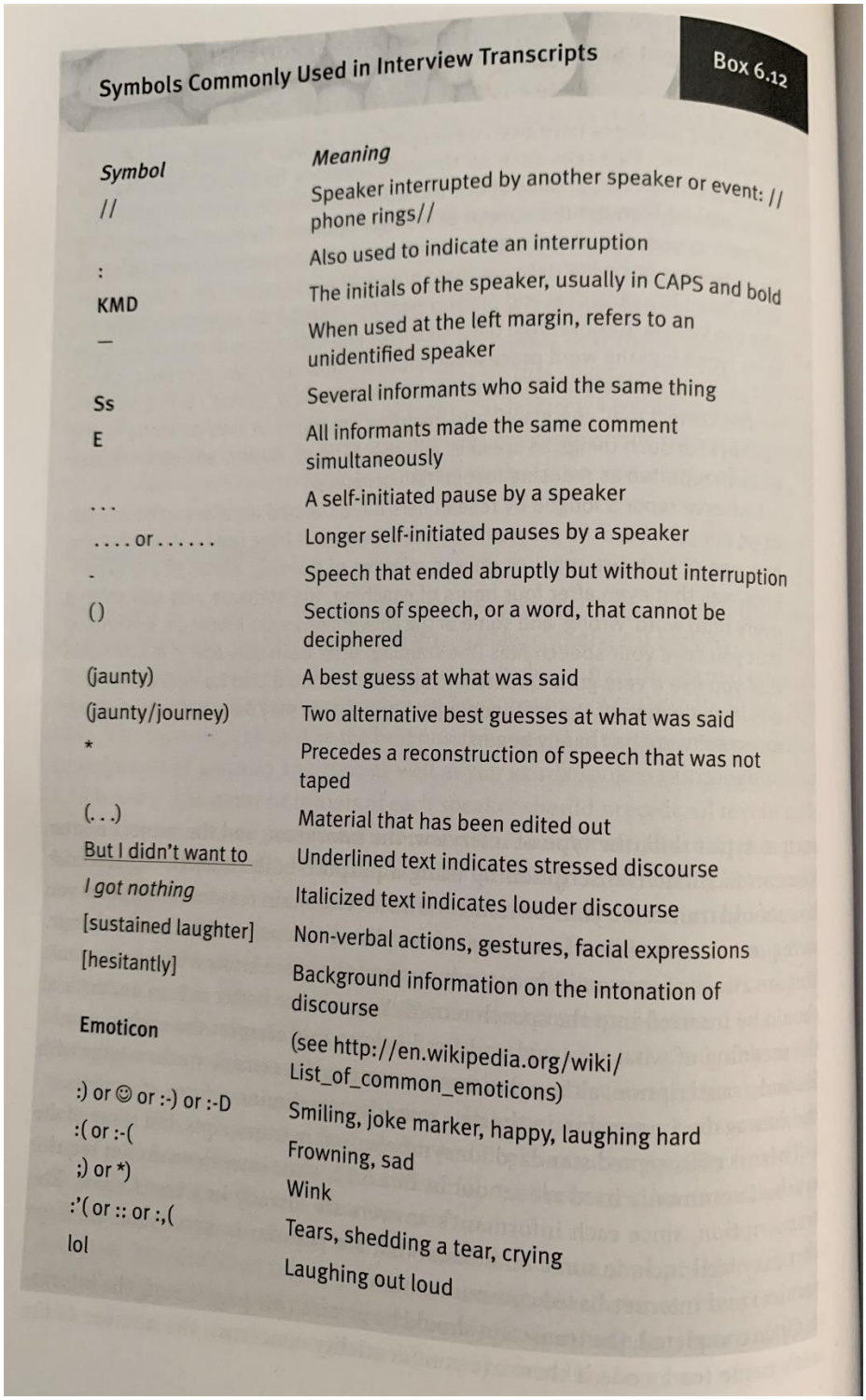
4. Do you fish in a variety of locations or settings, or are you more choosey? Particular places? Or types such as river environments, drive in sites, lake fishing by boat/tube, from the shore?
    a. Can you tell me about one place/type about which your perceptions have changed?

5. Have you joined or do you support conservation or environmental organizations? Which one? Why?

6. Do you feel that fly anglers have strong environmental norms, that is they behave and expect others to behave in ways that are and environmentally friendly? Can you give me some examples?
    a. Are these specific to fishing settings?
    b. Are these more general in nature?
    c. Do these shift with involvement in the activity?
    d. Do people actually behave in ways that are consistent with these norms.

7. To what extent do you feel that the way you act shapes or makes a difference in terms of environmental impacts or protection?

Appendix C: Transcribing Key



Box 6.12 Symbols Commonly Used in Interview Transcripts

Symbol	*Meaning*
//	Speaker interrupted by another speaker or event: // phone rings//
:	Also used to indicate an interruption
KMD	The initials of the speaker, usually in CAPS and bold
—	When used at the left margin, refers to an unidentified speaker
Ss	Several informants who said the same thing
E	All informants made the same comment simultaneously
. . .	A self-initiated pause by a speaker
. . . . or	Longer self-initiated pauses by a speaker
-	Speech that ended abruptly but without interruption
()	Sections of speech, or a word, that cannot be deciphered
(jaunty)	A best guess at what was said
(jaunty/journey)	Two alternative best guesses at what was said
*	Precedes a reconstruction of speech that was not taped
(. . .)	Material that has been edited out
But I didn't want to	Underlined text indicates stressed discourse
I got nothing	Italicized text indicates louder discourse
[sustained laughter]	Non-verbal actions, gestures, facial expressions
[hesitantly]	Background information on the intonation of discourse
Emoticon	(see http://en.wikipedia.org/wiki/List_of_common_emoticons)
:) or ☺ or :-) or :-D	Smiling, joke marker, happy, laughing hard
:(or :-(	Frowning, sad
;) or *)	Wink
:'(or :: or :,(	Tears, shedding a tear, crying
lol	Laughing out loud

Appendix D: Codebook

Name	Abbr.	Description	Included	Excluded
Recreation Specialization	RS	"Continuum of behavior from the general to the particular, reflected by the equipment and skills used in the sport and activity setting preferences" (Bryan 1977, pg. 175)		
RS Skill	RS SK	Embodied knowledge of specific environments and landscapes, an attunement (physical, perceptual, cognitive) to particular elements or phenomena (wind, current, sunlight, people, fish…) in the surroundings; learned through practical "hands on" experience; involving care, judgment, and dexterity in attuning one's abilities to perceive and act. Environmental conditions present limits and opportunities for action in accomplishing something (Ingold, 2000, 2001, 2011).	Instances in which respondent characterizes or references skills - their own, others or generally instances in which skill or lack of skill is evident in participant responses.	Mention of environment, without connection to embodied knowledge or attunement.
Centrality To Lifestyle	CTL	"friends or others and social interactions centered on the activity" as well as the "central role of the activity in the individual's life" (McIntyre & Pigram, 1992, p. 7 cited in Bricker and Kerstetter, 2000, p. 235)	Instances in which respondent characterizes or references connection to fishing as part of lifestyle / practice and/or social interactions, groups or engagement. Centrality may be referred to as all encompassing or very little in terms of the activity being a main focal point in the participant's life and social environment.	
Equipment / Financial Investment	EQP	Tools, technologies, apparatus bought, borrowed, gifted for the use in an outdoor activity: boots, waders, nets, GPS, fly rod, flies, hooks etc. Equipment to participate or experience the activity, may or may not be integral to the 'success' of the sport.	Instances in which respondent refers to his or her equipment in terms of buying, the quality of the equipment, length of ownership, how they sourced out the equipment, the amount of use it gets, how he or she feels about their equipment or others. Other instances be in referral to how equipment has helped or hindered their ability to 'do' the activity.	Participant should be referring to equipment specifically in terms of fly fishing or related activity. Equipment should not be coded if referenced in vague terms, or speaking about equipment in general terms not relating to how it effects their ability to fish
Avidity / Enduring Involvement	AVID	Affective component of RS: attraction, self-expression, and centrality contribute to 'enduring involvement' and how involvement contributes to a participant identity, life, and motivations. Avidity: the time invested into an activity, and how often one participates. Measured by hours, days per week, months, and years.	Instances where the participant talk about his or her level of participation and dedication to the sport. Participants may refer to their involvement in terms of how often they fish, past involvement, current involvement or future involvement. Participants may also refer to avidity or involvement as it relates to their family, work, lifestyle.	
Experience And Ability	SKLV	Trained, practiced and learned manual or cognitive proficiency to execute techniques associated to fly fishing. The physical body and mind hold a level of knowledge and muscle memory, able to maneuver through landscapes, equipment and catch fish. Learned through time and practice, related to level of experience.	Varying levels of skill and ability are taken into consideration as individuals may show low to high levels of skill and ability due to physical strength and mobility, equipment owned or not owned, sources of knowledge and retained knowledge instances where the participant refers to his or her own skills could include: physical strength focusing on one aspect of a technique in order to reach an objective ability to approach fishing site, mobility, and 'reading the landscapes' the techniques to catch a fish and release the fish awareness of their surroundings (i.e., insect hatches)	
Beginner	RSB	To be determined	Used to code participant level of specialization from self-assessment. Will be described in findings by type of equipment, level of participation and dedication, time and money spent on the activity, centrality to life, connections to fishing sites, attitudes on management and environmental practices….	
Intermediate	RSI		ibid	
Advanced	RSA		ibid	
Experts	RSE		ibid	
Types Of Relations	RLTS			
Ecological	ECO	Biophysical interactions that participants have, whether conscious of them or not, that are central to, supportive of, and/or resulting from their fly fishing activity, or attributed to others.	Knowledge/understandings, interactions on site, in transit, and 'back home', interactions include such things as direct and indirect impacts through physical presence, food, equipment production/resources, waste, and management practices	
Personal	PER	The relationship that the participant has with them self, including physical, psychological, emotional and/or spiritual	Gaining strength, improved ability, perceived self-efficacy, fears	

Social	SOC	Interpersonal relationships or social groups. Including sociological elements such as gender relations, culture, class, and power	Norms of practice that occur between anglers at a fishing site or elsewhere, interactions that occur between anglers, perceptions of crowdedness on fishing sites	
Environmental	ENV	Environmental relations expressed or potentially expressed. Attitudes and behaviors associated to the greater understanding of their involvement and connection to natural spaces	Environmental ethics, values, awareness of positive and negative impacts and environmental issues	
Gender	GDR	"gender is a set of socially constructed relationships produced and reproduced through peoples actions" (henderson, 1994, p.144)	Gender may be related to as a way to identity with male or female anglers, or indirectly referred to in terms of specific aspects of the environment. Gender may be referenced in terms of how the participant views the male dominated sport or again indirectly. Possibly referring to specific aspects of fishing as female or male, such as their rod, the fish they catch, the boat they use etc.	
Masculinity	MAS	Socially constructed ideas of masculinity pertaining to physical places, objects, and spaces.	Instances where the participant uses a masculine connotation to describe or illustrate something or as part of their experience (explicitly or implicitly). Participant identifies with masculine meanings in order to fly fish, or participant negotiates hegemonic masculinity, attitudes or behaviors around fly fishing and the 'outdoors'. Masculinity may also express in other aspects and activities that do or do not occur in their broader lives. Implicit or explicit references to masculinity.	
Femininity	FEM	Socially constructed ideas of femininity pertaining to physical places, objects, and spaces.	Instances where the participant uses a feminine connotation to describe or illustrate something while fly fishing or as part of their experience. An instance where the participant identifies with feminine variables in order to fly fish, or the opposite where the participant negotiates hegemonic ideologies of feminine attitudes or behaviors centered around fly fishing and the 'outdoors' another reference to feminine may be as part of their lives, where feminine activities take place and others do not. Illicit or explicit references to femininity may be expressed	
Norms	NOR	Norms are cultural products (including values, customs, and traditions) which represent individuals' basic knowledge of what others do and think that they should do. Sociologists describe norms as informal understandings that govern individuals' behavior in society.	Norms of practice that are acceptable or not acceptable within the fly fishing community, these can be structured rules or ways of acting to unspoken protocol on the river/lake and between anglers	
Space	SPC	"composed of intersections of mobile elements with shifting, often indeterminate, borders" (Espiner, et al., 2011)	May be referred through discussions as a physical aspect of the landscape, how a place makes them feel, connections to places and spaces, overall awareness of the human impacts on a location. Other mentioning's could entail differences between urban and rural spaces (either explicitly or implicitly) references to physical aspects of a space that evokes emotion, connection or other	
Place	PLC	Identify, Attachment, Dependence. Wattchow and Brown (2011): place demands corporeal experience & responsive forms of travel; Payne and Wattchow (2009) suggested "slow" pedagogy focused on corporeal engagement. Physicality of travel may foster understandings of skill and movement as interrelated with place, environmental relations.		
Drivers	DVR	1. Those that encourage an individual to begin an activity; and 2. Driving those to progress within an activity through the stages of recreation specialization		
Family	DVR-FAM	A group of people closely connection to you, whether that is biological or emotional. Family comprises of more than one person and is situated among a socially constructed notion of togetherness and/or blood relations	Instances where the participant refers to his or her family when fly fishing, how the family impacts or influence their participation on fly fishing, specific family members who have a direct connection to their participation in fly fishing. Life cycles where the family is new to them, how the family is balanced between their fly fishing etc.	
Time	DVR-TIM	The measured or measurable period during which an action, process, or condition exists or continues. Can be measured in seconds, minutes, hours and days etc. A non-spatial continuum that is measured in terms of events which succeed one another from past through present to future	Mention or example of how time has allowed for the activity, how time feels doing the activity. Positive attitudes about time and fly fishing	Instances where time is referred in simpler terms such as length of time it took to tie a fly etc.
Money	DVR-MON	Something generally accepted as a medium of exchange, a measure of value, or a means of payment	Participant speaks to money as being a way to participate in the activity.	Instances where participant mentions money but it does not relate to the participation or continued participation of the activity.
Equipment	DVR-EQP	Tools, technologies or apparatuses that are bought, borrowed, or gifted for the use of an outdoor activity (fly- fishing) this can range from: boots, waders, nets, gps, fly rod, flies, hooks etc. Equipment is used in order to participate or experience the activity and may or may not be integral to the 'success' of the sport.	Instances where equipment was sourced or used to benefit or help the participant in a positive manner- this in turn relates to the participants continued or increased participation	
Social	DVR-SOCI	**Social group** is a collection of people who interact with each other and share similar characteristics and a sense of unity. **Social interaction** is an exchange between two or more individuals and is a building block of society. By interacting with one another, people design rules, institutions and systems within which they seek to live	The participant describes or indicates that social interactions or going with a group is a factor in which 'drives' the participant to participate in the sport	

Confidence	DVR-CONF	A state of being certain either that a hypothesis or prediction is correct or that a chosen course of action is the best or most effective. Self-confidence is having confidence in oneself.			
Risk/Danger	DVR-RSK	Risk can contextualize the development and practice of particular skills (e.g., reading weather), and is also produced through skilled performance (e.g., climbing rocks). Lyng's (1990) participants in high-risk recreation regarded "the opportunity for the development and use of skills as the most valuable aspect of the experience" (p. 859). Risk in outdoor adventure activities and settings may demand skill, and skill development may alter the nature and degree of risks encountered (Lyng, 1990).			
Constraints	CON	A 'constraint' to leisure is defined as anything that hinders people in their ability to engage or remain in leisure activities, to access leisure or recreation services, or to achieve a desired level of satisfaction (Jackson and Henderson, 1995).			
Family	CON-FAM	A group of people closely connection to you, whether that is biological or emotional. Family comprises of more than one person and is situated among a socially constructed notion of togetherness and/or blood relations			
Time	TIM	The measured or measurable period during which an action, process, or condition exists or continues. Can be measured in seconds, minutes, hours and days etc. A non-spatial continuum that is measured in terms of events which succeed one another from past through present to future.			
Money	CON-MON	Something generally accepted as a medium of exchange, a measure of value, or a means of payment			
Equipment	CON-EQP	Tools, technologies or apparatuses that are bought, borrowed, or gifted for the use of an outdoor activity (fly- fishing) this can range from: boots, waders, nets, GPS, fly rod, flies, hooks etc. Equipment is used in order to participate or experience the activity and may or may not be integral to the 'success' of the sport.			
Social	CON-SOCI	**Social group** is a collection of people who interact with each other and share similar characteristics and a sense of unity. **Social interaction** is an exchange between two or more individuals and is a building block of society. By interacting with one another, people design rules, institutions and systems within which they seek to live.			
Confidence	CON-CONF	A state of being certain either that a hypothesis or prediction is correct or that a chosen course of action is the best or most effective. Self-confidence is having confidence in oneself.			
Risk/Danger	CON-RSK	Risk can contextualize the development and practice of particular skills (e.g., reading weather), and is also produced through skilled performance (e.g., climbing rocks). Lyng's (1990) participants in high-risk recreation regarded "the opportunity for the development and use of skills as the most valuable aspect of the experience" (p. 859). Risk in outdoor adventure activities and settings may demand skill, and skill development may alter the nature and degree of risks encountered (Lyng, 1990).			
Emergent Codes					
Aesthetic Experience	EASE XP				
Relaxation	REL	This can include relaxation from being at a specific setting, imposed by the physical act of the activity, conditioning from skill development to feel this way, real vs perceived reality of relaxation			
Adrenaline	ADR	Seeking adrenaline, rushes, receives adrenaline rushes, the activity gives the participant this feeling			
Escape	ESP	A feeling experienced while participating in the activity - a reason to visit 'nature' versus staying 'in town' or feelings of escape from routine life - physical, mental, geographical	Being at the river, not being in the city, escape from normal routine, escape from the stress of life and mind, solidarity		
Explore / Adventure	ADV	A sense of exploring new areas to participate in activity / sense of being the only person to find an ideal site. Discovering landscapes, encounters with wildlife	New sites of locations, catching new species of fish, bush whacking to find 'ideal' location and experience		

Appendix E: Themed Findings Tables

Beginner			
theme	sub-theme	Expressions	# of references
Socialization within the Activity and Interactions with others	Teachers and Influencers: family and friends introduce foundational knowledge	learning the fundamental skills of Fly fishing through others	17
		someone close to me introduced me to the activity	6
		going out with others who know more than I do, helps me with my skills	10
	Internal Social Groups: social relationships are valued and enable continued participation	enjoyment of having the social aspect of Fly fishing	8
		without knowing people, it would be hard to get out and do the activity	12
		the friendships created while fishing	22
	External Social Groups: Utilizing outside resources contributes to skill progression Seeking resources off the water contribute to increased learning	it can be intimidating seeing and talking to others who are more skilled	9
		talking with people on forums or at gear shops is very useful for my learning	4
Negotiations of the body and equipment	Equipment: The use of equipment can be awkward to navigate	basic movement and skills with my equipment	13
		started with borrowed or used equipment	6
		awkward to organise and handle while learning fly fishing skills	9
	-Wading through the waters – physicality and mobility of the body and the play of the body with natural elements -Weather and natural elements impact ability to perform	I stick to bodies of water I know and feel comfortable with	10
		weather conditions effect my fishing experience	17

	-The ability to perform is impacted by weather and natural obstacles	awareness of my placement in the water in relation with others	6
	-The art of the cast- embodiment, technique and skill -Casting technique are limited to one focus -Focusing on casting encourages skill development	casting techniques is a challenging skill	21
		main area of focus while fishing is the casting technique	14
		fly-tying knowledge is limited and knots are rarely changed	8
Indoor and Outdoor spaces and places	Expressions of masculine and feminine Anglers appear to exhibit dominant masculine behaviours associated to fishing	natural settings or wildlife referred in a female or male context	9
		fly tying vs fly fishing	4
		acknowledgement of men and women in the water	3
	Escaping and being present: Fly fishing breaks the daily routine of work and life Patterns of daily life are interrupted and allow room for relaxation	being away from everything (house, work, urban life)	13
		a way to relax (meditative)	15
		fly fishing as a mode to explore the outdoors	7
	Connection to place: Place dependency, based around accessibility, ease of participation	a place I call my own	3
		family legacy	4
		a place that holds memories	6
relationship with fish	Sustenance: Motivated to eat caught fish	I eat the fish I catch	4
		I do not agree with eating the fish	2
		species, population, and size determine my choice to eat or not to eat	6
	Symbolism: A trophy fish is the standard for being a successful fly angler	BC icon	1
		the gift	0
		the trophy	9
	catch and release practices: Best practices have not been refined, and are not a central aspect to fly angling	catch practices	4
		release practices	3
		regulations	5

Intermediate			
theme	sub-theme	Expressions	# of references
Socialization within the Activity and Interactions with others	Teachers and Influencers: Fundamental Skills become more refined through observation of friends, family, and others	learning the fundamental skills of Fly fishing through others	9
		show me how to behave on the water, what terminology to use	7
		going out with others who know more than I do, helps me with my skills	5
	Internal Social Groups: Incorporating a social aspect to the experience is just as important as skill development	enjoyment of having the social aspect of Fly fishing	9
		without knowing people, it would be hard to get out and do the activity	7
		the friendships created while fishing	12
	External Social Groups: Place specific engagement with other fly-anglers is scenario based.	it can be intimidating seeing and talking to others who are more skilled	10
		talking with people on forums or at gear shops is very useful for my learning	8
Negotiations of the body and equipment	Equipment: The use and choice of equipment is more purposeful	basic movement and skills with my equipment	9
		invested in equipment that suits for now	4
		know how to handle rod, and line in the effort to catch a fish	8
	Wading through the waters – physicality and mobility of the body and the play of the body with natural elements:	I stick to bodies of water I know and feel comfortable with	11
		weather conditions effect my fishing experience	9

	Familiarity to the space encourages participation and continued returns	awareness of my placement in the water in relation with others	6
	The art of the cast- embodiment, technique and skill and more: The importance of casting technique before refining any other skill is imperative	casting techniques is a challenging skill	6
		main area of focus while fishing is the casting technique	11
		fly-tying knowledge is limited and rarely changed	3
Indoor spaces and outdoor places	Expressions of masculine and feminine: Hard to determine, not enough evidence to suggest difference from Beginner	natural settings or wildlife referred in a female or male context	13
		fly tying vs fly fishing	2
		acknowledgement of men and women anglers (differences or similarities)	3
	Escaping and being present: Fly Fishing offers a purpose to explore and experience natural settings	being away from everything (house, work, urban life)	9
		a way to relax (meditative)	11
		fly fishing as a mode to explore the outdoors	14
	Connection to place: Identifying various flora and fauna enables increased understanding of fly fishing	a place I call my own	7
		family legacy	4
		I understand the ecological elements more (insect identification, grasses, water, slopes etc.)	15
relationship with the fish	Sustenance: Eating Fish that are caught is a part of the fishing experience	I eat the fish I catch	9
		I do not agree with eating the fish	4

		species, population, and size determine my choice to eat or not to eat	4
	symbolism	BC icon	1
		the gift	3
		the trophy	11
	catch and release practices: Through hands on learning and observation, the importance of 'proper' C&R is becoming a key aspect to the activity	catch practices	8
		release practices	5
		regulations	7

Advanced

theme	sub-theme	Expressions	# of references
Socialization within the Activity and Interactions with others	Teachers and Influencers: Fundamental skills are refined and normalized. Skills are now being shared and new technical skills are being explored and tried.	mentors and influencers are my peers, we learn from each other	22
		I assist others when I see they need assistance	10
		outside resources contribute to my learning	8
	Internal Social Groups: Intentional social interactions while on the water and with others. Seeking a more 'remote' experience on the water.	the social aspect of Fly fishing	10
		I am usually by myself of with close friends and family	14
		the friendships created while fishing	18
	External Social Groups: Some engagement with external groups can prove helpful for specific information or technique advice.	clubs, forums, and magazine articles can aid in my technique	7
		I occasionally reach out to outside social sources	9
Negotiations of the body and equipment	Equipment, an extension of the body: A fluid connection between corporeal movements and the equipment used to engage in the activity. Fine tuning of equipment to meet angler's needs and desired outcomes.	my gear, rod and flies are suited for the fly fishing I like	11
		invested in equipment that suits me and my needs	7

		I am aware of the effect my body has on my technique	15
	Wading through the waters – physicality and mobility of the body and the play of the body with natural elements: Sharp awareness of surrounding areas, and natural elements that affect the experience of Fly angling.	most water conditions I can handle	10
		weather conditions effect my fishing experience	17
		awareness of my placement in the water in relation with others, and natural elements	23
	The art of the cast- embodiment, technique and skill: Increased attention to each detail of setting up the rod to placing the fly on the water. Specific movements, fly-tying techniques directly impact the desired outcome.	the rod in hand is second nature	13
		my line is rhythmic, I place it for the fish to bite at	10
		fly-tying knowledge and practice contributes to my experience	13
Indoor spaces and outdoor places	Expressions of masculine and feminine: Language used is in gendered terms to describe the 'personality' and sex of the fish. Often related and connected to how I interact with the fish	natural settings or wildlife referred in a female or male context	9
		family outings vs going out with the friends	4
		acknowledgement of men and women anglers (differences or similarities)	3
	Escaping and being present: Separating from the daily routine and going into natural places is a source of rejuvenation. Fly fishing offers an outlet to understand and experience 'new' environments.	being away from everything (house, work, urban life)	15
		a way to relax (meditative)	21
		fly fishing as a mode to explore the outdoors	26
	Connection to place: Through experience in the activity I have gained various	a place a call my own	9
		family legacy	8

	levels of knowledge about myself, the area in which I recreate and feel more connected because of it	I understand the ecological elements in greater depth (insect identification, grasses, water, slopes etc.) and can use appropriate flies for desired outcomes	15
relationship with the fish	Sustenance: Refined knowledge and experience has led to specific decision making when deciding to eat a fish	I eat the fish I catch	3
		I do not agree with eating the fish	4
		species, population, and size determine my choice to eat or not to eat	8
	Symbolism: I respect the fish I catch and am more focused on catching a large fish rather than many small fish	BC icon	4
		the gift	8
		the trophy	17
	catch and release practices: I take pride in my skillset and want others to grow their awareness on best practices	catch practices	7
		release practices	8
		regulations	13

Expert			
theme	sub-theme	Expressions	# of references
Socialization within the Activity and Interactions with others	Teachers and Influencers: A shift based off of experience has led to sharing my skills and knowledge with others	mentors and influencers are my peers, we learn from each other	22
		I assist others when I see they need assistance	14
		I contribute to resources to encourage emergent practices and trends	6
	Internal Social Groups: Bonds have formed through fly angling and are now substantial in my life	the social aspect of Fly fishing	5
		I am usually by myself of with close friends and family	22
		The friendships created while fishing	9
	External Social Groups: Clubs and online/print resources are there when I need them	clubs, forums, and magazine articles keep me in the loop, but are not integral to my learning	11
		I occasionally reach out to outside social sources	7

Negotiations of the body and equipment	Equipment, an extension of the body: Embodiment and a sense of 'naturally doing it'	my gear, rod and flies are suited for the fly fishing I like	26
		invested in equipment that suits me and my needs	11
		I am aware of the effect my body has on my technique	23
	Wading through the waters – physicality and mobility of the body and the play of the body with natural elements	most water conditions I can handle	15
		weather conditions effect my fishing experience	10
		Acute awareness of my placement in the water in relation with others, and natural elements	20
	The art of the cast- embodiment, technique and skill and more: I no longer have to think about every move or step, it has become intrinsic and in-sync	the rod in hand is second nature	17
		my line is rhythmic, I place it for the fish to bite at and succeed	14
		fly-tying knowledge and practice contributes to my experience	15
Indoor spaces and outdoor places	Expressions of masculine and feminine: The way I think about fish and interact with natural settings has shifted and is less polarized	natural settings or wildlife referred in a female or male context	8
		family outings vs going out with the friends	6
		acknowledgement of men and women anglers (differences or similarities)	6
	Escaping and being present: Getting out and enjoying the entire experience is important	being away from everything (house, work, urban life)	19
		a way to relax (meditative)	19
		fly fishing as a mode to explore the outdoors	23
	Connection to place: conserving and stewarding the places	a place a call my own	9
		Family legacy	5

	I fish is just as important as the activity	I understand the ecological elements in depth (insect identification, grasses, water, slopes etc.) and utilize the natural environment to obtain desired outcomes	16
relationship with the fish	Sustenance: Increased perception of fish conservation has led to appreciating the fish rather than consuming the catch	I eat the fish I catch	2
		I do not agree with eating the fish	7
		species, population, and size determine my choice to eat or not to eat	4
	Symbolism: Greater appreciation of catching a fish has led feelings of gratitude for the time spent with the animal	BC icon	6
		the gift	13
		the trophy	8
	catch and release practices: sense of stewardship and pride for maintaining healthy populations, and ecosystems	catch practices	4
		release practices	14
		regulations	17