"WHATEVER WORKS BEST FOR THE ATHLETE": THE USE AND EXPERIENCE OF COMPLEMENTARY AND ALTERNATIVE MEDICINE AMONG ELITE FEMALE ATHLETES

by

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Abstract

This study examined how carded female members of Canadian national teams used and perceived Complementary and Alternative Medicine (CAM). The research was guided by the following question: How do elite Canadian female athletes use Complementary and Alternative Medicine? Additionally, the research was informed by three subsidiary questions, namely: (1) How do they perceive and experience CAM?; (2) Why do they use/not-use CAM?; (3) What roles do they perceive CAM to play in their athletic development?; and (4) How is the use of CAM negotiated within existing sport structures?

Using qualitative research methods, 12 female athletes were interviewed twice using a semi-structured interview format for a total of 22.5 hours. The athletes were questioned about their first experiences of using CAM and the situations that lead them to explore new treatments. The athletes were also asked about their continued use of CAM and the reasons for the ongoing treatments as well as the role they perceived CAM and CAM practitioners to have in their athletic careers.

Previously, the extant literature concerning CAM use among athletes indicated that 56% of varsity athletes used CAM although this research gave no indication as to the frequency with which CAM treatments were utilized. The women in my study reported that, when carded, they used CAM treatments extensively and frequently (from two appointments a month up to two appointments a day). At the same time, the women in this project revealed that their ability to access services was highly contingent on their status as carded athletes and the associated monthly stipend from Sport Canada. Within different sports organization, gendered, and hegemonic hierarchies further delimited access to CAM. My findings suggest that while injury may have been the impetus for the first treatment, the ongoing use of CAM was more closely associated with an effort to prevent chronic conditions and physical imbalances from escalating and thereby restricting their ability to fully participate in their sport.

These findings have theoretical implications for expanding our understanding of the value CAM holds for those who use it. The data also bridge the gap between the existing literature which has examined the influence of the sportsnet on an athlete's belief, attitudes, and actions, and research into rates CAM utilization in special populations. Finally, this project reveals that elite female athletes perceive CAM to be an essential part of their athletic training.

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Dedication

I dedicate this work to the athletes who taught me nothing compares to starting the day doing what you love.

CHAPTER 1: Introduction

Complementary and Alternative Medicine (CAM) is a term best explained as an array of therapies, modalities, health systems, practices, and practitioners that exist apart from (and yet in relation to) the mainstream medical system (Barrett et al., 2003; Kaptchuk & Eisenberg, 2001a, 2001b). As such, the definition of CAM is one of exclusion (Doel & Segrott, 2003) as well as one that is in constant negotiation. The study of CAM practices requires an examination of the context in which the practices are being used, as well as consideration of the origins of the practices, the training of the providers, the sites of delivery, and the degree to which the practices are integrated into or excluded from allopathic medicine. In a Canadian context, CAM includes (but is certainly not limited to) the following: Alternative medical systems such as Traditional Chinese Medicine (TCM) and Ayurvedic medicine; energy based therapies such as Reiki and electromagnetic treatments; body based manipulations such as chiropractic treatments, massage, and visceral manipulation; nature-based or bio-based treatments such as homeopathy; and an endless list of techniques used by a variety of practitioners such as active release therapy (ART), intramuscular stimulation (IMS), needling, cupping, herbal remedies, and meditative practices. The Canadian Health Network identifies over 300 forms of CAM on their Web site and, even then, makes no claim that the list is exhaustive (Canadian Health Network, n.d.).

To further confuse the issue of definition, CAM practices are not static and their position in relation to Western medicine is not fixed. Some groups of CAM practitioners have sought to legitimize their practices through processes of self-regulation (Kelner, Wellman, Boon, & Welsh, 2004) or the adoption of medical terminology and techniques from the medical model, including taking a patient's history, body temperature, or blood pressure (Bombardier & Easthorpe, 2000). Similarly, medical practitioners are becoming increasingly familiar with CAM therapies and

many have adopted certain CAM techniques, or have begun to refer their patients to CAM practitioners (Astin, Marie, Pelletier, Hansen, & Haskell, 1998).

While many CAM practices are centuries, if not millennia, old (e.g. acupuncture), the study of CAM practices as a whole is fairly recent and not without complexities. CAM practices have emerged from a number of diverse sources including Eastern philosophy, techno-science, consumer culture, and folklore (Doel & Segrott, 2003). Thus, it would be erroneous to present them as a unified and coherent set of practices. Further complexities arise from the "contested, value-laden, and politically charged" (Adler, 1999, p. 215) beliefs and philosophies that are associated with each health system and that culminate in a "lack of a consensual language with which to discuss alternative therapies" (Adler, 1999, p. 215).

Yet despite the absence of a consensual definition as to what CAM practices actually include, there is a general acknowledgement in the literature that the use of these practices is on the rise (Swartzman, Harshman, Burkell, & Lundy, 2002). In 1998, Eisenberg et al. published a large-scale survey of CAM in the United States that revealed that the rate of patient-reported CAM use had increased from 34% in 1990 to 42% in 1997. The most recent Statistics Canada data, published in 2005 and based on the results of the 2003 Canadian Community Health Survey, indicated that 20% of Canadians aged 12 and over had used the services of at least one CAM provider in the 12 months preceding the survey. In comparison, 15% of adult Canadians reported using CAM in a 1994/1995 survey (Park, 2005).[1]

A growing body of quantitative and qualitative research has analysed the reasons that people give for either choosing or not choosing CAM. Users of CAM (as compared to non-

1 The difference in rates between the Statistics Canada data and Eisenberg et al. is likely do to different definitions as to what constitutes CAM. Some studies include only practitioner delivered services whereas others are much broader in scope and incorporate practices such as the use of herbal remedies or prayer.

users) have been characterized as having a holistic philosophical orientation towards health, being more likely to have had a life altering experience that changed their worldview, and being more likely to self-report poorer health status (Astin, 1998). Additional reasons given for using CAM include the views that biomedicine is deficient and/or that CAM offers a safer and less invasive alternative to biomedicine (Singh, Maskarinec, & Shumay, 2005). Several reports have found that CAM use is higher among women than men, higher in western regions of North American than in eastern regions, and positively correlated with both income and education (Eisenberg et al., 1998; Esmail, 2007; Park, 2005).

In addition to the increase in CAM use among the general population (leading one to question just how long alternative will remain an accurate descriptor), certain groups have been shown to have particularly high utilization rates. Individuals with Alzheimer's disease, multiple sclerosis, rheumatic diseases, cancer, acquired immune deficiency syndrome, back problems, anxiety, and chronic pain demonstrate high rates of CAM usage as compared to the general population (Astin et al., 1998) and as such have been the focus of much of the CAM-related research. Consequently, because of the focus on groups with chronic or terminal conditions, the literature contains little information about the use of CAM in other populations.

Recently a new group has been added to the list of populations using CAM at particularly high rates (Nichols & Harrigan, 2006; Pike, 2005). Indeed, a survey of varsity athletes at a Division 1 National Collegiate Athletic Association (NCAA) college in Hawaii found that 56% reported using CAM in the 12 months preceding the survey, with 43% of respondents receiving treatments from both physicians and CAM practitioners, and 13% seeing CAM practitioners exclusively (Nichols & Harrigan, 2006). Similarly, Pike (2005) conducted a mixed methods

study on the use of CAM by British club rowers and found that 59% of the female rowers were using CAM compared to only 10% of the male athletes.

1.1 Situating the Research Project

To date, the research concerning athletes' use of CAM is limited, consisting of either surveys reporting the rates of utilization (see Nichols & Harrigan, 2006; Pike, 2005), or case studies on the effectiveness of certain treatments for specific injuries (see Kleinhenz et al., 1999; Straub et al., 2001; Weerapong, Hume, & Kolt, 2005). Combining survey research and in-depth interviews with rowers and their coaches, Pike's (2005) study is the only project that has provided a detailed look at why athletes utilized CAM. Together, these studies provide an important platform for the exploration of CAM use in sports but many questions remain to be addressed. Like much of the research on health practices amongst athletes, Pike (2005) focused on injured athletes (see also Griffin, 2005; Young & White, 1995, 1999), but failed to recognize that athletes might incorporate CAM into their daily training regimens regardless of their injury statuses. Interestingly, Nichols and Harrigan (2006) theorized that CAM use might not be confined to the treatment of injuries, although their findings did not differentiate between the reasons or situations that might lead athletes to seek CAM.

As alternative care providers are increasingly included in sports settings, it is important to investigate what experiences and understandings athletes have of CAM practices, biomedicine, and the role of these practices in an athletic context. Using symbolic interactionism and hegemonic power theories as a theoretical framework, this thesis project addresses a gap in the literature by investigating the experiences of female, Canadian national team athletes. It offers a qualitative understanding of the meanings that these athletes attributed to their use of CAM.

Specifically, the research examined the participants' injury-related attitudes, if and how they were using CAM while training and competing, and the role these women perceived CAM to have in their athletics careers. I further consider the way that health practitioners (both CAM and biomedical practitioners) were accessed by the athletes and how information regarding health treatments was transferred within athletic communities.

The research question

The investigation of these areas of inquiry was guided by the following research questions:

Central research question

How do elite Canadian female athletes use Complementary and Alternative Medicine?

Subsidiary questions

1) How do elite Canadian female athletes perceive and experience CAM?
2) Why do elite Canadian female athletes use or not use CAM?
3) What role do elite Canadian female athletes perceive CAM to play in their athletic development?
4) How is the use or non-use of CAM negotiated within existing structures in the sport system?

CHAPTER 2: Review of Relevant Research and Theory

2.1 Defining Complementary and Alternative Medicine

In order to facilitate research, the National Centre for Complementary and Alternative Medicine (NCCAM) in the United States developed the following definition of CAM:

> Complementary and alternative medicine (CAM) is a broad domain of healing resources that encompasses all health systems, modalities, and practices, and their accompanying theories and beliefs, other than those intrinsic to the politically dominant health system of a particular society or culture in a given historical period. CAM includes all such practices and ideas self-defined by their users as preventing or treating illness or promoting health and well-being. Boundaries within CAM and between the CAM domain and the domain of the dominant system are not always sharp or fixed. (Panel on Definition and Description, 1997 as cited in Adler, 1999, p. 215)

As broad as the above definition is, it does not fully encompass all of the existing forms of CAM practices. For example, the history and current practice of acupuncture illustrates the complexities of researching CAM. Acupuncture was first used within Traditional Chinese Medicine (TCM), a separate medical system that has a history that dates back over 2000 years (College of Traditional Chinese Medicine Practitioners and Acupuncturists of British Columbia, n.d.). Originally, acupuncture involved inserting thin, long needles into acupoints according to the theory of the meridians, and TCM practitioners manipulated the needles to direct the flow of *Qi* or vital energy (College of Traditional Chinese Medicine Practitioners and Acupuncturists of British Columbia, n.d.). In North America today, acupuncture is a technique employed by many different types of practitioners in both biomedical and alternative settings. The Acupuncture Foundation of Canada Institute (AFCI) offers courses in acupuncture to health professionals (defined on their Web site as physicians, physiotherapists, chiropractors, dentists, naturopaths,

and others) who are already licensed and practicing in their respective areas. The AFCI Web site states:

> Because these professionals already have an understanding of anatomy, physiology and pathology, they are able to learn enough at the introductory level to begin applying simple acupunctures techniques in clinical practice with excellent outcomes. (Acupuncture Foundation of Canada Institute, n.d.)

In this example, we have a specific practice being employed by a variety of practitioners who may or may not subscribe to the associated belief system of TCM.

The adoption of acupuncture by practitioners from diverse backgrounds has led to some interesting developments in the ways in which the technique is being used. For example, the College of Traditional Chinese Medicine Practitioners and Acupuncturists of British Columbia has recognized electro-acupuncture (whereby the needles are attached to electrodes and stimulated) as a valid technique. Other variations on the technique include intramuscular stimulation (IMS) and dry needling, which both involve targeting deep muscle trigger points in order to elicit muscle release. Thus, acupuncture exemplifies the myriad ways that a single practice can evolve within a contemporary North American context resulting in traditional practitioners modifying their practice to incorporate new advances in technology, and biomedical practitioners incorporating ancient techniques into a modern medical setting.

2.2 Prevalence of CAM Use by Population and Treatment Type

According to Statistics Canada, chiropractic is the most commonly used practitioner delivered form of CAM with 11% of adult Canadians reporting having used it in the 12 months preceding the survey (Park, 2005). In comparison, eight percent of Canadian adults reported

using massage therapy, two percent used acupuncture , and two percent used homeopathy and/or naturopathy (Park, 2005). With respect to age and gender differences, 23% of women reported using some form of alternative care as compared to 17% of men (Park, 2005) and the use of CAM was highest in those aged 25 to 65 (Park, 2005). A study by the Fraser Institute (which included practitioner and non-practitioner delivered services) found similar trends as 19% of participants reported having used massage therapy and 15% indicated that they had used chiropractic services (Esmail, 2007). Both Statistics Canada and the Fraser Institute found that residents of British Columbia and Alberta had the highest rates of utilization in the country (Esmail, 2007; Park, 2005).

Income and education have also been found to be positively correlated with CAM use (Esmail, 2007; Park, 2005). For example, Statistics Canada reported that 26% of those in the highest household income group had used CAM recently compared to only 13% of those in the lowest income group (Park, 2005). Statistics Canada data indicated that 26% of post secondary graduates had used CAM compared to 16% of individuals with less than secondary graduation (Park, 2005).

In line with Astin's (1998) finding that CAM use was highest among those in poor health, Statistics Canada data suggest that individuals with a chronic illness or condition tend to be more likely to use some form of CAM. The highest rates of CAM use were reported by individuals with fibromyalgia (37%), back problems (36%), multiple chemical sensitivities (33%), bowel disorders (29%), migraines (28%), and chronic fatigue syndrome (28%) (Park, 2005). In comparison, only 16% of individuals who did not report having a chronic illness used CAM (Park, 2005).

Similarly, Nichols and Harrigan (2006) found that 56% of varsity athletes at an NCAA Division 1 College in Hawaii had used some form of practitioner delivered CAM in the 12 months preceding the survey. While 38% of the athletes had used massage therapy, 29% had used chiropractic, 14% had used lomilomi (a Hawaiian form of massage), and 12% had used acupuncture (Nichols & Harrigan, 2006). Interestingly, although the rates of utilization were much higher among the athletes who were surveyed as compared to the general population, the same forms of therapy were popular with both groups.

Finally, Pike (2005) surveyed 200 rowers (male and female) during a regatta season in the United Kingdom on topics related to risk, pain, and injury. The results of the survey showed that 59% of female athletes had used CAM, compared to only 10% of male athletes. Although the survey did not provide reasons for the difference between the use of CAM by males and females, Pike (2005) theorized that it might, at least in part, be due to the discrepancy in resources allocated to men's and women's teams. Specifically, Pike (2005) noted that the men's teams were more likely to have assigned medical staff whereas female athletes were required to find their own practitioners and pay for the services by themselves.

2.3 Discourses Regarding CAM Use

2.3.1 CAM and Holism

In addition to the above mentioned socio-economic descriptions of CAM users, CAM has also been associated with a holistic view of health or what is commonly defined as a belief that the psychological, spiritual, and physical are interrelated (Barrett et al., 2003). Doel and Segrott (2003) described a holistic outlook as a view of health that encompasses the individual's social surroundings and social placement. Thus, Lowenberg and Davis (1994) have stated:

> [Holism] presumes to enlarge the traditional sphere of medical (read 'allopathic') concerns from a narrow, largely technical focus on symptomatology and disease to a broadened domain including such health salient foci as nutrition, psychological and spiritual well-being, interpersonal relations and influences emanating from the environment. (p. 581)

Holistic health is also said to reinforce individual and private responsibility for health in that it assumes that the body has an innate equilibrium or healthy state that can be achieved through changes to one's behaviours, beliefs, or surroundings (Barrett et al., 2003; Doel & Segrott, 2003; Kelner & Wellman, 1997; Lowenberg & Davis, 1994; Williams, 1998). It becomes the individual's responsibility to seek out the things in his or her life that have made the body lose its equilibrium and to make the necessary changes in order to restore balance. A holistic view of health has proven to be an accurate predictor of CAM use as people who subscribe to this philosophy more commonly reported that they were also CAM users (46% versus 33% of those who did not report a holistic orientation towards health) (Astin, 1998).

A holistic approach to health is also touted as a way to manage not only the specific illness or condition, but also the psychological stress associated with illness and the disruption to the individual's sense of self (MacNevin, 2003; Pike, 2005). In Pike's (2005) investigation into the use of CAM by female rowers, she reported that CAM provided the women with more opportunities to engage in the treatment process— first they had to seek out the practitioner since CAM was not a service commonly provided to them and secondly, during the treatment process they were asked to take specific actions to facilitate the healing process. Pike (2005) contends that because athletes frequently identify themselves as active beings, CAM helped them to maintain their identity as athletes at a time when their participation in training and competition

was compromised. Pawluch, Cain and Gillett (2000) also commented on the potential for CAM to influence an individual's sense of self when they conducted a project on the use of CAM by persons with HIV. They found that CAM was frequently used by individuals belonging to groups that had been marginalized or oppressed by Western medical systems (or more generally by Western white cultures) such as women, homosexual men, and individuals of African or Native American descent (Pawluch et al., 2000). Many of the participants revealed that they took pride in using healing traditions that were associated with their cultural heritage and that connection (or re-connecting) with this part of their identity was a source of comfort and a way of coping with the stress of the illness (Pawluch et al., 2000).

There is, however, considerable room for debate as to how CAM and holistic health relate to medicalization and demedicalization. On one hand, many CAM practices encourage individuals to take a more active role in their own health practices and often use the term client instead of patient to indicate the greater degree of autonomy offered by CAM. And yet, even as CAM empowers individuals, it can also result in patient-blaming when the treatments are unsuccessful (Lowenberg & Davis, 1994). Because a holistic approach to health suggests all individuals have the potential to heal themselves, a failure to heal or achieve health can be viewed as a failure on the part of the patient. Lowenberg and Davis (1994) have argued:

> The denial to patients of the privilege to be absolved from responsibility for their illnesses smacks strongly of demedicalization, while the application of a health-illness paradigm to nearly every domain of life represents, if anything, a massive thrust in the direction of medicalization. (p. 584)

Thus, while biomedicine offers patients a genetic or biological basis for understanding their condition, thereby absolving them of any responsibility for the causation of the condition,

the holistic approach can be better understood through Crawford's 1980 concept of healthism. According to Crawford (2006), healthism describes the spread of health promotion into increasingly diverse spheres encompassing body, mind, and spirit (a holistic view) as well as the accompanying moralization of heath related behaviours. The unfortunate consequence of a holistic view of health is that poor health can then be viewed as a personal failure on the part of the individual or, according to Crawford (2006), "the failure to achieve health or to seek it [is] equated with a failure to embrace life, an inability to master one's emotions or to appreciate the spiritual dimensions of being" (p. 411).

2.3.2 CAM and Biomedicine

As the terms complementary and alternative suggest, CAM is defined in relation to, and against, biomedicine. Jain and Astin (2001) have argued that much of the existing research concerning the reasons that users give for selecting CAM contains an inherent bias. Specifically, they contend that the research implicitly suggests that the use of CAM is an appropriate area of study because it represents deviant behaviour or a rejection of standard or conventional medical care. This is despite the fact that some of what are termed CAM practices are increasingly being used by medical practitioners (Esmail, 2007), some practices classified as CAM are now covered under both public and private health care plans, and coverage for many forms of CAM has increased significantly in the last decade (Esmail, 2007).

The divide between CAM and biomedicine is perhaps best illustrated by the research into how many individuals using both CAM and biomedicine disclose or discuss their use of CAM with their physician. For example, Eisenberg et al. (1998) reported that only 38% of CAM users who also visited a physician discussed their use of CAM with their medical doctors. Similarly,

the Fraser Institute found that 53% of participants did not discuss their use of CAM with their physicians (Esmail, 2007). When provided with a list of possible reasons for not discussing CAM use with their physicians, 61% thought that it was not important for their physicians to know, 56% said that their physicians never asked about CAM therapies, 31% said they did not believe it concerned their physicians in any way, 11 % thought that their physicians would not understand or would disapprove, 10% thought that their physicians would discourage further use, and two percent thought that their physicians would refuse to continue to be their care providers (Esmail, 2007).

To date, the research is divided with respect to whether or not the decision to seek CAM is associated with dissatisfaction with or distrust of biomedical practices, or is rather a belief in the value and efficacy of alternative therapies— or if it is both factors acting in concert (Doel & Segrott, 2003). Astin (1998) reported that "the most influential or salient factor in people's decision to use alternative health care may be its perceived efficacy" (p. 1552). Kaptchuk and Eisenberg (1998) stated that "the attraction of alternative medicine is related to the power of its underlying shared belief and cultural assumptions" (p. 1061). However, Doel and Segrott (2003) found that these theories were not supported in their review of how CAM was framed within popular British magazines, and they reported that, for many, "the very act of deciding to use CAM is an act of resistance to dominant practices and a form of self-empowerment" (p. 137). MacNevin (2003) also cited "disenchantment" with biomedicine and its "invasive" and "mechanistic" (p. 285) techniques as contributing to the rise of CAM.

The suggestion that CAM use is linked to both dissatisfaction with biomedical practices and the attractiveness of alternative therapies is gaining ground. Doel and Segrott (2003) have argued that viewing biomedicine as ineffective and deficient may "function as a force for change

within the existing health care system" (Doel & Segrott, 2003, p. 135), but that dissatisfaction alone does not sufficiently explain the need for an alternative form of medicine (when attention could just as easily be directed towards promoting change within the biomedical system). It is also telling to note that the current research indicates that the majority of CAM users also utilize biomedical services. Wellman, Kelner, and Wigdor (2001) reported, "typical alternative pathways demonstrate a combination of medical and alternative use. Moreover, those who use alternatives use several kinds of therapies and often many therapists until they find the one that satisfies their need" (p.12). Indeed, a Statistics Canada report published in 2001 found that alternative health care users were more likely than non users to have a regular physician, to have had 10 or more visits with a physician in the past year, and to have recently had their blood pressure checked or to have seen a specialist (Millar, 2001). As was previously mentioned, certain diseases and chronic conditions are associated with higher use of CAM, but Millar (2001) revealed that even when chronic conditions were adjusted for, CAM users still accessed conventional health care services more frequently than those who did not use CAM.

2.3.3 CAM and Feminism

Astin's (1998) often cited paper on the reasons patients use alternative medicine reported that individuals who identified with feminist social movements (as well as environmentalism, spirituality, and personal growth psychology) were more likely to be CAM users. Biomedicine and the medical encounter have frequently been understood as one domain in which masculine hierarchies are reinforced through the unequal relationship between patient and practitioner. Similarly, leaders of the feminist health movement have argued that biomedicine ignores the subjective experience of women and privileges instead the expert knowledge of the practitioner

(Scott, 1998). While it is always dangerous to generalize CAM practices given the previously discussed diversity of therapies, compared to the biomedical encounter, the alternative nature of CAM practices does allow for a different type of practitioner/patient (or client) relationship thereby disrupting the associated power hegemonies and allowing for a more feminist approach to health practices (Luff & Thomas, 2000; Scott, 1998). One example of a method used to create a more equal distribution of power during a visit with a CAM practitioner is seen during the collection of patient histories. One practitioner in Scott's (1998) study of homeopathy as a feminist practice explained it in the following manner:

> [What doctors] are taught is always to be paring down to what we want to know. And in homeopathy, the absolutely essential thing is to hear what the patient wants to tell you (p.205).

The implication is that the narrative approach, more commonly employed by CAM practitioners, empowers the client and allows her some agency in the encounter as opposed to the reductionist and essentialist approach employed by physicians.

Additionally, independent of the research relating political or worldviews with CAM use, the literature indicates that women are more likely than men to use CAM (Eisenberg et al., 1998; Park, 2005). Unfortunately this has resulted in a conflation in the literature whereby the *feminist* nature of CAM (i.e. the opportunities that exists within the CAM encounter to recast the patient-practitioner relationship in more egalitarian terms) and the *feminine* nature of CAM practices (i.e. the use of candles and scented candles by some CAM practitioners or the marketing of CAM products to women as primary caregivers for their families) are confused and used interchangeably to explain the higher rates of CAM use by women.

2.3.4 CAM and Social Identities

Recently there has been a move to better understand the role that individuals' belief systems, values, and worldviews have on their use of CAM. A study by Pawluch et al. (2000) investigated how individuals with HIV (a population with particularly high rates of CAM utilization) understood their use of CAM therapies. They concluded that the attractiveness of CAM to HIV patients was multi-faceted and related to issues of maintaining health, enduring stress, coping with marginalization and oppression, and agency and control (Pawluch et al., 2000). The authors concluded that the use of CAM could only be understood within a context that also considered social identities such as (but not limited to) gender, sexuality, and ethno-cultural background (Pawluch et al., 2000). They further contended that the use of CAM by women could not be separated from their care-giving roles, reproductive concerns, and the historical relationship between women and Western medicine (Pawluch et al., 2000).

2.3.5 Athletes and CAM

While the relationsip between social identities and CAM is well-documented in the literature, some populations have been the focus of more attention than others. It is only very recently that athletic subcultures have been recognized as frequent users of CAM although according to Nichols and Harrigan (2006) that the findings are not totally unexpected:

> We are not surprised about the popularity of CAM amongst our subjects, as competitive athletes are typically highly motivated to do whatever it takes to hasten recovery from athletic injuries and illnesses that may hinder the ability to train and compete. (p. 235)

While their work did not directly elucidate the athletes' reasons for using CAM, Nichols and Harrigan (2006) drew attention to one of the key gaps in the scarce research on athletes and CAM. Namely, they acknowledged that the design of existing studies (including their own) have so far failed to differentiate between CAM use in response to injury and illness, and the possibility that athletes may be using CAM to prevent injury or even to enhance performance.

There is some suggestion, at least anecdotally, that the use of CAM is linked to a desire to enhance performance and push the limits of athletic abilities. White (1998) claimed that "athletes may be leading the charge in exploring some alternative treatments" (para. 4) and quoted a sport physician as saying:

> The population that we deal with is pushing the edge on a regular basis. They're a group that's very susceptible to ideas that are on the fringe, that are hearsay. When you're trying to optimize yourself, you don't want the guy next to you doing something that would give him an advantage. It can make them [the athletes] vulnerable to a lot of crazy suggestions. (White, 1998, para. 5)

Clearly, there is some concern that the popularity of CAM is in some ways comparable to previously seen trends in the use of steroids and other banned substances and techniques that were designed to improve performance but that ultimately posed huge risks to the long term health of athletes (in addition to challenging the supposed notion of a level playing field in high-performance sport).

At the same time, Pike (2005) described holistic health practices as a more active form of health care, and proposed that the engagement of the athlete in the treatment process was empowering to athletes who are accustomed to using and viewing their bodies as instruments. The assertion that the attraction of CAM is at least partially associated with its reputation as an

active form of health care is supported by Franzoi's (1995) theory of the body-as-object or the body-as-process. Franzoi's work proposes individuals think of and describe their bodies primarily in one of two ways: those that view their bodies as static components and evaluate their bodies by judging each part discretely based on appearance (e.g. liking the appearance of their legs but having insecurities about their arms or torso) versus those that judge their bodies based on what they are able to do with their bodies (e.g. how fast they can run or how flexible they are). Franzoi (1995) reported athletes are more likely than non-athletes to subscribe to the view of the body-as-process rather than body-as-object. That is to say that, athletes consider their bodies first and foremost in terms of physical performance and ability and value opportunities that allow them to use their bodies (Franzoi, 1995).

However, while the body-as-process theory is congruent with Pike's observation that the rowers sought out health care that required their active participation, it does not necessarily account for the discrepancy between the utilization of CAM by male and female athletes. In the same way that women in the general population are more likely than men to use CAM, Pike (2005) reported that 59% of female athletes in her study compared to only 10% of the male athletes had used CAM. The male athletes were more likely to choose traditional pathways and seek treatment from doctors and surgeons when injured whereas the female athletes were less conventional in their treatment choices. While Pike's study does not come to any conclusion with regards to the reasons for the observed differences between the genders, she does propose two theories for consideration. The first theory is that resources are unequally allocated to men's and women's sports and team practitioners were rarely available to the female athletes. Consequently the women were more likely than the men to seek practitioners on their own and as a result were exposed to various types of practitioners (Pike, 2005). The second theory proposed

by Pike (2005) is more closely related to the previous discussion on CAM's congruence with feminism. Namely, she suggested that CAM may be viewed by the female athletes as a more gender-appropriate form of treatment because it is perceived by many to empower and engage individuals more so than most biomedical treatments and, as such, may attract those who have suffered the most as the result of patriarchal structures in sport and biomedicine (Pike, 2005).

2.4 Athlete Behaviours and the Sportsnet

Pike's (2005) work also provided insights into the role that teammates and the rowing subculture had on the decisions that female athletes made regarding seeking treatment and disclosing information related to injuries and health status to coaches and teammates. Nixon (1994) described the network of significant others involved in the athlete's sporting subculture as the sportsnet. The sportsnet can include coaches, athletic trainers, teammates, administrative staff as well as sport specific support staff (e.g. bike mechanics or referees). The notion of the sportsnet is important when investigating the use of CAM in sport, as research has indicated that athletes resort to their sportsnets for medical advice (Nixon, 1994; Pike, 2005). Nixon (1994) reported that 75% of athletes turned to trainers for help or encouragement with sports injuries, while 62% turned to teammates and 56% went to their coaches. Nixon (1994) also proposed that athletes made decisions regarding injuries and medical treatment based on the relationships that they had within their sportsnet. Pike (2005) supported Nixon's conclusion, and added that the athletes in her study indicated that they took medical advice from coaches and teammates even when they knew the individual was not qualified to provide such information. Echoing Nixon's (1992) concern, Pike (2005) suggested that the information provided by the sportsnet is

compromised because individuals in the sportsnet often have a vested interest in the health and performance of the athlete.

2.5 Injury, Pain, and Risk in Sport

The role of the sportnets in socializing athletes to normalize pain, injury and risk in sport was often displaced in academic research by studies into the physiological aspects of sports injury. Early works were quick to observe the contradiction between the supposedly healthy nature of sports participation and the reality— that high level sport came hand in hand with an increased risk of injury (Roderick, 2006). While some early studies drew attention to the high degree of risk associated with professional sport and the ways in which athletes weighed the risk of injury (and permanent disability) against professional and/or athletic recognition, it was Howard Nixon's work that remains the most frequently cited in the field. Nixon, along with developing the previously discussed sportsnet theory, looked at the way in which sporting communities normalized pain and formed what he called a "culture of risk" (Nixon, 1992, p.129). In this culture of risk, a paradoxical situation occurs whereby the athlete refuses to give up trying to achieve performance goals even while the injury worsens and further reduces his or her chance of future athletic success (Nixon, 1992).

Young, White and McTeer (1994) made landmark contributions to the field when they interviewed male athletes in contact sports and analyzed the ways in which they referenced pain. Four different types of "injury talk" (p. 192) were identified: *hidden pain* where athletes denied pain, *disrespected pain* where they adopted an attitude of irreverence towards the pain, *unwelcome pain* meaning pain and injury that was ignored or mocked, and *depersonalized pain*

where athletes spoke of the injured part as if it were separate from themselves (Young et al., 1994).

The early work done by Nixon and Young and colleagues (as well as most of the work leading to that point) focused on the experiences of male athletes and usually those who participated in contact sports with high rates of acute and traumatic injuries such as rugby, soccer, and hockey. As such, the work was deeply concerned with notions of masculinity and male identities (Roderick, 2006). Young et al. (1994) explained the willingness of male athletes to risk injury and withstand pain at least in part because by doing so they lived up to gendered notions of what was expected of "real men" (p. 176). In this way, the male athletes affirmed both their masculine and athletic identities by playing through pain (Young et al., 1994).

Building on this research, Young and White (1995) made an important foray into the study of female athletes' attitudes towards injury and pain in sport. They interviewed elite Canadian female athletes in the sports of rugby, basketball, downhill skiing, football, and bodybuilding and concluded that the women displayed similar attitudes to those exhibited by the men— they normalized risk of injury and developed narratives to make sense of how their participation in sport compromised their health (Young & White, 1995). Theberge (1997) used the work of Young and White as the basis for her study of female ice hockey players and her findings largely supported their earlier work. Theberge (1997) observed that while the women's participation in the masculine sport of hockey challenged the previously uncontested relationship between aggressive sports and masculine identities, in other ways the women reproduced existing power structures in the sport. For example, while the women reported feelings of accomplishment and empowerment due to their participation in hockey, there was also pressure

to adopt tough attitudes and violent behaviours in an effort to gain recognition within the broader hockey subculture (Theberge, 1997).

2.6 CAM and Qualitative Research

While the study of subcultures remains largely the domain of sociological research and qualitative methods, at the present moment, there is a trend in CAM research towards more quantitative approaches. This shift towards an objective analysis of CAM practices is a response to the call for biological explanations for the practices (Adler, 1999). However, as reported by Adler (1999), CAM is a recent addition to scientific research and historically belongs to the realms of folk medicine and ethnomedicine rather than clinical trials. Without suggesting that CAM practitioners are a homogenous group, the emphasis that many CAM practices place on a more egalitarian client/practitioner relationship (when compared to the traditional doctor-patient relationship) is well documented (Adler , 1999), and this client/practitioner partnership has a "primacy of meanings, relationships, and processes shared by traditional qualitative inquiry" (Adler, 1999, p. 219-220). Specifically, in both the interview process and the CAM practitioner/client encounter, there is an attempt to achieve a more egalitarian relationship where the client is acknowledged as the expert with regards to his/her own experiences and bodies (Adler, 1999).

2.7 Symbolic Interactionism and CAM

Symbolic interactionism belongs to the theoretical school of interpretivism, which stresses that our "knowing about the social world" (p. 7) is a result of not only our experiences but also the psychological, cultural, and historical context of these experiences (Snape &

Spencer, 2003). Based on this premise, our attitudes and beliefs are shaped by our experiences and more specifically by our understanding and interpretation of our experiences. Symbolic interactionism as a theoretical framework was developed by Blumer (1969), and consists of three main premises. The first premise is that our behaviours and actions towards things (including people, objects, activities, or situations) are based on the meaning that these things have for us (Blumer, 1969). The second premise is that meanings arise from our social interactions with these things and with others (Blumer, 1969). Thirdly, symbolic interactionism proposes that meanings are modified through the interpretive process that we employ to understand our interactions (Blumer, 1969).

Blumer (1969) wrote that "to ignore the meaning of the things toward which people act is seen as falsifying the behaviour under study" (p. 3). For example, without a better understanding of what patients/clients are seeking from their encounters with various health practitioners we cannot understand if the increased use of CAM is the result of growing dissatisfaction with biomedicine or with the appeal of a holistic worldview that is associated with CAM (Doel & Segrott, 2003). Symbolic interactionism allows for an investigation into the myriad of factors related to health behaviours including health beliefs, social networks, access to care, and symptoms (Barrett et al., 2003).

Additionally, Denzin and Lincoln (2005) described the qualitative research process as blending of the researcher's own observations with the life stories of a "real subject, or real individual, who is present in the world and able, in some form, to report on his or her experiences" (p. 21). The focus in qualitative research on methods that allow the participant to guide the direction of the interview and focus on issues they find relevant to the research topic is congruent with the theory of symbolic interactionism. While a more detailed description of the

methods employed in this project is included in the following chapter, it is useful to note at this point that the self-narrative research technique has proven useful in helping individuals make sense of injury or illness and their experiences (Brock & Kleiber, 1994; Scott, 1998) and semi-structured interviews allows participants to direct the discussion towards issues they consider to be relevant to the research topic but that may have been overlooked by the researcher.

2.8 Hegemonic Masculinity and Power Relations in Sport

The second and complementary theoretical framework for this project is the concept of hegemonic masculinities as proposed by Carrigan, Connell, and Lee (1985). Carrigan et al. presented a model where multiple power hierarchies and relations existed simultaneously. They drew on Gramsci's work to describe cultural situations as places where a hegemonic masculinity, that is to say the most normative and privileged masculine identity, existed but was always situated in relation to other subordinate and pluralistic masculinities and femininities (which were, of course, also hierarchically positioned in relation to each other) (Connell & Messerschmidt, 2005). The concept of hegemonic masculinities has proven useful in the exploration of interpersonal relations in the fields of criminology, organizational behavioural studies, and educational studies. As an example, it has been employed to investigate both the hierarchies that exist among teachers and those among students on the playground (Connell & Messerschmidt, 2005).

The theory of hegemonic masculinities has also been applied extensively in sports sociology to explore power in sports as something that is relational and contested on ongoing basis by participants (Pringle, 2005). The previously mentioned works by Young et al., as well as many other papers by such acclaimed sports researchers as Messner, Sabo and Sparkes

(Messner 1990; Jansen & Sabo, 1994; Sparkes & Smith, 2007) have all used the theory of hegemonic masculinity to explore human interactions in sporting subcultures. The strength of using the concept of hegemonic masculinity in the field of sport studies is, as stated by Pringle (2005), its potential to "[acknowledge] that some sportsmen [sic] enjoy greater ability to exercise power than others and that sporting practices contribute to inequitable power relations between males and females" (p.263). In my project, the concept of hegemonic masculinities was used to explore how access to services and practitioners was negotiated, how the status of the athletes within their sport systems restricted or enabled their access, the role authority figures played in determining the services available to athletes, and how power relations played out in the treatments themselves.

2.9 Application to Project

This project employed a symbolic interactionist approach to more fully investigate how the athletes' experiences in the sports systems, their relations both within and without the sportsnet, and their attitudes regarding biomedicine had factored into their use of CAM while training as high-performance athletes. Hegemonic masculinities theory compliments the interpretive framework and allowed for an exploration into how the hierarchal nature of both the sport and medical systems influenced the female athletes' use of services with specific attention paid to issues of access, funding, and the legitimization of certain health practices over others. The congruency between qualitative methods and CAM practices in addition to the potential provided by hegemonic theory to understand how use of CAM is related to power structures within sport allowed this project to provide detailed and unique perspectives the lives of female

athletes. It provided a previously unexplored bridge between the literature related to the general rise in the popularity of alternative health practices and investigations into elite sport subcultures.

CHAPTER 3: Methodology

This project challenged and delineated the bounds of current CAM research by applying existing CAM theory to a currently under-represented population, namely, high-performance female athletes. It employed qualitative research methods to examine the behaviours and attitudes of these women with regards to CAM. Specifically, I investigated how the women's use of CAM had (or had not) changed over the course of their athletic careers, if and how the sportsnet had influenced their use of CAM, and how CAM use was negotiated within the existing structures of the Canadian sport system. In the following section, I describe the rationale behind the selection of my study sample and the methods employed. In addition, I will discuss the limitations and ethical concerns associated with the conducting of this research project.

3.1 Sample and Rationale

The data for this study were collected from interviews with 12 female members of Canadian national teams in the sports of cross-country skiing, cycling, kayak, rowing, and speed skating. I used the system of carding to determine and define national team status. The Athlete Assistance Program (AAP) is a program directed by Sport Canada that provides national team athletes with monthly stipends or *cards*, which are renewed on an annual basis. The specific selection process and requirements for cards are determined by the athlete's respective national sport governing body. The AAP program was developed to provide funding to Canadian athletes who are ranked among the top 16 internationally in their event or who have the greatest potential of achieving this level of performance (Heritage Canada, n.d.). The stated objective of the AAP program is to permit athletes to train and compete year-round and further their athletic goals

(Heritage Canada, n.d.). Carding can be awarded at several different levels and while each sport organization has some discretion in how the funds are allocated and awarded, the list published by Sport Canada in 2008 indicated that funding ranged from $2,700 annually to $18,000 (Heritage Canada, n.d.) depending on past athletic performances, years on the team, and expected future accomplishments. The athletes who participated in my study were carded at either a Senior (SR) level or a Development (D) level with stipends of either $10,900 or $18,000 annually. In addition to the stipend, carded athletes are eligible for certain services and programs that vary by region and by sport but typically include access to Canadian Sport Centres, career and academic guidance, and health insurance[2]. Carded athletes are required to sign contracts with their national sport organization that contain general conditions, such as abiding by Sport Canada's anti-doping policy, as well as sport specific conditions, such as residing near a training centre or attending training camps.

The decision to recruit national team members was based on the two proposed theories in the existing literature regarding the reasons athletes have for using CAM— namely, that athletes are willing to try anything that might provide them with a competitive edge (White, 1998) or that athletes will try anything that might minimize the time away from training due to injury and facilitate their return to play (Nichols & Harrigan, 2006). Because national team members have so much more invested into their sport, it is further assumed that they will have adopted attitudes related to athletic subcultures to a greater degree than athletes competing at other levels in sport. It is supposed that, compared to other athletes, national team members face increased pressure to train and compete even when injured and that the consequences of not training and competing (in

[2] The most popular insurance policy provided to carded athletes is the Canadian Athlete Insurance Program (CAIP) but some national sports organizations use alternative plans.

terms of lost physical abilities, financial loss, challenges to their athletic identities, and social status within the sports community) are greater.

The sample size of one dozen athletes was based on previously conducted projects in athletic populations that employed a similar research design (see Griffin, 2005; Pike, 2005; Young & White, 1995) and which reported that strong themes emerged in groups of this size that were sufficiently homogenous in nature. It is unlikely that the theory of data saturation as proposed by Glaser and Strauss (1967) could ever be completely achieved given the scope of the topic and unstructured format of the interviews. However, other studies of this nature, such as the previously referenced work by Griffin (2005), Pike (2005), and Young and White (1995), reported that after in-depth interviews with 12 participants there were observable trends in the data and that further interviews rarely lead to the development of new categories or novel insights related to the research topic. My decision to interview 12 athletes also took into account the resources available to me as a Master's student and the necessity of completing this study within the time allocated.

The sports included in this project were selected for several reasons. First of all, the relatively low numbers of women competing at an elite level of sport in Canada made it impractical to recruit from a single sport. Even though British Columbia is home to a high proportion of Canada's top athletes, many of the national teams train in warmer climes or spend a significant portion of their season competing at World Cups or other events in Europe. Consequently, the numbers of athletes in the province at any given time is unknown and constantly in flux.

Secondly, my choice of sports reflected my broader research objectives. As previously discussed, I wanted to select sports that were typically overlooked in the literature concerning

sport injuries. Additionally, in order to consider Nichols and Harrigan's (2006) suggestion that CAM use was related to performance enhancement, I needed athletes with relatively long athletic careers in sports that were not normally associated with traumatic and career ending accidents. In this way, I hoped to explore how injuries or *issues* (as will be discussed later) were managed over long periods of time. Finally, given the unstructured nature of the interviews, I made the decision to limit the sample to athletes over the age of 18 in order to simplify the ethical review process.

Taking all of the above mentioned factors into consideration, I approached Pacific Sport, the Canadian Sport Centre in British Columbia, and asked them to assist in the recruiting process by distributing letters of contact introducing the project as well as information and consent forms (please see Appendix B) to carded female athletes in non-contact sports who were registered at their training facilities and who were over the age of 18. From this mail-out, four athletes were recruited and in each case these athletes forwarded the information to other teammates. Although some of the teammates they contacted had already received the mail-out, the second contact by a teammate resulted in the recruitment of two additional participants. The same package in E-mail format was also sent to my friends, former teammates, and co-workers who were active in the sports community and they were asked to forward the information to any female national team members with whom they were in contact. These E-mails helped to recruit an additional three athletes who did not live in British Columbia and who were not registered with Pacific Sport, and who subsequently assisted with the recruitment of the final three participants.

In addition to focussing on non-contact sports, I endeavoured to recruit a sample that was diverse in terms of ethno-cultural background, socio-economic status, age, and that included both

able-bodied and paralympic athletes. The objective was to find participants that enabled me to broaden the categories of analysis and verify the limits of such categories by testing them against outlying cases (Glaser & Strauss, 1967). However, my ability to recruit a diverse sample was highly dependent on the diversity of Canada's national teams. Since not all women have equal opportunities to participate in sport, and making a national team requires years of training, substantial financial resources, and social networks that support the athlete's goals, it is not surprising that there is limited diversity among the members of Canada's national teams. Nevertheless, in the end I was satisfied that the women I interviewed represented the broadest sample possible given the circumstances of sport in Canada.

Table 1 – Sample Characteristics	n=12
Age distribution	n
20-24	4
25-29	6
30-32	2
Marital Status	n
Currently Married/Common-Law	2
Never Married	10
Education	n
High School	2
Some College/University	5
College/University Degree	4
Graduate Degree	1
Income	n
Under $10,000	4
$10-20,000	5
$20-30,000	1
$30-40,000	1
$70, 000+	1
Sport	n
Canoe/Kayak	1
Cross Country Skiing	2
Cycling (Road)	2
Rowing	4
Speed Skating (Long Track)	3
Years on National Team	n
2-4 years	7
5-7 years	2
8-9 years	2

The women in the sample ranged from age 20 to age 32 (average age of 26) and had spent between two and 16 years on national teams. All of the women self-identified as either

Caucasian or of northern European descent. Eleven of the athletes were able-bodied and one athlete participated in the paralympic system. While two of the women indicated that they were in significant relationships (either marriage or common-law partnership), the remaining 10 women stated that they were single. Nine of the athletes had some university level education (although in most cases their degrees were on hold or taking more than the standard four years to complete), one was currently pursuing graduate studies and two had completed high school. The women's incomes varied from under $10,000 a year to over $70,000 a year with two-thirds of the athletes reporting their income to be less than $20,000 a year (although in the course of the interviews some athletes mentioned that were receiving additional financial support from parents that may or may not have been captured in the biographical data form).

Injury status was not a criterion for participation in this project. Rather, the design of this project was meant to capture the myriad ways in which athletes were using CAM, potentially including the enhancement or improvement of performance. Limiting the project to injured athletes risked overlooking the ways in which athletes were employing CAM therapies on a daily and ongoing basis throughout their athletic careers.

3.2 Sampling Challenges

Even though I was aware my potential pool of athletes was limited, I was still surprised (and somewhat disappointed) when Pacific Sport reported that only 27 of their registered athletes met my sampling criteria and had been sent information packages during the initial mail-out (a few more packages were sent in January when Pacific Sport updated their registration lists). One of the reasons for the low numbers was that the sports that met my criteria typically had very small teams. For example, road cycling sends three women to the Olympics and the total

number of carded athletes reflects this. Additionally, while all carded athletes have the option of registering at a Canadian Sport Centre in order to access services such as gyms, pools, physiological testing, massage, and physiotherapy, not all athletes do so (or they do not update their mailing addresses). Some of the reasons athletes may not register include: They do not intend to access the services, they do not live near the facilities, or they have access to the same type of services at other centres. It soon became apparent to me that the mail-outs would not be sufficient to my needs and I would have to focus on snowball methods and personal contacts as previously described.

Although I did eventually obtain my targeted sample size (12 athletes), it took five months rather than the originally scheduled two months. I was most successful in recruiting when I was able to make a personal contact in the sport by way of a former teammate or training partner and then asked him or her to forward the recruitment packages directly to their friends and teammates in the sport. The mail-outs sent through Pacific Sport yielded some responses but even then, the athletes that replied to the letters were people with whom I had another connection— for example, they saw my name on the letter and contacted me because they recognized me as a former member of Team Saskatchewan.

While the athletes I contacted proved to be a great resource— both in terms of volunteering their own time but also in terms of recruiting their teammates— my contacts with coaches and administrators were less productive. Indeed, only one of the athletes that I interviewed indicated that she had received the information package via this avenue. Rather, many coaches and administrators expressed concern in either my E-mail or face-to-face interactions with them about the time demands associated with participation in the study. Some of these individuals also indicated that they not be willing to forward the information on to the

athletes as a result of their concerns about the time demands that participation in the study would place on participants.

3.3 Protocol and Rationale

The athletes who agreed to participate in the project were asked to commit to two interviews each lasting approximately one hour. The second interview was scheduled four to eight weeks after the first interview in order to allow time for transcription and preliminary analysis of the first interview. The timing of the second interview was often dependent on the athlete's competition/training schedule as many athletes were competing overseas or in training camps during the period of data collection. The interview schedules (please see Appendix A) asked participants to describe their history in their respective sports, what practitioners they currently used or had used in the past, when and why they had started using these practitioners, who or what had influenced their decisions to see a practitioner, and the role they perceived CAM to play in sport. The interview schedules were used as guides only and the actual content of the interviews was largely determined by the athletes' responses.

The interviews were conducted at a location of the athlete's choosing, with the majority taking place in coffee shops (although two were conducted in the participants' home and two were conducted at training facilities). Four of the athletes were living and training in Alberta so I used a graduate student research grant to travel to Canmore and Calgary to conduct the first set of interviews. One athlete was interviewed in Montreal, Canada, while I was attending an academic conference. For all five of these out-of-province athletes, the second interview was conducted by telephone.

Before starting the first interview, the athletes were asked to read and sign the information and consent forms. They also filled out a biographical data sheet (please see Appendix C). At the second interview, the participants were given a list of CAM practices and were asked to identify all of the treatments they had tried using an additional form (please see Appendix D). Used as a tool to ensure that each athlete identified all of the CAM treatments she had previously used, the form was also employed as a prompt for discussion.

The multiple interview format was selected in order to encourage ongoing self-reflection on the part of the athletes (Ryen, 2004). In her own work, Hurd Clarke (2003) reported that:

> Interviewing the women two and three times also fostered rapport, as it gave the women a chance to talk about a wide variety of issues and afforded them an opportunity to amend, return to, or elaborate on previously disclosed information. (p. 732)

Having an opportunity to interview the women a second time was particularly appropriate for this project since existing research on CAM is limited and new and unforeseen themes were likely to emerge during the course of the project. The opportunity to question participants regarding new themes that other athletes raised during interviews is consistent with the principles of grounded theory (Glaser & Strauss, 1967) and theory generation, as it encourages the discovery of previously unexplored themes. The double interview format also permitted me, as a new researcher, time to review transcripts and modify my interview techniques, consider the data, and familiarize myself with literature I had not previously considered.

The decision to use a less structured interview format and to ask open-ended questions was based on similar rationale. In addition to theory generation, open-ended interviewing techniques minimize the researcher's opportunity to impose her own assumptions on the

participants' accounts (Britten, 2006). Although a series of predetermined topics for discussion was developed prior to conducting any interviews, the research was meant to be inductive in nature and grounded in the data, and, therefore, was designed to permit new topics and categories of analysis to emerge.

The interview process began with the soliciting of life history narratives in order to create a rapport with the participant, and also because allowing participants to start the interview by situating themselves in a social-historical context has proven to be an effective method in engaging interviewees and easing into what may be more intimate or difficult topic matters (Hurd Clarke, 2003). The self-narrative has also been identified as a useful method for "extract[ing] meaning from experience rather than to depict the experience exactly as it was lived" (Bochner, 2000, p. 270). Bochner (2000) has described life narratives as "not so much academic as they are existential, reflecting a desire to grasp or seize the possibilities of meaning, which is what gives life its imaginative and poetic qualities" (p. 270). Rubin and Rubin (1995) contend that the use of open-ended questions allows the interviewee to present his/her own ideas without imposing the researcher's predetermined themes, and yet sufficiently limits the scope of the interview to the topic of interest. In this project, the interview schedule for this project was organized in a way that allowed enough freedom in the interview format to pursue new directions and themes that the interviewees introduced, while still ensuring that the key themes were adequately covered. The second interview utilized follow-up and probe questions to elaborate on previously mentioned themes that "lack[ed] sufficient detail, depth, or clarity" (Rubin & Rubin, 1995, p.145).

3.4 Data Analysis

Grounded theory (Glaser & Strauss, 1967), in addition to guiding the structure of the interviews, was also incorporated into the data analysis process. The objective of grounded theory is "the achievement of a complex theory that corresponds closely to the data" (Glaser & Strauss, 1967, p. 113), through the use of a "constant comparative method" (p. 102). During this project, the interviews, transcriptions, and analysis were done in a concurrent fashion so that each process interacted with and directed the others as is proposed by Glaser & Strauss (1976). More specifically, the first stage of data analysis occurred immediately after I conducted each interview and started transcribing while making notes regarding potential follow-up questions for the second interview or for interviews with other participants. My supervisor, Dr. Laura Hurd Clarke, also reviewed several of the transcripts and provided a critique of my interview style and suggestions for future directions regarding the questions.

More formally, the analysis of the data can be described in three parts: data management, coding, and in-depth analysis (Miles & Huberman, 1994). Data management consisted of each interview being transcribed verbatim. I was very fortunate to have an undergrad seeking research experience volunteer to assist in the transcribing process. As well as transcribing some of interviews, the undergraduate student also reviewed and proof-read the transcripts done by myself. After being reviewed, each interview was loaded into NVivo, a software program used to manage and assess large quantities of qualitative data.

Coding began with the reading and rereading of interview transcripts and the creation of a codebook. During the reading process, I identified meaningful categories or recurrent themes and these, in addition to some codes directly related to the research objectives and questions, formed the basis of the codebook. With the assistance of my supervisor, I developed the

following 11 broad analytic groupings: the role of funding and health coverage, accessing services, reasons for treatments, the role of practitioners, desired qualities in practitioners, communicating with practitioners, attitudes towards biomedicine, attitudes towards CAM, talking about the body, anticipated future use of CAM and other services, and theorizing on the future of CAM and sport. Using the process described by Strauss & Corbin (1998), these 11 codes were further reduced into sub or axial codes until each analytical grouping contained between one and six sub-codes. Using the NVivo program, segments of interviews were selected, assigned to a code, and thereby reduced into meaningful categories of analysis (Miles & Huberman, 1994). The formal analysis of the data consisted of reviewing the node reports from each of the codes and sub-codes and mapping out the relationships between them.

3.5 Reflexivity

In order to more fully understand the end product of this master's project, it is necessary for me to situate myself in relation to the topic and in relation to the population that was interviewed. As a White, educated, and middle-class individual who had had opportunities to pursue athletic and leisure opportunities, I was very similar to my sample participants in terms of my own social position. Additionally, my status as a highly competitive, varsity lightweight rower who competes nationally and internationally, in addition to my previous experiences as a competitive cross country skier at a national level, meant that I had some shared experiences with the women. That said, all of the women involved in this project were Canada's top athletes who were at the height of their careers. In short, their athletic achievements had far surpassed my own— a fact I remained cognisant of throughout the entire process.

At the same time, I was closely acquainted with two of the participants prior to the start of the project (they were at one time teammates of mine) and I had met several of the other women prior to interviewing them. The large majority of the participants recognized me (and I them) because we had trained in the same gym or attended the same major multi-sport events (e.g. the Jeux du Canada Games). It was because of these existing relationships within the sporting community that I was able to recruit participants for this project.

In addition to helping me to recruit participants, my experiences as an athlete proved vital in being able to establish a rapport with the women. For example, when trying to set a time for an interview, I often suggested that I would wait for them at a coffee shop near their training facility and that they just come whenever practice ended. Many of them showed up in gym clothes and ate their post workout snack while we were talking, and commented that they often experienced difficulties making appointments because of last minute changes to their training schedules and said that they appreciated that I understood their schedules. Similarly, my ability to use and understand sport jargon or acronyms that are popular in sport organizations helped to establish my credibility. Finally, while I avoided making comments that would identify my personal attitudes towards specific Sport Canada initiatives or, for example, the state of sport funding in Canada, some of the women only really started to open up once they realized that I not working for an organization and was not likely to be offended by their criticisms of programs or of personnel within the system.

However, while my experiences may have assisted in creating a rapport with the athletes, in other ways they proved a hindrance. The main concern was my tendency to take for granted some of what the women said because it closely reflected my own opinions or attitudes (based on my own socialization within the sportsnet). In some cases I did not follow up as I should have

because I assumed I understood what the athlete meant. In other situations the athletes themselves cut their responses short because they assumed that as an athlete I would already know what they intended to say or was familiar with the issue. Three strategies were adopted to address these concerns. The first strategy was the soliciting of feedback from my supervisor on the content of the interviews and her analysis of some of my initial transcripts. This occurred in conjunction with the second strategy, which involved the previously discussed reading of transcripts before the second interview in order to develop follow up and probe questions. The final strategy was to respond to the athletes' comments in a way that indicated that although I was somewhat familiar with the phenomenon, I was primarily interested in getting their thoughts and opinions.

My age and student status also proved to be an asset during the interview process. As a 26 year-old, I was the same age as the average age of my sample. When they first contacted me, some of the younger athletes commented that they did not feel they had a lot to contribute and that their teammates would be better suited to participating in the project. Once they realized that I was not much older than they were and that I was still a university student, they seemed more comfortable.

The final point to consider is my own attitudes towards and experiences of CAM and how they served informed my work. When starting this project I was largely unfamiliar with CAM practices and had had very little personal experience with the various treatments. With the exception of a few sport massages several years ago, I had not used any CAM services. I was of the opinion that most CAM treatments were of little value to athletes except as a type of placebo— that is to say that their value lay mainly in the practitioners' abilities to convince athletes of the necessity of their respective treatments for the healing process or sport

performance. Aware that my attitude towards CAM would limit my ability to hear what the participants were saying and at my supervisor's urging, I made a commitment to try several therapies over the course of the project. Thus, I tried massage therapy, craniosacral therapy, and visceral manipulation treatments. In conjunction with the stories that I heard from the athletes, my own experiences with massage therapy and craniosacral therapy modified my attitudes towards CAM. While I remain wary of the aggressive marketing of certain CAM practices to athletes and maintain that it is important to adopt a critical view of the ways in which these practices and practitioners are adopted into sportsnets, I am now of the opinion that these practices and practitioners have something of value to offer to athletes, even if that value is not easily understood, reduced, or articulated. I entered the research process curious and open to hearing what CAM offered the participants. At this final point of the project I have come to realize that ultimately it is not my position (or anyone else's) to decide what practices are of value but that we must first consider "whatever works best for the athlete."

CHAPTER 4: Findings

Similar to the literature review, this section begins with an overview of how the athletes in the project defined CAM. Next, I examine the situations that lead them to seek treatment and what type of treatment they decided upon. Since continued use of CAM is not possible without the financial wherewithal or the ability to access services, the next section illustrates the role of carding, the cost of CAM, and other forms of social capital within the sportsnet (e.g. athletic successes and years on the team) that factor into the athletes' use of health services. The relationship with specific practitioners and the role practitioners play in an athlete's career are also presented along with observations related to how the athlete found the ideal practitioner and the role of referrals from within and without the sportsnet are explored. Of central importance to this study was an exploration of why athletes use CAM on an ongoing basis and how CAM figured into their athletic careers, if at all. Accordingly the findings conclude with an elucidation of the three themes that emerged related to the purpose of CAM: How the athletes defined injuries, how the use of CAM was part of a strategy to prevent the body from "breaking," and how the use of CAM enabled them to deal with stress.

4.1 What is CAM?

4.1.1 Athletes Classify and Define Practitioners and Treatments

When asked to define the term 'Complementary and Alternative Medicine,' it became apparent that although the athletes were largely unfamiliar with the term, they were well versed in the practices and practitioners commonly associated with CAM. Indeed, four distinct responses to the question "what is CAM?" emerged. The first type of response consisted of

defining CAM by comparing and contrasting it with biomedicine, which the women referred to variously as "Western medicine," "allopathic medicine," and/or the "traditional medical system in our society." Half of the athletes described CAM as "outside the norm," "not Western medicine," and "not from North America" as exemplified by Nicole[3] who was not only able to define CAM but who was also able to classify different practitioners:

> Alternative medicine to me is stuff that most people would consider to be outside of the traditional medical system. To me, the traditional one is like your hospital, your GP who has gone to a traditional medical school— I think physio would be in there but I think probably massage would be complementary. Nutritionist would be traditional. Outside of that would be stuff like naturopaths and acupuncture where you know it's not considered to be traditional medical practice in our society.

Similary, Claire defined CAM by giving examples of practices she considered to be alternative:

> The first things that pop into my head were things like Traditional Chinese Medicine. Or I was wondering if we were going to talk about naturopathy medicine. I definitely thought about needles... Just more of that. Like just things that maybe are outside the norms but now have become mainstream.

The second group of responses included a further description of the perceived nature of CAM. Two of the athletes stated that in order for a practice to be considered CAM, it needed to include a "holistic" element. For example, Brie stated:

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[3] Throughout the findings and discussion portions of my thesis, I will refer to the participants using pseudonyms. I have taken several steps to ensure the anonymity of the participants especially considering the fact that I recruited from a very small, closely knit sport community. It is for this reason that I have not included a table that links the pseudonyms, sports, ages, or years on the national team for each subject choosing instead to use tables that show the range and distribution in ages, years on team, and sport.

> I would say alternative medicine would not include the three that I talked about which were chiro, massage, and physio. I would define alternative as acupuncture and more like [a] holistic kind of approach... I would say holistic would be kind of... not necessarily looking at where the pain is but looking at the entire package. Like your body as a whole as opposed to just 'This is where it hurts.'

Hilary suggested that it was the attitude and perspective of the practitioner that made a practice alternative and when asked to classify practitioners as either allopathic or alternative explained:

> I think that really depends on their outlook as a practitioner. So yeah, I think I could look at a physio and say that they are an alternative practitioner because they actually listen to their patients. And they're listening to all the symptoms... I guess maybe that's more my definition of holistic but I kind of define it all together. Maybe I stereotype the standard practitioner as somebody who listens to symptoms and prescribes the treatment or gives the treatment and somebody who is alternative is alternative to that and listens holistically.

Three athletes were less familiar with the term CAM and did not compare it to biomedicine but still classified practitioners in order to illustrate what they perceived to be the differences between practices. A key factor in their definition was how popular or "mainstream" the practices were. Thus, Jody asserted: "Alternative. I don't know... I'm sure there's tons... I think of it as something newer. I guess originally Chinese Medicine would have been alternative, right? It's becoming more mainstream now." Similarly, Kathy stated:

> I guess it makes me think of naturopaths and acupuncture and things kind of like that... I guess I think of chiro and massage more as mainstream but I don't know if it is... Maybe it's because we've worked with these people for a long time.

Finally, several of the participants provided a literal consideration of the term "complementary" in their definitions of CAM. These athletes were unfamiliar with the term

CAM and so deduced that this would include anything they thought might "complement" their training. For example, Audra gave the following response:

> I just think that means anything above and beyond the normal training. I think of normal training as how I start out— you have a coach, you go ride your bike. That's it. Like you sleep, you eat, you ride your bike. And then I think anything above and beyond that would be like going to a naturopath, getting that nutritional advice, going to physio, finding out what you can fix about your body to make yourself go faster. It's all about getting that extra stuff that can make a huge difference... like psychology or massage.

4.1.2 What is Meant by Holistic?

As is seen in the above quotes, the term holistic was used by a few of the athletes to define CAM. As stated in the literature review, holism is often associated (rightly or wrongly) with CAM practices and while holism is another term lacking a consensual definition it is most commonly described as a worldview that encompasses mind, body, and spirit (Barrett et al., 2003). While interviewing the participants I was cautious not to use the word holistic to describe CAM since I wanted to be open to the possibility that this was not how everyone views CAM. However, when five of the participants used the words holistic or holism, I took the opportunity to ask them to clarify their definition of the term. Their responses were fairly unanimous and consistent with existing definitions— they described holistic as an approach that was "balanced" (Jody), that "addresses everything" (Kathy), and one that looks at "the entire package" (Brie).

When asked to elaborate and describe what was meant by "everything" and the "entire package," none of the participants mentioned emotional or spiritual components choosing instead to focus on different physical factors such as nutrition and sleep. For example, Brie responded in the following manner:

> I would say holistic would be kind of approaching a diagnosis from not necessarily looking at where the pain is but looking at the entire package… Like your body as a whole as opposed to just 'This is where it hurts, what's going on in this area?'

Hilary had a similar description but included a comparison to allopathic medicine in her response when she said:

> [Holistic is] having a medical practitioner that can look at you as a whole. They're not looking at your symptoms. They're looking at where your symptoms came from… Drives me nuts nine times out of ten going to allopathic doctors who just kind of ask for your symptoms and then give you a prescription… as opposed to looking at the body as a whole.

The only athlete to give a definition of holistic that included anything other than physical elements was Kathy and even then she focused mainly on the body:

> It's addressing everything… I guess trying to increase your performance… Yeah, I guess the way I would look at it is trying to attack everything at once. Like saying that if I have a back problem… I don't necessarily just need something done to my back. I need maybe different kinds of treatments on all different parts on my body. Even mentally I might need something. I might need different nutrition. I might need needling… I might need massage… So I think kind of looking at each injury or each thing from a whole bunch of different perspectives… Yeah, I would say holistic means trying to look at every angle.

4.2 Choosing CAM: What are Athletes Using?

Given that not all of the participants defined CAM in the same manner or classified practices using the same criteria, the questions in the interview were designed in a way that

encouraged the participants to include all practitioners that they had used or were using.[4] Table 2 illustrates the range of CAM practices engaged in by the athletes as well as the number of athletes that had tried each form of therapy and the number of athletes that were using them at the time of the interviews. All 12 of the participants were using some form of CAM[5] at the time of the interviews. When asked how many forms of CAM they had tried— both those they had tried and continued to use, and those they had tried and discontinued— the responses ranged from three types of CAM to 12 types of CAM.

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[4] As seen in the interviews guides (Appendix A), the athletes were first asked 'what types of health practitioners are you using?' and only later asked 'how would you define Complementary and Alternative Medicine?' The intent of this structure was to ensure valuable information was not omitted because the athletes did not all classify practitioners in the same way. For example, an athlete that did not consider massage to be alternative may not have included a massage therapist in their response if asked 'what CAM practitioners are you using?' It also meant that physiotherapists and physicians were usually included in the athletes' responses. Throughout the document the use of and experiences with these biomedical practitioners will be discussed and will provide a means of contrasting and comparing the athletes attitudes towards CAM to their attitudes towards biomedicine.

[5] When asked what practices they used, the athletes were given a list of therapies to select from and the option of writing in additional therapies (Appendix D). Given the highly contentious and complex process of labeling CAM practices (especially given the ways in which individual practitioners borrow from other traditions or combine a therapies), I chose to accept the classifications and definitions provided by the participants and not to try and classify the treatments they were using myself.

Table 2 – Use of Practitioner Delivered CAM	n = 12
Number of CAM Treatments Tried	n
Two	3
Four	4
Five	3
Seven	1
Twelve	2
Treatments Tried	n
Acupuncture	12
Aromatherapy	1
Ayurvedic Medicine	2
Chiropractic	10
Craniosacral Therapy	4
Homeopathy	3
Hypnosis	2
Massage	12
Meditation	4
Naturopathy	8
Osteopathy	3
Qi Gong	1
Reflexology	3
Reiki	2
Traditional Chinese Medicine	2
Treatments Regularly Used at Time of Interviews	n
Acupuncture	5
Chiropractic	6
Craniosacral Therapy	4
Massage	11
Naturopathy	8
Osteopathy	3
Traditional Chinese Medicine	1

At the time of the interviews, 11 athletes were using massage and their use ranged from once a week to once a month. Additionally, these 11 participants reported that they received more frequent massages while attending competitions or training camps when their use increased

to between twice a week to twice a day (although the massages were usually much shorter in duration). Acupuncture[6] treatments were regularly received by five of the athletes and used "as needed" by two of the athletes. Half of the participants reported that they saw a chiropractor although the frequency of their visits varied depending on which phase of the training or competition cycle they were in and whether or not they had any injuries or conditions that necessitated additional visits. For these six athletes, the number of treatments ranged from once a month to twice a week. Naturopathy was the fourth most popular form of CAM with eight of the women stating that they had worked with a naturopathic practitioner in the recent past. Compared to other CAM practices, the athletes did not report regular appointments with a naturopath. Rather, after a few visits, the practitioner had provided them with individualized programs (usually nutritional guidelines but occasionally including other elements) that the athletes continued to follow. Table 3 summarizes the frequency of the visits as reported by the participants.

Table 3 – Frequency of Treatments During Training Phases

Type of Treatment	Frequency of Treatments (range)
Massage	1 to 4 treatments per month
Acupuncture	As needed
Chiropractic	1 to 8 treatments per month
Naturopathy	2 – 3 treatments total
Physiotherapy	2 – 4 treatments per month

[6] Although an attempt was made to differentiate between different forms of acupuncture (for example traditional Chinese acupuncture, dry needling, or intramuscular stimulation), in many cases the athletes were not able to categorize the type of treatment they had received or suspected the practitioner combined forms of acupuncture — as a result the total reflects all forms of needle therapies used.

In addition to enumerating the types of CAM practitioners used by the athletes, the interviews also explored different types of treatments or techniques employed by the practitioners. While this list is far from exhaustive (in many cases the athletes were not able to name or identify specific techniques), many of the athletes reported having received active release treatments (ART), Graston Therapy®, needling, intramuscular stimulation (IMS), cupping, Bowen Treatment, and myofascial release treatments from physicians, physiotherapists, chiropractors, osteopaths, and/or athletic trainers.

At the same time, 11 of the athletes reported that they made regular visits to a physiotherapist. Five of these individuals saw a physiotherapist as needed, while six received treatments once a week or once every two weeks. Finally, all of the participants reported that they accessed the services of a physician periodically throughout the season.

4.3 Why CAM? Athletes Describe the Reasons for their First Use of CAM Practices

One key finding in the analysis of the data was that there were four situations or conditions that initially lead the athletes to try a form of treatment within the scope of what they defined as being CAM. Specifically, the athletes identified the following four reasons: (1) a new injury or condition required treatment; (2) an injury or condition that was not improving with the existing treatment; (3) an awareness of the popularity of a specific form of treatment with their teammates in conjunction with the treatment being made available to them; and (4) curiosity about a new type of therapy and an openness to experiment with something that had the potential to improve their performance.

4.3.1 Treating a New Injury

When faced with a new athletic injury, it was physiotherapy that the athletes most often turned to. While physiotherapy is more commonly understood as a biomedical practice and part of the medical model, it has been included in this work because most of the athletes reported that many of the physiotherapists they worked with employed various CAM techniques (such as acupuncture) or were the athletes' primary source of referrals to CAM practitioners. As such, in order to fully understand how the participants utilized CAM, it is necessary to include some discussion of physiotherapy.

The use of physiotherapy was usually the first time the women had ever sought professional treatment for a sport-related health matter. For example, Caroline described her first use of physiotherapy by saying: "I had SI [sacroiliac] joint problems. The first injury I can actually recall having was my SI joint slipping a bit, so that was the first, my first visit." For some of the athletes, their first physiotherapy treatment (and their first injury) was far enough in the past that they were unable to recall the exact injury or circumstances. Such was the case for Jody who, when asked about her history with physiotherapy, responded in the following manner:

> Oh, I don't know. I've sprained my ankle so many times. It probably started with that when I was 18. And just trying to help my ankles because we kind of need a good range for my sport. And then because we had access [to practitioners at the training centre] I would go for various things that were probably just caused from being in my sport my whole life... I don't remember how often I went. Since I was 18 I've been going all the time.

4.3.2 Trying Something Else

Contrary to the trends seen in physiotherapy use, acupuncture and chiropractic treatments were not the first treatments the athletes tried when injured. Instead, the athletes reported that

these were practices they turned to in frustration when existing conditions were not improving despite regular treatments (which included physiotherapy, and drugs, but also occasionally other forms of CAM). Two-thirds of the participants reported that it was a physician or a physiotherapist who was currently treating them who first suggested acupuncture or needling. For example, Kit described an ongoing problem with her Achilles tendon:

> We couldn't figure out the problem for quite some time and then we found some exercises and stuff to strengthen it and then that helped out but it took probably five months... It was just mostly using the machines. I didn't get acupuncture for quite some time. It was mostly ultrasound and the stimulation and the laser... Acupuncture was introduced at physio and he was just like, 'Do you want to try this, it might help out?'... And it was fine. I really actually like it. I could feel it immediately.

These eight athletes all reported that they had heard from other teammates that a practitioner associated with the team practiced acupuncture and needling. As such, the athletes were prepared when the practitioner suggested this manner of treatment as explained by Kathy:

> I went in for my back and I had seen her for a while and I knew she did that stuff. I guess I heard about it from other athletes. She said, 'Do you want me to try needling?' So I said 'okay.'

Only two of the athletes reported specifically seeking out practitioners specialized in acupuncture. For example, Michelle received treatments at a school of acupuncture to treat tension related headaches after trying both drugs and chiropractic services. At the time of the interviews, Brie had just started seeing a doctor of TCM from whom she was receiving acupuncture treatments and cupping to treat inflamed tendons. Once again, these two athletes indicated that their decisions to seek out acupuncture was strongly influenced by friends and

teammates who had suggested that acupuncture could be useful in treating their specific conditions.

The reasons given for first use of chiropractic treatments were more varied than those reported for the first use of either physiotherapy or acupuncture. As was the case with acupuncture, three of the women made the decision to explore chiropractic treatments when other forms of therapy were not successful in treating their conditions. Kathy explained her experiences:

> I was having back problems all year and at that time we only traveled with a physiotherapist and she was working really hard on things and it just wasn't helping at all. And I was really frustrated and, actually, our massage therapist at the time was more helpful... but he said that it was a structural thing that he couldn't get at. Eventually, at the end of the year he recommended I go see a chiropractor and he recommended this specific chiropractor because he had worked with him in the past.

Rather than performing the treatments themselves (as was the case with acupuncture), practitioners often referred athletes to specific chiropractors. Additionally, one individual was approached directly by the team chiropractor when he observed her receiving other forms of treatment. Similarly, another athlete began to receive treatment from the team chiropractor because the team physiotherapist was absent.

Although the athletes very rarely reported using telephone books or directories to find practitioners (this issue is elaborated upon later in this document), three athletes who were not national team members and did not have the same types of team networks as the other participants reported finding chiropractors in this manner. Two athletes sought out chiropractic when biomedical options proved ineffective for the treatment of headaches. Another athlete,

who injured her back while training for a triathlon (not her current sport), stated: "He was close by and I didn't know anything at that point so I was just like 'Chiropractors fix backs so I'm going to go to them."

4.3.3 "Everybody's Using It": Trying Out Sport Massage Therapy

While the first use of physiotherapy, acupuncture, and chiropractic therapy were associated with the treatment of injuries, the most frequently cited reason for first trying massage therapy was that other members of the national team actively engaged in the practice. All of the study participants had tried massage therapy and 11 were regularly using it at the time of interviews, making it the most popular form of CAM used by the athletes in this project. For one-third of the athletes their first massage coincided with their making the national team and having access to the team's practitioners. Kathy stated:

> I first started using it [massage] the first year I made the team… And I just basically started using it because it was free and everyone got massage. I wouldn't have gotten one if I had to pay in the past. And I thought, 'Well, everybody does this so I'll try it.' And I didn't really know what I was doing… We were at a [training] camp… and they had a massage therapist with us and it was hard and I was sore and people were like 'get a massage.'

Audra had a similar experience when she first travelled with her team and reported that, "Last year in 2007 was probably my first year using it… When you're on a team you have a massage therapist travel with you… and you usually get 15, 30 minutes after a race every time."

These athletes reported that not only was massage made available to them as members of a national team but also that they felt there was an expectation that they would make use of the service. This was the case for Kit, who told the following story:

> After I made the team I was allowed to get massage for free. And they [the practitioners] kind of hunted me down to get a massage— they approached me to do it. I didn't go to them... I was kind of unaware of what I could get so they kind of approached me and [said] 'Hey, you could get a massage from us'... I was told I was given half an hour so I only got massaged half an hour once a week.

For the remaining two-thirds of the athletes the use of massage predated their making the national team, but not their involvement in competitive sport. Often it was while training at a provincial or varsity level that they first tried massage. This was the case for Brie:

> It was probably the first summer that I was competing all summer... Second-year [university] I spent a lot of time trying to improve... and I think I was just training so much... and I remember hearing a teammate say something about massage.

As is evidenced by the above quotes, the ubiquitous use of massage therapy by teammates as well as the ease with which athletes were able to access the service was a key factor in the decision to try massage for the first time.

4.3.4 "I Found a Lot More": Curiosity About Naturopathy

Compared to the other forms of CAM that the athletes tried, the reasons and circumstances that the athletes reported for first trying naturopathic medicine were the most varied. Four athletes had been referred by a coach, and the other half had been referred by family members or friends. However, one common element expressed by all of the athletes was that they were already open to the idea of trying out naturopathy and most had a family member who was familiar with the practice. In three cases naturopathy was tried as an attempt to address an unresolved health matter (difficulties with digestion for two athletes and breathing/bronchial

issues for the third) but in most cases the athletes were unable to identify a specific incident or issue that provided the impetus for the first visit. For example, Audra explained that she was first introduced to naturopathy by a coach who was himself training to become a naturopathic practitioner. Despite having no defined reason for first trying naturopathy, she was very enthusiastic regarding the benefits of the therapy to athletes and said:

> I knew not a single thing about nutrition before I meet him. I just thought I was eating healthy by not eating chips and candy, you know. But then… I found a lot more… It kind of gave me clear-cut answers and that was really helpful cause I found out that I'm extremely allergic to dairy and wheat… So just those things that like they'll help me around races… So those things [are] like extremely helpful. Like I wouldn't even be nearly the same [athlete] with eating those foods, that's how serious it is…

In addition to nutritional advice, Audra also valued the advice she received regarding the use of vitamins and supplements and stated, "I'll bring my blood results to her and she'll look at them and say, 'Okay, your B12 is low… take this.' She'll give a brand recommendation 'cause you know not all brands are [a] 100 percent clean." This was echoed by several of the athletes including Michelle who reported that she initially saw a naturopath for dietary advice but was now going for other treatments that included acupuncture, herbal supplements, and guided relaxation sessions:

> I would like to go and see her right now actually because I'm feeling a little bit drained and I think… she shoots me full of [vitamin] B12… We're going once a week for that… just with the energy thing and there's something that is probably lacking and I'm not getting enough so we're going to try it and see if it helps at all.

4.3.5 Trusting the Practitioner

While all of the participants were regularly seeing at least one CAM practitioner, and had tried at least two different types of CAM practitioners and several different types of CAM modalities, not all of the athletes described themselves as being equally open to exploring new forms of health practices. Approximately one-third of the participants said that it was because they trusted the practitioner they were working with that they were willing to try new types of therapy even when they did not fully understand what was being proposed, or endorse the underlying theory behind the treatment. For example, one group of participants spoke of a practitioner associated with their team that was hired as an athletic therapist but had additional training in osteopathy and craniosacral therapy. While the athletes were unfamiliar with the full range of her practices, they all reported that she had included energy-based treatments in their sessions and that they were willing to permit her to do so because of their existing relationship. Caroline described it in the following manner:

> She's trained in osteopathy as well so she would do some like, crazy energy stuff where she like held your head, worked with your dura and loosened up your diaphragm... sort of energy manipulation... I thought it was pretty cool. You know I, at first, was a little bit wary. I'm like 'What's going on here?' but you know, I always felt better so I let her do her thing and bought into it and it seemed to work for me.

Claire, who had tried at least 12 different types of practitioners and many more types of treatments and modalities), explained that it was her trust in the advice offered by the practitioners she worked with that lead her to explore new options. When asked if there was any form of CAM someone had recommended to her that she was not comfortable trying she replied:

> No, because my trust level is through the roof. Some of these people I've been with for years... There's some osteopaths around the corner here— they're new in town so my physio goes in there and susses it out [and tells me] 'It might be something you want to think about.' Or myofascial [treatments] was something new that I never heard of, I didn't understand. Even for the first few treatments I didn't know what we were doing but [the referral] comes from this panel of experts. If they recommend something to me, I'm absolutely willing to try it.

4.3.6 Reservations About Chiropractic

Although ten of the participants had tried chiropractic treatments at some point in their athletic careers, it was the one form of CAM that evoked the most concern. Indeed, seven athletes expressed reservations about the risks and/or benefits of the practice. The two athletes who had not tried chiropractic before said that they were uncomfortable with the idea of "cracking" and concerned about how the frequency with which their teammates went for treatments. Nicole explained her concerns this way:

> The concept is, to me, weird... I have known athletes that have gone and they swear up and down that it helps. But they also end up going back on a semi-regular basis. And I'm thinking... 'If you have to keep going back to something like that, there's something not right.'... You know that you saw improvement then it declines and then you need to go back again and it declines. So I think there's probably else at play as opposed to that your skeleton is just out of alignment.

Of the athletes who were seeing a chiropractor, a few also expressed concerns about the frequency of their own visits and the possible "addictiveness" of the treatments. For example, Kit described how she felt she had to ration her chiropractic treatments:

> I haven't used chiro since World Cup. And it's good, I really like chiro. I get addicted to it almost because, I don't know, you feel so good after you get your back cracked or your neck and everything... You just feel like your body just

> works properly... My lower back would always kind of be tweaked and stuff so I would go to see chiro probably once a week [during competition season] to go get that fixed... It would always seem to reoccur. So maybe that's why it was addictive, because I had to always go back? So I guess it was never like a problem solved completely.

Two athletes who used chiropractic services specified that they did so with some conditions. Jody would go for Graston® treatments[7] but told the practitioner that she was not comfortable with other manipulations. Kathy found the frequent visits recommended by chiropractors to be excessive:

> There's some chiropractors that will tell people to come once a week or something and I also just don't feel like I need it that often. I haven't seen the chiropractor now for like three weeks... and my back is perfectly fine. And I probably won't see him again for another probably three weeks and then I might need to... I go when I feel like I need it.

4.3.7 Willingness to Explore New Treatments

Despite some of the participants' expressed concerns about chiropractic manipulations, the athletes generally described themselves as being very open to trying new types of therapies and curious about what other athletes were using. Their attitudes towards CAM ranged from curious yet cautious to very open and eager to experience new treatments. Audra was one of two athletes who had not tried chiropractic and was uncomfortable with the idea although she had this to say:

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[7] During Graston Technique® practitioners pull a metal instrument over the skin and soft tissue of the athletes to break down scar tissue.

> I don't know if I'm really agreeing with cracking that much... just like from the whole natural point of view of things I don't think cracking sounds like something your body really wants. So it's something I'll resort to if they, you know, can show me why it will help or something... Because who knows? Maybe they'll know something about how to fix this stupid bone in my ankle that never stays in place... like I've heard of one recommended here so I might give her a try.... I probably will.

Audra's comments illustrated that athletes were reluctant to rule out any type of treatment if they thought it could benefit them. As Brie explained there is "the tendency to see what's out there and what's going to make me go faster. So if there's new techniques that are being used, everybody wants to see how they're working and if it makes them feel better." Participants who had not tried as many types of treatments as others often stated that they were satisfied with the treatments they were receiving already and did not feel they had reason to look for anything new. Caroline reported that she was "happy with what I have... I've kind of found my magic potion and so I'll just stick with that."

4.3.8 The Role of Family Members in Influencing Attitudes Towards CAM

While the participants were unanimous in stating that the main source of their referrals to practitioners was other athletes, one-quarter of the athletes attributed their openness to CAM to their upbringing and their parents' attitudes. Claire described her mother's worldview as "beliefs that are her own amalgamation of whatever she wants to believe" and described herself and her siblings as growing up with a "spiritual side to our brain." It was Claire's opinion that being open to new treatments was a desirable quality in a high-performance athlete:

> People will talk to me about the physiology of my body and they'll talk to me about energy or they'll say energy or chi or whatever you want to call it. Both my

> myofascial release therapist and my physiotherapist use different things—I love it. I think that's so cool that their minds are open and my mind is open... I would say there's so many different ways to accomplish things and I'm glad that I have people who within themselves have everything integrated... There's science and there's energy flow and these things are not separate.

Kathy also credited her parents with introducing her to some forms of CAM and teaching her to be open to different practices. However she also stated that although her general attitude towards CAM was likely due to her parents, it was in her role as an athlete that she had the opportunity to learn about and try new therapies. As she explained it:

> I think I'd probably be open anyways just 'cause of my parents... I probably see more things just because of the people I that talk to from being an athlete and the team, and things kind of getting passed down through the team and stuff. And then just 'cause I have more injures and issues from being an athlete.

Hilary, who was the other participant who had tried a dozen different forms of CAM, also described her family as having a holistic orientation towards health and an interest in CAM. She agreed that it was her career as a high-performance athlete that prompted most of her visits to CAM practitioners even though she felt she had always had an open attitude towards less mainstream practices:

> I would say that as an athlete I've tried more things than the typical person... Because we rely on our bodies to perform and we are so body-aware in terms of our sport... we know what it is supposed to feel like or what it feels like to be 100%. So when that's not there you know that something's wrong and there's got to be a way to fix it.

These athletes suggested that their families' attitudes factored into their general perceptions of CAM but it was their athletic careers that provided the impetus and opportunity to explore new therapies.

4.4 Accessing CAM: How Access to CAM Services is Facilitated and Restricted

While the previous section examined the first use of CAM therapies and general attitudes towards CAM, this section investigates the factors that encouraged or discouraged the ongoing utilization of CAM. Of central importance to the discussion is an understanding of the issues that assisted or inhibited the athlete's ability to access various forms of treatment. Financial costs, social capital, and social networks all influenced how the negotiated the structures of the sport organization to which they belonged.

4.4.1 Being Carded: Stipends, Health Insurance, and Team Practitioners

As previously explained, carded athletes receive monthly stipends from Sport Canada and they are also eligible for extended health care coverage through programs such as the Canadian Athlete Insurance Program (CAIP) or other insurance policies obtained by their national sports organization. Additionally, practitioners (both CAM and biomedical) often offer discounts to carded athletes especially if their clinics are located near or in national team training centres. Many national teams with large concentrations of athletes at one facility choose to employ practitioners either on salary or on contract, and carding is often, if not always, used as a criterion for determining who is eligible to book appointments with these team practitioners.

Because of the high cost associated with many CAM treatments, all of the participants discussed how being carded affected their use of services and all reported that their CAM use

had increased when they achieved carded status. Audra explained how carding influenced her use of treatments:

> This is the first year I've really taken advantage of it— well second year I guess— that I've had insurance through CAIP. So that's the main... yeah without CAIP I wouldn't be probably going to any of them... If I had a lot of money then [the treatments are] probably worth it but I just don't and I probably spend most of my money on food... Yeah, cost is huge...

When discussing how funding influences CAM use, it is crucial to remember that most of the athletes reported having multiple appointments a week and that even when the treatments were being subsidized or provided at a reduced cost, the total cost was often quite substantial. Audra elaborated on her previous comments as she stated:

> We get $40 a session covered so most of the places here I get referred to from athletes— generally you go to them because they'll do special things for us. Like they'll either give us a rate of $40 an hour or $40 per session or they'll try and cut it onto two receipts for us... Even if you go for a $60 massage you're still paying $20 a time and it sounds like not much but it really is when you're not making very much money.

Most of the athletes were unable to provide a total of how much they had spent annually on treatments given the complexity of funding (e.g. some treatments by team practitioners were free, some costs were reimbursed, and some treatments were received at a reduced cost). At the time of the interviews Michelle had just finished totalling her expenditures on massage for 2007, a year in which she was not carded and, therefore, received no reimbursement. In one year she had spent $1,900 on massage alone which at $56 an appointment (the discounted rate for carded athletes) translated into 34 massages a year, which was far fewer than the weekly or twice

weekly appointments reported by other participants. Kristina estimated that the associated cost for all of the treatments she had received in the 12 months leading up to the 2008 Olympic selections was between $3,000 and $4,000, although much of that would eventually be recovered through CAIP. According to Hilary, her coach had recently increased their training sessions from six days a week to seven and Hilary had seen a dramatic increase in her use of practitioners as a result. She explained that she typically submitted receipts every three months and that the last bundle she had submitted totalled nearly $700, almost double her usual expenditure. She also reported that because CAIP did not cover the entire cost of the treatments she had to reconsider her use:

> Actually for the first time, in the past few months there has been a hesitancy... I've started keeping track of budget on everything and there's a lot going into my health. Paying $20 each week adds up obviously... The biggest thing for me personally as an athlete is not being injured... if it's not crucial, there's times when I'll call and cancel.

Additionally, some carded athletes reported having to pay for service first and then wait for the claims to be processed, which caused them financial stress and limited their use of services. Other athletes charged visits to credit cards or borrowed money from parents to cover the cost until they were reimbursed.

At the same time, athletes who lost their carding described trying to access services as difficult and stressful. Three participants reported that they had at one time lost their cards—one while the interviews were in progress. Carding is awarded on an annual basis and although the criteria for selection are sport specific and elaborate, one key determinant is the athlete's success at international competitions in the past year. Failures to achieve certain results or the

onset of an injury or an illness are the most common reasons for losing carding. For example, when Jody suffered a series of illnesses and minor injuries during a single season, she was unable to compete overseas at international events and this eventually resulted in her carding not being renewed. Caroline made the decision to switch events and classifications within her sport and lost her carding during the process because she had yet to produce any results in the new event but was no longer competing in her former event. At the time of the first interview, Nicole's status as a carded athlete was being reviewed. Although she had performed well at international events, her final competition at the season fell short of the carding criteria. Here is what she had to say about her use of massage therapy during this waiting period:

> I'm not training right now because it is my month down. I don't know if I'm carded or not anymore. So it's like if I'm not carded, I need to save that money for when I'm training as opposed to when I'm off... I can't afford to be paying for it now and find out after that I'm not carded... I'd rather be missing massage now [rather] than leading up to a major competition.

Losing carding had serious implications on the athletes' use of services both in terms of being able to pay for treatments and in terms of having access to team provided practitioners. For example, as a carded athlete Jody had a weekly regimen of massage therapy, chiropractic, and physiotherapy, but when she lost her card her use decreased dramatically:

> I went to a physio once at the beginning of the season when I started training again [after the injury]. You know, to see where I was at and what might need strengthening and then I just did my exercises and stuff. And I saw a massage therapist a couple times when my adductor tightened up. I mean I paid for it all so I went a minimal amount.

Athletes attempted various strategies when cost became an issue (either prior to being carded or when carding was not renewed) and prevented them from seeing practitioners as frequently as they would have desired. Several reported that they tried to stretch out the period of time between appointments, as was the case with Michelle:

> When I moved out here everything was self-funded… I tried to go without but I [was] shooting myself in the foot… My body would get worse and worse and I might as well not be [training]. So it is pretty important to take care of my body. And it was worth the money… You try to stretch it out and only go like once a month. But then you end up the last week you're in pain. And it's just not worth it. You might as well just spend the money and go as often as you need to.

As the above quotation evidences, this strategy was not seen to be entirely successful by the athletes and ultimately they found the money for treatments.

Another method for reducing the cost associated with CAM was to ask the practitioners for extra exercises or techniques that the athletes could perform on their own. For example, when she lost her carding, Jody reported that she practiced yoga regularly since most of her treatments were to increase strength and mobility in her injured ankle joint. Hilary explained that when she and her teammates were denied access to team practitioners (an event that is discussed later in this document) they 'treated' themselves and each other:

> We treated ourselves. I'm not joking… I've had a massage therapist offer to hold a little workshop to show us some basic techniques so that we can do that properly. So we've treated ourselves. I treat myself. Like I have my little balls that I roll on, roll onto my back to release different areas. When I go to the physio I often ask 'Is there any way I can do this myself?'… And so [my physiotherapist] has been really good in sort of instructing me.

4.4.2 Social Capital and Accessing Team Practitioners

In addition to carding and other forms of financial support, the athletes also spoke of the ways in which forms of "social capital" (Bourdieu, 1991, p. 372) impacted their ability (or that of their teammates) to access provider-delivered CAM. In a sport (as in any social setting) there are many factors that can lead to hierarchal relationships between group members and the status of the group member is determined by a variety of factors that constitute their social capital (Bourdieu, 1991). The participants of this project referred to age, years on the team, athletic successes, and the position of their team or training group in relation to other groups within the association as factors that influenced their access to services.

On the one end of the spectrum, was Claire who had achieved success at the highest level in her sport, winning multiple medals at international events including world cups, world championships, and the Olympics and was the least likely to report barriers to accessing services. When asked if she had ever had her use of services limited she replied:

> No because even as a struggling athlete. I just knew that my body matters above all else and I was quite aggressive at finding sponsors… I never wanted to compromise… I was just really lucky with my sponsors… I've never been limited by cost.

Not only was she never limited by cost but she had also taken control of her situation to a degree not seen with any of the other participants. She discussed how as part of the 2010 Own the Podium project, a concept named Performance Enhancement Teams (PET) was introduced (two other participants in different sports also used this term). PET, as described by the athletes, was meant to be a team of practitioners, coaches, physiologists, psychologists, and others who worked together in an integrated model to provide service to the athletes. However, at least for

this athlete, the promise of PET did not deliver. In her words, "There are so many egos that are completely incapable of following through and actually initiating and actually communicating." This is how she described her response to the situation:

> As an athlete who wants the best I just decided that I was going to make it happen. I started calling meetings... And I wanted psychology, physio, coach, strength coach, altogether... like if everyone's on the same page I can just improve so much faster...Instead of like 'Wow, she really wants to do things well' it was just perceived in a different way. Like 'This athlete is really demanding.'... I didn't waste a lot of their time on it but [it] definitely shows that disconnect between like listening to an athlete and thinking you know what an athlete needs without asking.

This was an example of how an athlete was able to draw upon her athletic successes to demand the types of services she believed necessary to her continued performance. She reported:

> Overall things work for me and I don't get too much opposition convincing people of my vision and where it's going and why it's important and getting the support I need. I'm really good at drawing on the resources and drawing everything out of them I can.

In addition to pressuring team staff to adopt a more integrated approach, she was also proactive in finding her own therapists when she felt the practitioners provided by her association were not meeting her needs. Instead of the assigned physiotherapist, she was seeing another practitioner who offered 90 minutes appointments and only treated one athlete at a time (many physiotherapists treat several clients at the same time) and she was also using a CAM therapist for a variety of treatments including myofascial release— a treatment that costs $175 an hour and that her association agreed to pay for directly.

One group of teammates interviewed in the project found themselves in quite a different situation. While they were carded athletes training at a national training centre with a national team coach, they were not on the shortlist of athletes being considered for the upcoming Olympics. According to these athletes, as a consequence of not making the cut for the Olympics, their access to services was severely restricted and services that had been available to them in previous years were suddenly withdrawn. The most frequently cited consequence of not being an Olympic camp athlete was that they were no longer permitted to see the practitioners hired by their national organization who were working onsite at the training centre. Specifically, while they were still carded and had CAIP, they no longer had the ability to drop by the treatment room before or after practice to see the team's chiropractor, physiotherapist, athletic therapist, and psychiatrist. The women all agreed that the lack of access to practitioners was not only inconvenient, it was also insulting and symptomatic of the low esteem in which their program was held within the organization. They also expressed frustration that the same standards had not been applied to the men's team— not only was the men's Olympic camp list considerably longer than the women's (corresponding to the greater number of events in the sport open to men at the Games) but they also frequently reported seeing male athletes who were not being considered for Olympic events using the services. They were animated and passionate in their description of what had occurred and as one athlete explained:

> We were allowed to see ... the athletic therapist, the chiropractor, they physio, the doctor... last year it was a free-for-all. You came, you waited in line with everyone else and got to see them. Somehow, though, it was decided this fall that that those practitioners were overworked and so they said only the Olympic camp invitees are allowed to come up here and you have to sign up... The chiropractor and the physio said 'If when I'm here... it's not busy I will work you guys in. It's okay, it's no problem, I don't mind doing this.' So the next week a couple of us

> went to go do that and we were told, 'No, we're not allowed to touch you.'... but the frustrating part is there were still men that aren't on the Olympic camp list that would go see those practitioners but we weren't allowed to go see them.

In the second interview, the participant returned to the subject, further explaining that it was the way in which the access to the services was terminated that was the most infuriating:

> Having it pulled away from you makes you feel like crap. Like 'What did I do wrong? I've gotten faster. I've gotten a medal under my belt. Why are you pulling this away from me? I don't understand. And how do you expect us to get better when we don't have access to this like everybody else does.' It almost makes you feel like 'Okay, we're not important and you really don't care how we perform.'

During the course of this project, Caroline was put in an unusual situation. After having been told she was not on the Olympic camp list in November, the national association reconsidered in the spring and gave her and one other woman a second opportunity to trial for the Olympic team. As a result, at the time of the first interview she was not eligible for the services provided to Olympic camp members but shortly before the second interview she was told that she could start using them again. Despite ultimately gaining access to the therapists, she was still very critical of the way in which the decisions were made saying that, "It was too little too late." She continued to sympathize with her teammates who were not up for reclassification as she asserted the following:

> Our status has changed from just a training centre athlete to an athlete who is now being tried for a higher calibre position. And I think that's unfortunate because I don't think I now deserve that anymore than another girl who is in my training group... I understand... the therapists are really busy but if you're trying to run a national team— the importance of therapy— you can't exaggerate it. It is so crucial and until I had access to this therapist I was putting out... probably about a

> $150 a week on a massage and chiro and I'm not surprised if these girls [those not eligible for team services] are paying the same thing... I think that if you come to a training camp, if you come to a national centre and you're training at that level and you're expected to train at that level and be at every workout, then in return... I think it's the organization's responsibility to say 'We will provide you with someone who is going to keep your body in order because we are asking you to come out here.'

She also pointed out the dilemma faced by athletes on the verge of making a team— namely that they faced the same demands as the top ranked athletes and yet they are expected to perform with far less support. She used her own situation as an example:

> If I've been training all year and you [the national association] didn't think in November I was worthy of being named an Olympic athlete, suddenly I'm going to Beijing in August and I've missed a year of treatment because you never foresaw in November what I was capable of. So that's really tough... I mean that's the reason why everybody should get treatment, right? Because you never know what someone could be capable of if they're really taken care of from the get go.

Participants in all of the sports reported some variation on the theme of an athlete's status on the team impacting their use of services. While technically all carded national team members had access to practitioners who worked at the national training centres or who travelled with the team, the practitioners were in high demand and priority was given to certain athletes on the team. As the youngest and least experienced member of the team this past year, Kit was very aware of issues of seniority especially as it related to her use of massage therapy immediately before racing or between races at the world cup events:

> It [pre-race massage] didn't happen very consistently because there's lots of different [athletes] and they are more prioritized because I was like first year on the team... I felt like I should let them go ahead of me... I was new to

> everything… I was a follower a little bit throughout the World Cup, just like learning and everything. And people would call me the 'rookie,' right? It was kind of a joke.

According to Tanya, while the practitioners working with her team were given a list of which athletes to prioritize and would be sure to book those appointments first, the athletes themselves were willing to assist a teammate as needed:

> There's like a priority list so people that qualified for the Olympics last year are first, and then it's people who went to Worlds, and then it's people who were senior carded and d-cards… [The massage therapist] would take his list to the qualified athletes and they get first dibs to sign up. And then after that he just leaves it out and you come and sign up whenever you want. But if you're below somebody, the people above you can bump you… It doesn't happen very often. And I mean we're all friends so you can go up to somebody and say 'Look, I know you had a massage four days in a row, can you just give me your massage today?' And usually they'll go, 'Yeah, it's fine.'

In this way, Kit, like the other athletes in my sample, normalized the hierarchal relationship between athletes on the same team. In another instance, Claire explained that in order for a recovery massage post competition to be most effective, timing was critical. When asked how it was determined which athletes were given the most desirable time slots she answered:

> The priority is on those who are racing the most. Second priority are people who are racing the best… It is definitely very equitable. It's just that, you know, 'You were second today and you were 45th. We are going to take care of the guy who is second first and help him recover because he's performing.'

While most of the women described barriers to accessing services on an organizational level, one athlete had a particularly distressing example of an individual coach restricting her access. When the project started she was working with a national team but was not happy with

the current training environment and was considering switching to another program. However, one reason she was reluctant to make the change was that her current coach had some control over discretionary funds that were used to provide additional health services not normally covered by the team's insurance. During the second interview, she described the decision to change programs and her coach's reaction:

> Remember I told you they were paying for nutrition and psychology and stuff like that... I knew he was going to cut it. And so he did. It was like his way of getting back at me... I guess it's up to his discretion to use it because that's his job... At the meeting when I was telling him I wasn't going to be coached by him anymore... He's just trying to like go off and tell me how I'm such a difficult athlete... So it's just all this really immature shooting things at me and I'm just like sitting there like 'Okay, can I leave now?... And then during the meeting he's like 'Oh, and you know those extra available funds?'... I knew he would probably try and pull them away. But he's like 'You know those aren't going to be available when you get back— not because of this meeting.' Like 'Oh yeah.'

This athlete was stressed by the situation and felt that the coach had inappropriately used access to practitioners as a way of trying to influence her decision to work with him.

4.5 The Right Person for the Job: Athletes Discuss Their Relationships with Practitioners

Once the athlete had the financial and social resources necessary to access services and had made the decision as to what types of treatments to pursue, the next stage was finding a practitioner. This section will explore the role of referrals from within the sportsnet, the ways in which practitioners worked as teams, the different types of relationships athletes had with practitioners, and issues of trust and communication in the therapeutic encounter.

4.5.1 Sources of Referrals

As is apparent from much of the previous discussion of how athletes started using CAM or accessed services, the participants who trained at training centres with teams that employed practitioners rarely spent time searching for therapists and even reported it was occasionally the therapists who found them and suggested treatment. Only if a team practitioner was unavailable— for example, travelling with another team— did they even consider looking outside their sport organization for a practitioner and when this occurred they usually asked the team practitioner to recommend someone.

The athletes training in less structured environments or on team that did not employ practitioners reported two main sources of information when seeking out a new practitioner. The first source of information was other athletes (most commonly their teammates but occasionally retired athletes or athletes from other teams who trained in the same facility) and the second was practitioners they were already working with. A couple of the athletes reported that they had tried practitioners they found in the phonebook, but were not satisfied with the treatments that they had received. Consequently, these athletes had begun to rely even more heavily on referrals from within their sportsnet. For example, Audra said:

> I don't feel like wasting my time looking in the phone book... I'm not going to go somewhere just 'cause it says 'athletic therapist.' Like that means nothing to me... I probably will just go see somebody if they're recommended to me by somebody who I trust. So generally athletes because most of them have had injuries at some point in their life... mostly it would be teammates and people I train with.

Michelle agreed, and when asked why she was more likely to take referrals from teammates than from anyone else replied, "Well just 'cause we usually have the same problems and they

recommend someone that has fixed them." In addition to referrals from teammates, practitioners were considered to be a reliable source of information and often directed the participants to other practitioners who worked in the same clinic or with whom they had worked in the past. Michelle expanded on her response and said:

> Besides teammates... a lot of it is one practitioner recommending another one. Like the athletic therapist recommending my naturopath or like one physio is telling you to go see a chiropractor in the office or the massage therapists. That's pretty much it. It's a small little integrated world for getting treatment.

4.5.2 "A Couple of Things Working Together": Practitioners as Team Players

In addition to directing the participants to other practitioners, the athletes also revealed that it was highly desirable to find practitioners who were willing to collaborate with each other. When Kristina was suffering from a debilitating knee injury, she credited the combined abilities of several therapists for enabling her to return to full-time training and competition:

> I don't think you can say one in particular [was the most beneficial]. I think, for me, the use of all of them and just taking what I could from them all was the most beneficial because I was seeing one at a time, and two at a time and it wasn't until I kind of got everybody involved and they were all talking and communicating... and working together. That's when we could figure out a good program for me to get the injury to get better.

Jody's team employed massage therapists, physiotherapists, chiropractors, and strength coaches and she described the relationship between the practitioners in this way:

> They're integrated and work together. For example, if the massage therapist knows I see a chiropractor and he'll be like 'Okay, tell him this.' Or 'What day did you see them?'... So I think they actually work pretty well together. And they kind of have an understanding. Well I think the physio and massage therapist are

> pretty good at having an understanding that you probably need a few things more than just what they offer. A couple of things working together.

While therapists who were able and willing to work collaboratively with practitioners in other fields were seen as desirable, several of the athletes noted that the interactions between the different practitioners were not always collegial. Tensions between physiotherapists and chiropractors were particularly evident. Michelle stated that, "I've had a chiropractor... talk about physio. That he didn't think it was very beneficial and they were a rip-off, blah, blah, blah. And then there's also the physios that feel chiropractors shouldn't be covered under health care." In keeping with the theme that the ideal was for practitioners to work in concert, she purposely sought out those individuals who were able to work together and contended that it was a "bad practitioner" who could not acknowledge the value in another's treatment.

However, while the athletes thought it was *ideal* if the practitioners were willing to work together, it was not perceived to be essential. Rather, the participants were comfortable mixing treatments that they felt were complementary with or without the support of the therapists. For example, Kit explained that because she was aware of the tensions between practitioners she did tell her chiropractor about the physiotherapy appointments but did not tell the physiotherapist about the chiropractic treatments. She felt the chiropractor would not criticize her decision to use both and thought it was necessary to share the information with at least one practitioner so that he did not give a treatment that would be counterproductive to what she had already received— for example, both therapists used acupuncture in their practice and she wanted to avoid two consecutive acupuncture sessions. As Kit described it:

> I think it's just whatever works best for the athlete. Cause if they like try it once and they saw that it was starting to work, obviously they're going to continue it. And even though I think the physio and chiro are two different practices, they can work well with each other... I don't know if they realize it or not. Obviously it works for a bunch of people, combining it. And I think if it heals or if it helps the athlete with whatever then they're going to continue with it.

4.5.3 Practitioners as Collaborators and Confidants

In addition to valuing a practitioner's ability to work with others, the athletes also described two types of relationship that they wanted to establish with their practitioners: the practitioner-as-confidant and the practitioner-as-collaborator. To begin, the practitioner-as-confidant was an individual to whom the athlete could confide about her experiences of stress or other difficulties associated with participation in her sport. Five of the participants reported that being able to talk to a practitioner or having a practitioner who was a good listener were important criteria by which they selected therapists. Hilary defined CAM practitioners as those practitioners who were ready to "listen holistically":

> They're listening to me list off the ingredients of a recipe but they're not necessarily saying 'This is purely comprising this disorder.' They're... taking all the individual components and thinking about each one individually and also tying them all together. So really just listening with the intent of finding out a root problem.

Hilary also stated that as a result of the practitioner's willingness to spend more time listening to her, she was likely to share more information with a CAM practitioner than with an allopathic practitioner.

For Nicole it was important to find a female practitioner since she felt that she felt better able to communicate with a woman and that communication was an important component of the treatment process. She said:

> I want to be able to say and feel comfortable saying, 'This is really sore, this is why it's sore, and can we do something about it?'... I always hate feeling... awkward around them... So I guess if you can't communicate effectively with them then it's hard to get to that point where you can say, you know, where you can be totally open... You can be more open communication-wise and not feel like anybody is judging you... It's just nice to feel that comfortable with someone that you can just let loose and know that they'll do the best job they can to figure it out for you.

The practitioner-as-collaborator was similar to the practitioner-as-confidant but had an added element. In addition to being a good listener, the practitioner-as-collaborator was someone who was perceived to be fully engaged in the treatment process and committed to helping the athlete achieve her goals. Two-thirds of the athletes referred to the collaborative nature of their relationship with practitioners. Claire described her relationship with a massage therapist that she had worked with for many years in this way:

> I really like someone who matches my intensity level... I started babysitting for her and then we started trading massage and babysitting... It was a great set-up... And there also was kind of a really personal connection. Like this space that I was in where she was healing my body and also hearing me out... I think all of my practitioners that I rely on are people that genuinely care about me. I think that's a quality to seek-out... If you can just feel that extra caring that helps you to actually improve. You're not just being stamped and passed along. It's really an experience were you're both dedicated to improving something.

A key feature of the collaborative relationship was the willingness by practitioners to go beyond their job description and take an interest in the athlete and their team. For example, one

group of participants reported some practitioners had asked the coach if they could attend practices to gain knowledge of the particular movements in the sport and the demands on the athletes' bodies. Other practitioners offered value-added services as was the case with one of the chiropractors associated with one of teams:

> He's very, very good at what he does... He's organized a session with us next week to do strengthening. So not only does he go in and do the treatment but he's also offered to keep us out of there. Keep us healthy so that we don't need to see him quite as much.

Not all of the additional services offered by the practitioners were directly related to their area of specialty. For example, athletes from another sport reported that team practitioners would make an effort to cheer them on during races or would operate the video camera to film races illustrating that the role they played for these athletes was multifaceted. Jody described the practitioners as if they were members of the team:

> You know you have all these people behind you and helping you out and it's just a good feel... They just want to make you as healthy and as strong as possible... It's like they want you to do well, to succeed. And obviously if we do well it does reflect on them... The guys on our team are always trying to watch the races when they can... They're pretty good... in that way to create that support system.

Practitioners also helped the athletes negotiate issues related to funding and carding. Several athletes reported that practitioners offered special rates, broke receipts down so that they were covered by insurance, or provided service even though the athlete was not strictly eligible for treatments by team staff.

One final variation on the theme of a collaborative relationship was the way in which CAM practitioners were becomingly increasingly familiar with sport injuries and more generally with sport settings. To set the scene, Jody was one athlete who had the opportunity to try several massage therapists and provide feedback when her association was hiring a new practitioner and she described the process as follows:

> Everyone was very different… You can tell the difference between someone who really like works with athletes and [someone who] just kind of works at their clinic… I don't know, an average massage therapist… You can just tell.

While this quote does not immediately seem relevant to the discussion of practitioners-as-collaborators, when the athletes were asked to more broadly theorize on the relationship between CAM and sport, they all referenced the growing popularity of CAM treatments within their sports organizations and a couple women asserted that the relationship went both ways. That is to say, even as athletic populations were increasingly adopting CAM practices, CAM practitioners were also modifying their practices in order to delivered more sport specific treatments. As Tanya explained:

> I think 10 years ago if somebody said they were going to a naturopath, people would have thought they were nuts… Same with acupuncture— that was just way out in left field… And now whether it's just athletes are learning more about it but it seems like the practices are getting more and more sport related… Ten years ago when you thought of massage you [thought of] a spa with nice candles… but now you talk about myofascial release and deep massage and that if you have a deep massage you can't sprint for two days… So whether it's just athletes are getting more educated about it or whether the science of these professions has actually expanded that much that it now includes all those different things, I don't know.

This quote clearly indicates that, as is the case with a truly collaborative relationship, all the involved parties were impacted by the experience.

4.5.4 "I Know When I Need a Massage": Practitioners as Gatekeepers

In contrast to the collaborative relationship, physicians were frequently described as gatekeepers when it came to accessing treatments. While athletes on teams with dedicated practitioners on salary or contract could access chiropractors, massage therapists, physiotherapists, and others without a referral, not all national teams followed this model. For athletes on teams without practitioners, they usually had to pay up front for service and then submit receipts either to the national sports organization or to their insurer. Many of the participants further reported than in order for their appointments to be covered they were required to have a prescription from a physician *before* they received treatment from another practitioner. As a result, athletes on these teams stated that their use of physician services was most often because they were seeking referrals. This was a source of frustration as conveyed by Nicole:

> If I want to go and get a massage, or I want to go to physio, I have to go to my doctor first, get a referral, then go to the practitioner and then I can submit half of what it usually costs to CAIP. It's an annoying step that I have to go to my GP… Because I am an athlete I know when I need a massage and I know when I need to go to physio… If I get injured on a Friday and I want to go in and see a physio Saturday or Sunday… if I want to submit that I either have to get my doctor to get me a retroactive one [prescription] which sometimes they don't want to do.

This was also an issue raised by an athlete who was among the last group to be carded this year— she had been short listed for carding but did not receive confirmation of it until a few

months after her teammates had been notified. During this waiting period she had no health coverage and paid for health services directly. She explained:

> I just started getting my coverage in January... but I didn't find out about it until like March or April... So then I had to go see if I could get a prescription back-dated. And our doctor had morals apparently that day. And she wouldn't back-date my prescription.

It was experiences like this one that shaped Michelle's opinion of physicians and lead her to consider how she used their services:

> You'd go to them for CAIP forms and for referrals to go to massage and physio. Cause they're the ones that hold that key. But I don't actually go there seeking any advice from them. Cause I think being an athlete you know what's wrong with your body and you don't go in and say 'I don't know what's happening, my arm hurts.' You go in and say 'I have tendinitis, I know I have tendinitis.'

4.5.5 Communicating With Practitioners

The comments made by the women about knowing their own bodies' needs and not feeling that they required a practitioner to tell them when to go for treatment were part of a broader theme in the data. The large majority of the participants reported that the manner in which they communicated their needs to practitioners of all types had changed over the course of their athletic careers. For example, Claire explained that she had had a very "scattered" approach as a young athlete such that she had tried every type of practitioner available before "streamlining" her use. Kit described how the team practitioners approached her when they believed that she needed treatments rather than the other way around. The majority of the participants stated that over time they had taken more control of the relationships and become

more forthright in requesting specific treatments. They still took advice from practitioners (including trying a new therapy) but they also had a better understanding of what they wanted to be achieved during the therapeutic encounter and felt comfortable communicating this to practitioners.

One example of this was given by Claire who had found a massage therapist in the telephone book. Describing herself as having "confidence and awareness of what I do need and I'm not very shy about saying it", Claire told the following story:

> I booked 90 minutes with a random dude. I went in there and said, 'Buddy, you are going to have to give the deepest massage of your life so just get ready.' And he's giving me this super soft, basically just rubbing oil around... I pretty much coached him for half an hour – 'Deeper, that's okay, more pressure. Can you give me more pressure?' And I needed that massage (*laughs*) so I was able to give him a ton of feedback and at the end he was like, 'Wow, I feel like I know how to massage an athlete now. Come back here!' And I'm like, 'Yeah right.'... Before I would go in and just be like 'Yeah, you're the pro. Do what you're doing.' Now I've seen a ton of pros and I've seen what's given me results so I like to be a part of it for sure.

Nicole focused less on directing the encounter and explained it instead in terms of how she was increasingly able to provide more detailed information to the therapist when she said:

> I have a much better understanding of what feels right and what feels wrong in my own body... So I think I can better give them the information they need to make a better-educated decision on what's going on.

Finally, Caroline spoke of how her increased awareness of her body factored into the treatments:

> I probably make their jobs pretty easy because I go in and I know exactly what I want worked on... I'm very direct about what I want and I give a lot of dialogue

> during the treatment... I think I make it probably pretty easy to work with because I'm very conscious of my own body... I think you become more and more and more aware of what's going on just as you use your body more and as you become more attuned to what's happening.

4.6 What is Achieved Through CAM?: Reasons for the Ongoing Use of CAM

The previously discussed literature pertaining to the reasons that individuals in the general population give for using CAM has focused on the dual themes of dissatisfaction with biomedicine and the perceived congruency between the individual's worldview and CAM-related philosophies. These two discourses combined with serious health conditions such as cancer and HIV/AIDS are often cited as the impetus for seeking out CAM practitioners. In the case of the elite athletes I interviewed, life-threatening illnesses and chronic conditions were not a factor in their use of CAM. Rather, the high rate of injury sustained during athletic training and competition was the phenomenon that precipitated their initiation into CAM.

4.6.1 When is it an Injury?

The explanations for why athletes first sought practitioners clearly revealed that injuries were often a factor when deciding to try a new practitioner or a new treatment, with massage therapy and naturopathy being exceptions. However, over the course of the interviews an interesting theme emerged. While the athletes were quick to cite injuries as the reason for their *first* visit, injuries were not necessarily the reason for their *continued* use of treatments. In fact, all of the athletes stated that they were injury-free at the time of the interviews even as some of the participants revealed that they had four appointments with practitioners each week. This discovery necessitated that additional questions be included in the interview schedule. Specifically, athletes were first asked if they had any injuries at the time of the interview and

then asked how they would define an injury. Of particular interest was the participants' apparent reluctance to discuss injuries in the present tense. For example, while athletes were comfortable describing past injuries or using phrases such as 'injury-prone' to describe teammates or other athletes, they were far less likely to describe themselves as currently having any injuries. When asked "What do you consider to be an injury?" or "When is something considered an injury?" their responses included: "When it stops you from training, from racing," (Caroline); "An inability to do my sport," (Brie); "Everything that inhibits you from training at your full capacity," (Kit); and "Something that is preventing you from using your body in the sense that you normally could" (Hilary). Thus, injuries were described as impairments to the body or impediments to sports performance. Since all of the participants were training full time or in the midst of a competitive phase at the time of the interviews, they were by their own definition *not injured.*

When discussing their present conditions, instead of referring to injuries, the athletes spoke of "imbalances" and "tightness." When one athlete was asked "When does something become an injury?" she replied:

> When I can't participate in my sport. Yeah, like I know I have to go get massages for my lower back. Otherwise it will become an injury. But as long as I keep on going [every] 10 or 12 days it will keep it loose. Fine, but that's not an injury because I can still do my sport.

When asked if she presently had any injuries, Kristina turned the question back on me and replied:

> No, not really. I don't know. What would you call an injury? (laughed)... My Achilles tendon hurts sometimes. I don't know— yeah, like your back hurts, my neck hurts. But

> those are not injuries. I think that's just more a sore back... It's just normal aches and pains... I do exercises for my Achilles tendon and if I don't do those it starts hurting. So that's I guess more of an injury... It's just general pain that every [athlete] goes through I think... there's nothing you can do about that. But it's not an injury.

When pressed to further elaborate on certain conditions, some athletes revised their responses to admit that strictly speaking some of their "issues" might be considered injuries. However, these athletes were quick to qualify that statement. For example, Hilary described having had stress-fractured ribs and, when asked specifically if these constituted an injury, she replied:

> No, I guess those were injuries. Like they put me out. But never anything major in the sense of becoming chronic. I think you have an acute sort— 'I put something out, boom, it's gone.' Where something that's kind of nagging... for a long time— to me those are the ones that more affect me so I focus more on those. But the other [acute] ones are still injuries but [they] might last a day or two and then [they're gone] and it's fine. But the true chronic injuries are the ones I think really affect performance as an athlete.

Careful review of the interview transcripts revealed that the majority of participants held ambivalent attitudes towards injuries. On the one hand, as previously stated, the athletes were comfortable discussing past injuries, both serious and minor, in great length and detail. They also frequently acknowledged the risk of injury inherent in their sports especially when referring to the role of practitioners on their teams. For example, when asked why it was important to have practitioners travel with her team, Kristina responded:

> If you are on the road and you get an injury or a sore back or a crash or anything, that's when it's different [from not having practitioners around]. If you have someone that can actually help you heal from that, that's where it's going to be different. You can heal faster.

Other athletes also clearly stated that they understood the high risk and the high rate of injury associated with their sports. Michelle spoke of the team practitioners seeing the "same injuries over and over and over again," Hilary talked about how she and her teammates had experienced a number of injuries in their small training group, and when Kit was injured she was reassured by her teammates that they all had lots of "experience getting injuries and told [her] it was pretty normal."

However, despite the apparent normalization of injury and the nonchalance with which they discussed the risk of injury, none of the athletes willingly labelled themselves as injured at the time of the interviews. Further questioning into the subject revealed some of the emotional risks the athletes associated with being *classified* as injured. Tanya was the most eloquent in her description of how admitting one was injured challenged her athletic identity:

> I struggle with it a lot mentally... I have a hard time admitting that I'm not okay and things aren't right... I put all my time and effort pretty much into this. It's my life, it's what I love to do. I've really passionate about it. And admitting that you have an injury means that you might not be able to do this thing that you spent so much effort— you might not be able to do what you love... I've tried to come to terms with 'I have to make myself better.' Like I have to be healthy before I can do it... So I try to remind myself that it wouldn't be the end, it's just enabling myself to continue.

Caroline thought she was better able to handle and accept being injured now than she had in the past but stated that it was still "tough." As she explained, she found not being able to train at her full capacity very frustrating: "You have a routine and your body is used to doing a certain amount of training... I feel like crap because I'm so used to training and keeping my body going that you go into like almost a depression." Her strategy, taught to her by a coach when

competing on a university team, was to use the time off due to an injury to work on another body part that she might otherwise not spend much time on. Caroline explained as follows:

> She [the coach] was really good cause she was like 'Whenever I injured my upper body I took the time to strengthen my legs... use this as an opportunity to strengthen something that otherwise you might not pay attention to.' It helped because then I could put my focus somewhere else because you have all this energy.

While the participants agreed that being injured was difficult on an emotional level and this was related to their reluctance to admit an injury, they had varying opinions regarding when it became necessary to discuss a condition/injury/issue with coaches and teammates. Most described their communication with coaches as very open, as was the case with Tanya who said, "I'm completely up front and honest with [my coaches]. They're very, very supportive. They totally support me taking the time I need... They're very cautious with that." Brie had a different opinion. At the time of the interview she was headed back to the training centre after a break and was deliberating as to whether or not she would tell her coach about an inflamed tendon. This is how she explained her situation:

> If I told my coach... right now that I am injured, I would be under the assumption that I can't do anything. I couldn't [train]. Which isn't the case... The tendinitis thing I will probably keep to myself and see how it goes... and if it acts up, I'll probably say something... I don't know, I feel like coming into camp... I wouldn't want to be the one person that comes in and is like 'Well, I'm here but I'm not 100%.'

In addition to not wanting to inform her coach, Brie was reluctant to tell other team members about injuries. As she described it:

> I would say you want to appear as strong as you can. You don't want to get the stereotype of being the person who's always injured or I don't know, complaining or not [working] because you're not feeling a 100%. Most of athletes all agree that if you're not feeling a 100% you shouldn't be [training.]... I mean you try to be supportive but... it's a competitive environment.

While a couple of the athletes asserted that there was a risk associated with being labelled injury prone, the majority of the participants reported that their teammates and coaches were likely to be supportive. Hilary elaborated on this theme explaining that the group she was currently training with was different from those she had trained with previously. Whereas former groups avoided discussing injuries, her current teammates and coaches perceived the discussion of injuries to be a way of sharing knowledge:

> I know in the past... it was very hush, hush. 'Somebody's injured—don't talk about the injury, we don't want to hear about it.' Whereas us, we're totally open with it... We're all very open with it because I think we're unique and really want to learn about it as well... so that's good.

Hilary's comments reference the earlier discussion regarding teammates as a source of referrals but include an added nuance— specifically that coaches and teammates were a source of information and support when an athlete was injured. One athlete in particular provided additional insights into this theme. Unlike the other participants, Nicole trained with a very small group, and felt she was disadvantaged by not having other teammates' advice to draw upon. When asked how athletes learned about what types of treatments were most effective in treating injuries, she replied:

> Unfortunately I think a lot of it is just experience. You know, you go and you do it and you go 'That didn't work.' Or 'That really worked' and you learn from it. I think though

> that you learn a lot from other athletes and their experiences and if you talk to other athletes and say 'Hey, I had a similar problem and I did this, and this, and this, and it really helped.' Or I saw this guy and it really helped.' They can be really important in helping you do that.

In this way, the participants revealed that different training centres adopted different attitudes towards injury-talk and that the training environment impacted how athletes dealt with injuries or sought treatment.

4.6.2 Maintaining the Body and Optimizing the Machine

Being able to avoid injury and continue participating in their sport at the highest possible level was the most frequently cited reason for ongoing visits to CAM practitioners. While the athletes were reluctant to admit that they had injuries, all were graphic in their descriptions of conditions that had to be carefully *monitored* and *maintained,* and it was these conditions that they felt necessitated the involvement of various health professionals. For Tanya, treatments for her shoulder muscles had been the main reason for her visits to various practitioners since age 13:

> I've had shoulder problems pretty much my whole life. I have really loose shoulder joints and they cause a lot of problems... So I've had trouble all my life and so I started seeing a massage therapist when I was really young... My problem is that the small muscles aren't quite strong enough to hold everything in place so if I can have a massage on my pecs and on my rhomboids and those sort of things to make sure that they're all relaxed... my shoulder don't get as sore.

All of the athletes used words such as "maintenance" and "tune-ups" to describe the purpose of ongoing treatments from CAM practitioners. For example, some athletes spoke of a common

injury in their sport and described the importance of regular "maintenance" work in preventing this injury. One explained her maintenance strategy in the following manner:

> I have a rib that likes to jam-up quite often. I go [to massage] for that and they can loosen everything around there so that my rib will pop back out. So it's just general maintenance and making sure everything is loose and moving and the muscles aren't tightening up so that they tighten around the bones and then you get fractures.

Another participant described how her body "broke-down" in the absence of regular treatments:

> You are pushing your body to limits that it's not necessarily comfortable doing all the time. And I think every rower has seen someone at some point. And probably sees them quite frequently. And I mean it happened to me last summer— I wasn't seeing anybody and my body just like, it broke down. So they [practitioners] play a huge role in keeping us going, in keeping us healthy, and keeping us from breaking.

"Breaking" was used by the athletes as a euphemism for injury and once again was discussed in terms of performance rather than in terms of the physical pain associated. Hilary normalized the risk of injury by saying, "You're pushing your body so hard that someone's going to break and the people who are in that Olympic [team] are the people who haven't broken."

The vocabulary used by the athletes, including words such as "maintenance," "tune-ups," and "broke down," was consistent with the existing literature, which states that athletes often describe their body in terms that could equally be applied to a machine (Messner, 1990, Smith & Sparkes, 2004). Key to the discussion of the body-as-machine is the concept of functionality and performance. The well-maintained machine is not only one that is not broken; it is also one that is performing optimally. Optimization, or performance enhancement (to use a term commonly

employed when discussing elite athletes), was a theme raised by all of the participants to some degree or another when discussing their use of CAM. However, the strength of this theme was more evident in some interviews than in others. One long time national team member, Claire, described her use of various practices over the course of her athletic career in this way:

> As a teenager, with injuries and imbalances and a desire to be optimal, I had a very scattered approach. So I went to see *everyone, all the time.* I was packing in chiropractor, active release, physio, massage... The last three years, they streamlined it... we have a team of professionals. We will help you decide which of these people you need so that I'm not going to everyone... now I just feel like I know which ones I need and I dedicate my time to ones that give me return. And there are some that give me no return so I don't spend any time there anymore... I'm extremely grateful to all the practitioners I have worked with over my entire life because they've made me able to go out there and give 'er.

One of the older participants in the project was also the athlete representative on the board of her national sports organization. She spoke about the role of practitioners in enhancing performance:

> We've talked a lot about this in our meetings... In the past, I think it's been more of a like fixing people once things are broken role. Whereas we're really trying to push it more towards a maximizing your performance role... they should be there to make us better.

For one woman, there was no doubt in her mind of the role health practitioners played in her athletic career and she reinforced the theme of the "body-as-machine" (Franzoi, 1995) when she said:

> It [the use of practitioners] is very important to me because I think of my body as a machine and I think it's important that it's running very smoothly for [my sport]. And

> it's my job. So I think it I'm not maintaining the machine the way I should I'm not going to perform the way that I can.

When asked about the role of therapists in an athletic environment, all of the athletes agreed that they had the potential to improve the overall success of the program. Caroline explained:

> I definitely need them. I'm definitely the better athlete for having them because then I can go into workouts with my body feeling better, I can push myself harder and I've seen my scores getting better, my... performance getting better and I think they have a lot to do with that.

Claire was in agreement and her response included elements of the broken body theme when she said, "I just don't think I could do the same level of work without this stuff keeping my body together. It would just wear down and break down. I think that's what happens..."

4.6.3 Coping with Stress

In addition to treating injuries, preventing "breaking," and enhancing performance, the third and final reason for the use of CAM therapies identified by the participants was that of managing stress. Half of the participants indicated that the treatments prescribed by their CAM practitioners were intended to induce an emotional response. For example, Hilary described a situation where a physician who was treating her by using acupuncture "snuck in a couple of pins for some emotional things that she could read... she said 'Oh, I can tell you are upset, that's your happy one.'" Hilary described a second occasion where a co-worker who practiced Reiki offered her a treatment. As she described it, "I think I was just really— had not made a team or something and I was very emotional. And he laid me down and gave me this energy Reiki

massage. It was very nice." Similarly, Michelle described a situation where a naturopath practitioner incorporated relaxation exercises into the visit and prescribed high dose injections of vitamin B12 as a means of addressing stress. In Michelle's words:

> B12 is if you're not happy or you're feeling stressed out of kind of tired... I think it is 900mg that you get in one shot... I think it definitely reduces your stress levels. For the first couple of days you're kind of like 'Oh, my body needed that.' But it doesn't stay with you for too long.

The same practitioner ended the visit with 10 minutes of a relaxation exercise that Michelle described as "nice because how often do you just sit there and be like 'okay, relax.'... I felt a lot better after." Other participants described practitioners discussing the flow of energy or "chi" and the relation between the physical treatments they were providing and the emotional response.

The second manner in which CAM practitioners contributed to the emotional well-being of the athletes was through the provision of a space for the athletes that was stress-free and comfortable. Nicole tried massage at the recommendation of a teammate but instead of going to the recommended therapist made the decision to seek out a female practitioner. Her reason for this selection was that she felt she was better able to communicate with a female therapist and that this communication made the treatments more enjoyable and more effective.

> It's hard to get to that point where you... can be totally open about what your workouts are... what it feels like... you can just be more open communication-wise and not feel like anybody is judging you... It's just nice to feel that comfortable with someone. You can just let loose and know that they'll do the best job they can to figure it out for you.

Tanya made similar comments when she contrasted the high-stress training environment with the atmosphere in the treatment rooms:

> As athletes you put so much pressure and strain on yourself and I think these things allow you to find a way to relax your body and help it get into that recovery state. And I think it's a low-key atmosphere... I mean sometimes it's stressful because you're injured, but for the most part it's not stressful... you can joke around and have a lot of fun and that's not something you run into all the time within your sport.

In this way, the CAM practitioners were perceived to support the athletes in both the physical and the emotional aspects of their training and were considered by women to be a vital part of the support team.

CHAPTER 5: Discussion and Conclusions

This project has investigated the experiences of, and attitudes towards CAM as expressed by 12 female members of Canadian national non-contact sports teams. My findings have revealed the processes by which high-performance athletes first came to try CAM, the factors underlying their decisions to use CAM treatments on an ongoing basis, the evolution of their attitudes towards alternative health practices, and the role they perceived CAM practices and practitioners to have in their athletic careers. Furthermore, the findings elucidated the connections between the athletes' use of CAM, the behaviours of their sportsnets, their access to funding and extended healthcare coverage, and their views on the athletic body as a machine that needs to be maintained and managed. My study builds upon existing research which indicates that CAM utilization is linked to socio-economic status (SES), and a holistic orientation towards health. Additionally, my research extends the sociology of sport research into the behaviours and actions of high performance athletes and the theorizing around the sportsnet as a primary means by which risk and injury in athletic subcultures are normalized. This chapter will discuss these findings as they relate to the extant literature and will focus on the themes that have emerged from my study which have the potential to further inform our understandings of the experiences of elite female athletes and the role of CAM in a sport, thereby developing a knowledge base for the delivery of therapeutic services that are athlete-centred in their approach.

5.1 Understanding Rates of Utilization in Athletic Populations

The surveys by Nichols and Harrigan (2006), and Pike (2005) were the first indication that athletes were using CAM at rates much higher than the 20 to 42% seen in the general population (Eisenberg et al., 1998; Park, 2005). Indeed, Nichols and Harrigan (2006), and Pike

(2005) reported that varsity level and competitive club level athletes were trying CAM at rates comparable to those of individuals who were terminally ill or had multiple chronic conditions (Astin et al., 1998; Park, 2005). These findings suggested to me an opportunity for a sociological study exploring the reasons that athletes had for using CAM and examined how and why a sport milieu could foster such high utilization rates.

Since previous research projects had successfully employed Nixon's (1994) conceptualization of the sportsnet as a means for understanding the behaviours of athletic subcultures related to health behaviours and attitudes towards pain and injury (Young & White, 1995, 1999; Young et al., 1994), I also adopted the sportsnet as a means of focusing my investigation. The sportsnet theory draws attention to the ability of group practices in a sport setting to modify the behaviours of individual members. As such, it is congruent with symbolic interactionism, which draws attention to the influence of past experiences and current environments on the athletes' values, beliefs, behaviours and interactions as well as the meanings they attribute to CAM, injury, and sport participation (Blumer, 1969). My findings revealed that the sportsnet's sphere of influence included how CAM was used and portrayed within the groups. While the athletes reported individual preferences for certain types of treatments or practitioners, the words that the athletes used to describe CAM or describe the purpose of CAM, was remarkably consistent not only among athletes in the same sport, but also between athletes from different sports. The sportsnet served to construct particular narratives related to CAM and the first and strongest of these narratives was that CAM practices and practitioners provided vital services by helping to maintain the athletes' bodies and ensuring their continued participation in their sport. In addition to normalizing the use of therapies, the sportsnet also normalized the role

of the CAM practitioners hired by national sports organizations and cast them as team members interested in contributing to the overall success of the program.

In addition to the importance of social interactions with members of sportsnet, one of the most important and surprising findings from my research was the actual rates of CAM utilization by the athletes I interviewed. Based on my reading of the work by Nichols and Harrigan (2006), and by Pike (2005), I expected to find that the athletes had tried a number of practices and were consistently using one or two forms, with massage therapy, chiropractic, and acupuncture being the most popular (and indeed this was supported by the data). However, nothing in the existing literature— neither that related to the rates of CAM use in special populations nor the quantitative work on CAM use by athletes— gave any suggestion that athletes were receiving multiple CAM treatments every week and sometimes every day. In fact, athletes spoke of going for CAM treatments in the same way that they described getting a good night's sleep, maintaining a healthy diet, and showing up for training. Moreover, the participants indicated that the use of CAM therapies was integral and routine part of their larger training programs and practices.

Given that the use of massages, chiropractic adjustments, needling, ART, and other CAM treatments went far beyond simply being popular, and might better be described as ubiquitous, it is important that we reconsider existing theories regarding the use and allure of CAM. The narratives of the women revealed that although they were using CAM all the time, they *were not injured all the time.* That is to say, at least as it was understood by the athletes, that the extremely high rates of CAM use cannot be solely attributed to the increased rate of injury associated with high level sport. The broader implication of this finding is that the extant research has overlooked the extent and nature of CAM use among athletes and has not fully

elucidated the reasons that athletes turn to CAM practices and practitioners. From a methodological perspective, my findings illustrate the importance of combining quantitative work with qualitative projects that are more suited to uncovering nuances of athletes' behaviours and socially constructed meanings. Additionally, my research suggests that future survey research needs to measure the usage of CAM not just in terms of what athletes use but also the frequency with which they engage in CAM therapies on a daily and weekly basis in order to more fully capture the ways in which CAM has permeated sport subcultures.

5.2 Carding and Status as a Predictor of CAM Use

In order to fully understand how the athletes came to be using CAM at such an astonishing rate, it is necessary to comprehend how the Sport Canada system of carding functions, as well as how it intersects with other hierarchal structures at the level of national sports organizations. The existing literature has indicated that CAM use is positively correlated with income (Eisenberg et al., 1998; Esmail, 2007; Park, 2005), and can more broadly be described as influenced by the socio-economic status (SES) of the individual (Conboy et al., 2005). The implication is that because CAM exists outside of conventional medical pathways, it is not often covered by standard health care plans (although this is changing), and therefore individuals must have either extended health insurance or the financial resources to pay out of pocket for treatments.

Although socio-economic status is typically defined either in terms of income or education, my findings revealed that carding was the primary financially linked factor delimiting the athletes' use of CAM. Certainly those individuals who had higher incomes and families who were willing to offset their costs were able to access CAM more easily than those athletes on

restricted incomes. However, carding offered the athletes several avenues for accessing treatment irrespective of their annual incomes. The monthly stipend provided them with some (albeit limited) income; the status associated with carding meant they were permitted to book treatments with practitioners hired by their sport organizations; and the extended health care plans (usually CAIP) associated with carding reimbursed them for treatments. All of the athletes reported that their use of CAM services started or significantly increased when they were first carded, and those that had had their carding terminated or suspended reported a correlated decrease in the number of treatments by practitioners. The implication for future research is that, while financial resources are a factor in determining the rates of CAM use in elite populations, the socio-economic status (Conboy et al., 2005) or social capital (Bourdieu, 1991) of athletes is not captured using standard models.

Additionally, this project reveals that a national team member's ability to access services needs to be multi-dimensional and include consideration, not only of how she pays for treatments (or does not pay as the case may be), but also how the gendered and sporting hierarchies within which she is situated influence her ability to obtain CAM treatments. Carding is an example of a hierarchal structure in the Canadian sport system, with the most obvious division being between those that receive carding and those that do not. However, as evidenced by the experiences of the women I interviewed, even among carded athletes, resources are not distributed equitably. For example, participants from some sports indicated that their organizations were able to hire full-time practitioners who worked with all teams members, whereas participants from different organizations had to spend their carding stipend on treatments from providers outside of the organization. Still other athletes described hierarchies within their organizations with respect to who could access services and when. Some athletes indicated that these hierarchies were based

on the success of particular athletes while others described gendered hierarchies. Both of these conditions can be understood through the application of hegemonic masculinity theory which asserts status is always relational and exists both within groups and between groups. These findings call for a more comprehensive analysis of the services in place within each national sports organization. It would be particularly informative to consider how the past successes of the different sports (e.g. at the Olympics) and the status of the individual sports within Canada impacts an organization's ability to offer services to their athletes. Additionally, it would be important to further investigate how the privileging of certain groups over others shapes access to CAM.

5.3 Is That an Injury?: New Reasons for the Continued Use of CAM

In addition to exploring how athletes accessed and utilized CAM, this project draws attention to the reasons that the women had for continuing/discontinuing practitioner-delivered treatments. Pawluch et al. (2000) studied the use of CAM by individuals living with HIV/AIDS and concluded that there was no simple or singular explanation for the appeal of CAM. They reported that the use of CAM was interpreted in many different ways by their participants and that it was possible for an individual to explain his/her use by adopting a variety of narratives (both sequentially and concurrently). Similarly, the women I interviewed described CAM as a way of treating new injuries, managing chronic conditions, pro-actively preventing injury, coping with stress, and/or enhancing performance. The strongest theme in the data was the employment of CAM therapies to maintain the body as it was being subjected to high training loads, in terms of both the intensity of the training sessions and the frequency/duration of these sessions. Athletes from different sports and different training locations used remarkably similar

language when discussing the role of CAM as they stated that the treatments addressed "imbalances," relieved "soreness" and "tightness" and, most importantly, kept the athletes from "breaking." The women understood regular CAM use to be a necessary means of dealing with what they called "issues" before they escalated and became "injuries."

The observation that the participants were reluctant to use the word injury to describe their current condition is supported by existing research on the meanings athletes attribute to injury and their subsequent "injury-talk" (Young et al., 1994). Previous works have also reported that athletes "disrespected pain" (Young et al., 1994, p. 184) by questioning the definition of injury, referencing pain as an everyday occurrence that can exist independent of true injury, and differentiating between conditions that were painful and conditions that limited their sport participation (Young & White., 1994, 1999; Young et al., 1995). I argue that the reluctance to admit being injured is at least partially attributable to the poor reception that such admissions received from other members of the person's sportsnet (Young et al., 1995). The axiom "no pain, no gain" (p. 182) was used by Young et al. (1994) as an example of how a sportsnet, especially one imbued with hegemonic masculine ideals, can reproduce narratives that encourage athletes to hide injury and play through pain. This theory was not supported in my data, which illustrated instead that although the women normalized pain and injury, they felt that the members of their sportsnet were supportive of them when injured and encouraged them to take time off and go for treatments. In contrast, the athletes were the ones who felt that it was "tough" to take time off and struggled emotionally with not being able to fully participate in their sport. While this could be explained as an internalization of the pressures in a sport subculture to value and reward athletes who are winning rather than those who are injured, another possible

explanation could be that the athletes in this project were involved in individual sports[8]. As such, their sportsnets differed from those explored in previous works (Theberge, 1997; Young & White, 1995) because the other athletes in their training groups did not have the same level of vested interest in their continued participation. On a team, the pressure placed on an athlete to ignore injury could be attributed to a reluctance on the part of the team to admit the group as a whole is not functioning at full capacity whereas recognizing or labelling a training partner as injured does not have the same consequences.

In addition to observing commonalities related to how the athletes defined injury and resisted describing themselves as injured, certain words and phrases were repeated by athletes in different sports and different training locations. For example, in addition to the previously mentioned "not breaking," being "sore," and feeling "tight," the athletes spoke about ribs wanting to "jam-up," going to the chiropractor to "get cracked" or needing the "release" from a massage. I contend that, in the same manner corporate environments develop jargon to summarize and communicate practices and ideas common to their work (Chisalita, Puerta Melguizo, Hoorn, van der Veer, & Kok, 2005) so too have athletes and their various sportsnets adopted phrases to describe their reasons for using CAM or the benefits of certain treatments to athletes. Particularly fascinating is the observation that these words and phrases were repeated by athletes in different sports and training in different locales suggesting that Nixon's (1994) concept of the sportsnet as the individuals that surround an athlete needs to be expanded and further elucidated to better explain how behaviours and practices are transmitted *between* sportsnets. I assert that, based on the descriptions that the participants provided of the CAM

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[8] While there is a team component to rowing and canoe/kayak, all of the participants in this project were currently training in single person boats and did not strongly identify as members of a crew.

practitioner as a collaborator, we need to first recognize that practitioners have/are moving from the periphery of the sportsnet towards a more central role where they are better situated to inform the attitudes and behaviours of the athlete. Additionally, the shared language between the sportsnets speaks to the interplay between sport and the broader social context and the ways in which socially constructed meanings are acquired through and influenced by interactions with other social actors. Furthermore, it is important to underscore the fact that team practitioners were often a key source of information and referrals to CAM practitioners. What makes the practitioners unique is that, unlike most other sportsnet members, their work is not sport-specific and many therapists are in fact employed by several national teams at once or treating athletes from a variety of sports at their clinics. As such, they are in the rare position of being able to observe the practices in one sportsnet and facilitation the transmission of these practices to other sportsnets. The role of the CAM practitioner in the consolidation of practices between sports, transmission of knowledge from one group to another, or communication of a standardized message has not yet been studied and represents a novel direction for future work.

5.4 Limitations of the Project

While the data from this project are sufficiently rich to provide new and substantive insights into the experiences of elite female athletes in a Canadian context, the design of the study is not conducive to making overly broad claims. In other words, the generalizability of the findings is limited by the small sample size. Another limitation is the fact that all of the participants were white, Canadian born, and middle-class. As explained earlier in the document, my sample reflects the barriers that women of colour and low socio-economic status face when trying to access sport. Another inadvertent limitation is the fact that I did not interview male

athletes. I purposefully made the decision to recruit only female athletes because so much of the existing research has used males as the normative sample and I wanted in my own small way to address this imbalance. While I remain committed to this decision and feel incredibly fortunate to have had the opportunity to meet so many inspiring, strong women, I recognize that this decision limited my ability to fully examine certain topics. For example, while I had hoped to address the research that suggested that CAM was a gendered practice and was particularly attractive to women because of the alternative it offered to a paternalistic medical model, I now would argue that to fully explicate the gendered nature of CAM use among athletes, it is important to investigate both men's and women's experiences.

The final limitation of this project is a practical one. The project was done in partial fulfillment of my Master's program and as such was limited by my own abilities and by the resources available to me as a student. While I certainly would have loved to interview more women from a broader range of sports and geographical locations, I worked within pre-determined parameters to ensure that the study was one I could feasibly complete in the 12-month period. I also recognize that my interview and data analysis skills are still developing and I may, at times, have missed follow-up questions or overlooked themes significant to the lived experiences of the participants in this project despite my best efforts (and those of my supervisor) to adopt a constantly reflexive approach. To that my only response is that the entire process has been one of learning and I am grateful to the women for providing me with the opportunity to improve upon my abilities as a researcher.

5.5 Future Directions

Having now identified CAM as a vital component to the training of many female national team members, I propose that a more systematic analysis of what types of services are being offered to athletes is needed. The data from this project lead me to conclude that despite the fact that all the women were carded and received similar monthly stipends, the services that they were able to access varied from sport to sport, and even within sports. Given that the Athlete Assistance Program is meant to be a national initiative that is intended to support Canada's high performance athletes and deliver services deemed essential to their international success, it seems practical, if not imperative, to expect that a minimum standard of services is being offered and that a means of evaluating the success of each organization in delivering these services to the athletes is in place. An examination of the efficacy and success of the individual organization's service delivery structures would also provide a starting point for investigating whether or not the hegemonic relationships observed in this project can be projected to an organizational level— for example, by questioning whether or not sports with a higher profile in Canada were able to offer more services to their members.

My findings revealed that some athletes were expected to use their stipend to pay for therapeutic treatments (although some of the expenses would eventually be reimbursed by CAIP) while others were able to save their money and access team practitioners. This data suggests that there is a lack of a common understanding among sports organizations as to the purpose of the stipend with respect to which expenses the organizations are expected to cover and which expenses are the responsibility of the individual athlete. Exploring the different models used by various teams across Canada would not only further our understanding of what athletes are

using, but it would be the first step in determining which sports are meeting the needs of their athletes and which organizations need to reconsider the configuration of their programs.

It is painfully evident from the narratives of the women that they considered access to CAM services to be essential to their continued participation and success as athletes. Given the potential that the women saw in CAM to prevent injury and enhance performance, it follows that we need to do a better job of ensuring that the athletes have the services they consider the most beneficial when they most need them. This means not only setting standards of practice for organizations but also assisting them in expanding their capacity to deliver services so no athlete is left waiting for treatment since, as Caroline so eloquently stated, "You never know what someone could be capable of if they're really taken care of from the get go."

In conclusion, through the use of in-depth interview data with a dozen of Canada's top female athletes, this project has challenged us to consider new possible explanations for the use of CAM. The athletes in this project did not turn to CAM out of frustration with biomedicine or in a desperate search for a cure, they turned to CAM because they felt it had the potential to enhance, if not their performance, certainly their daily lives as athletes. The women saw CAM as an essential part of their training and believed it allowed them to manage both the physical and psychological stress of high training loads thereby extending their athletic careers and enabling them to train and compete at their full capacity. Furthermore, the participants indicated CAM practitioners were fully integrated into their training environments and were appreciated for the services and referrals they provided making them valued members of the sportsnet. This project is a first, but critical step in towards a richer understanding of the value CAM hold for high performance athletes.

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APPENDIX A

Study: The Use and Experience of Complementary and Alternative Medicine by Elite Female Athletes

The following questions will be the guide for the two interviews. The interview style is semi-structured and the questions will be open-ended and may be changed as new themes emerge in the data and require further clarification. Prompts, probes, and follow-ups will be added as required. Furthermore, questions from Interview #1 could be asked in Interview #2 and vice versa should the need arise. The order of the questions will be guided largely by the responses of the participants.

Interview #1

Background/Personal History

1. Can you tell me a bit about yourself and how you got involved in sport?
2. Can you tell me more about your more recent sport experiences and your current training situation (where, with who, for what competition, etc.)

Health Care Practitioners

1. Can you tell me what you do to stay healthy while training/competing?
   - Who is involved in this? What health professionals do you see, if any?
   - What do you see each of them for?
   - Are there others you have tried in the past but are no longer seeing?
   - Why did you first see them and why have you since stopped?
   - How much money do you spend on visits to health care professionals (in a month, in a year)?
   - Are you reimbursed for any of these visits? If so, how? (health plan – parents, work, student, etc.)
   - Has cost ever affected your decision to see a health care practitioner? How so?

Team Staff

1. Does your team have medical staff?
   - Can you tell me about the practitioners affiliated with your team?
   - Who are they?
   - What is their area of practice?

- Can you describe the role they play on your team?

2. Are there any health practitioners that are closely affiliated with your team but aren't officially employed by your team? Please describe their involvement to me.
3. Of all these people, which ones have you seen?

Use of CAM

1. When you hear the term 'Complementary and Alternative Medicine,' what do you think of? What types of treatments would you include in this?
2. What types of CAM have you tried?
3. Why did you first try these therapies?
   - What made you decide to try them?
   - Had you already tried something else first?
4. What do you think of the CAM practices that you have used?
   - Of all the practices/therapies you use, which do you see as being the most beneficial to you? The least?
5. Are there any CAM practices you've been considering but haven't tried yet?
   - Any that you are interested in learning more about? Why or why not?
   - What do you recommend/warn against in terms of CAM, if anything?
6. Do any of your family members use CAM?
   - If so, what forms of CAM do they use?
   - Do you talk to them about their CAM use? Your CAM use?
   - If one of them came to you and said they were thinking of trying out a new form of treatment, what would you say to them?

Interview #2

Attitudes regarding CAM

1. Do any of your family members use CAM?
   - If so, what forms of CAM do they use?
   - Do you talk to them about their CAM use? Your CAM use?
   - If one of them came to you and said they were thinking of trying out a new form of treatment, what would you say to them?
2. How do you think CAM practitioners differ from Western medicine practitioners, if at all?

Referrals

1. Who influences your decision to see health care practitioners?
2. What factors do you consider when you're picking a practitioner or a treatment type?
3. Where would you say you get most of your health related information?

Sportsnet

1. How open are you with people about all the health practitioners you visit?
    - Coach, teammates, family members, friends
    - Do you believe it's important that he/she has this information? Why or why not?
2. Do you ever feel encouraged or discouraged to visit a specific practitioner or try a certain treatment? By whom? Can you tell me about this?
3. What are the expectations regarding your use of practitioners associated with your team or sport association? Are you encouraged or discouraged to seek other practitioners?
4. What do you see as the advantages and/or disadvantages of visiting practitioners associated with your team or sports association?
5. If you visit a practitioner associated with your team or sport association, what kind of expectations do you have regarding the confidentiality of your visit?

Use of CAM by Athletes

1. What advantages or disadvantages do you see CAM having specifically for athletes? Are there any?
2. Do you think the types of CAM you use (or don't use) would be different if you weren't an athlete? How so? Do you think you are more or less likely to try out new forms of CAM because you are an athlete?
3. Do you see your use of CAM changing in the future? Can you describe a situation that might make you stop using a specific type of treatment?
3. When you retire from your sport (at least from competing internationally), will you still continue to use the same practitioners, the same therapy types? Why or why not?
4. What do you think is the future of CAM specifically as it relates to athletes? Do you think it will become more or less popular? Why?

APPENDIX B

INFORMATION SHEET AND CONSENT FORM: ELITE FEMALE ATHLETES AND COMPLEMENTARY AND ALTERNATIVE MEDICINE (CAM)

Study Title: The Use and Experience of Complementary and Alternative Medicine Among Elite Canadian Female Athletes

Brief Description of the Study: This study seeks to explore how female members of Canadian National Teams are using CAM. In particular, we are interested in finding out more about:

- What types of practitioners and therapies athletes are using.
- How this usage has changed over the course of athletes' careers.
- How athletes make the decision to try a new therapy.
- Who they consult during this decision making process.
- What role (if any) athletes perceive CAM to have in their training and competition regimen.

The results of this study will help understand how athletes select health care services and the role they see these services playing in their athletic experiences. The information generated in this project may help guide policy makers in their decisions regarding what services national team members are interested in accessing and how programs can better meet the needs of the athletes.

Andrea Bundon, a graduate student in the School of Human Kinetics at the University of British Columbia, will be conducting the research as part of her Master's thesis. Her supervisor, Dr. Laura Hurd Clarke, an assistant professor in the School of Human Kinetics, will oversee the project.

The Interviews and Your Participation: Your perspectives on CAM, Western medicine, and the role these therapies play in the lives of elite female athletes would be extremely helpful and very much appreciated as we research the topics mentioned above. You would be asked to participate in two interviews, each lasting approximately 60 minutes and scheduled approximately six weeks apart. Interviews can be conducted at your training facility, a community centre, at the UBC campus, or another location of your choosing. The interviews will be recorded on a MP3 player.

Confidentiality and Anonymity: All information resulting from the interview will be kept confidential and your name will not be used in any of the documents resulting from this study (e.g. Master's thesis, published articles, conference presentations). The transcripts from the interviews and the digital audio files will be stored on a password protected computer. *Consent forms* (see below) will be kept in a sealed envelope in a locked filing cabinet and stored

separately from interview transcripts. According to university policy, all transcripts, audio files, and consent forms will be stored for five years and then destroyed.

Interview Feedback: Participants may request copies of personal interview transcripts to ensure the researcher has accurately captured ideas and opinions.

Interview Results: Information generated from these interviews will be published as part of a Master's thesis and in scholarly journals. Participants may request a summary of the research findings following the completion of this project as well as copies of published articles.

Your Voluntary Participation: Your participation is entirely voluntary and you have the right to withdraw from the project at any time. You are also free to not answer any question. If you have any concerns about your treatment or rights as a research participant, you are encouraged to contact the Office of Research Services at the University of British Columbia, at (xxx) xxx-xxxx.

Risks and Benefits: Although this project is considered to be of minimal risk, you may feel uncomfortable with some of the questions asked. If you do not wish to answer any question, just say 'pass' and we will move onto the next section. There may be no direct benefit to you by your participation in this study but your involvement will contribute to our understanding of the health behaviours of high-performance athletes.

Further Contact Information or Concerns: If you have any questions or require further information regarding the project, please contact Andrea Bundon at (xxx) xxx-xxxx or her supervisor, Dr. Laura Hurd Clarke, at (xxx) xxx-xxxx.

CONSENT

I have read the above information and understand the nature of the study. I understand that participation in this study is voluntary and I may refuse to participate in or withdraw from the study at any time.

I hereby agree to the above stated conditions and consent to participate in this study.

Your signature below indicates that you have received a copy of this consent form for your own records. Your signature also indicates that you consent to participate in this study.

Signed: _____

Date: _____

APPENDIX C

The Use and Experience of Complementary and Alternative Medicine by Elite Female Athletes

The following questions are used to obtain background information about you. Please answer all questions as accurately as possible.

1. Date of birth:_____ Place of birth:_____
2. Marital/partner status:_____
3. Number of children, if any:_____
4. Please indicate the highest level of education you have obtained:
   - □ Public school
   - □ Some high school
   - □ High school diploma
   - □ College or university - undergraduate
   - □ Technical school
   - □ Graduate school
   - □ Other – please specify: _____
5. What is your current occupation? _____
6. What is your religious affiliation?_____
7. Which income bracket do you fall under?
   - □ Under $10,000
   - □ $10-20,000
   - □ $20-30,000
   - □ $30-40,000
   - □ $40-50,000
   - □ $50-60,000
   - □ $60-70,000
   - □ $70,000 +
8. What is your ethnic or cultural background? _____
9. What sport do you compete in? _____
10. At what level are you carded? _____
11. How many years have you been competing on a national team? _____

APPENDIX D

COMPLEMENTARY AND ALTERNATIVE MEDICINE USAGE

Please indicate which therapies or practices you have used on at least one occasion.

- ☐ Aboriginal healing practices
- ☐ Acupuncture
- ☐ Aromatherapy
- ☐ Ayurvedic medicine
- ☐ Craniosacral therapy
- ☐ Chinese herbal medicine
- ☐ Chiropractic
- ☐ Homeopathy
- ☐ Hypnosis
- ☐ Massage
- ☐ Meditation
- ☐ Naturopath medicine
- ☐ Qi Gong
- ☐ Reflexology
- ☐ Reiki
- ☐ Religious healing traditions
- ☐ Other

_____

Appendix E

The University of British Columbia
Office of Research Services
Behavioural Research Ethics Board
Suite 102, 6190 Agronomy Road, Vancouver, B.C. V6T 1Z3

CERTIFICATE OF APPROVAL - MINIMAL RISK

PRINCIPAL INVESTIGATOR:	INSTITUTION / DEPARTMENT:	UBC BREB NUMBER:
Laura Hurd Clarke	UBC/Education/Human Kinetics	H07-02465

INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:

Institution	Site
UBC	Vancouver (excludes UBC Hospital)

Other locations where the research will be conducted:
Interviews will take place at the location of the participants' choosing. Possible sites will include the following: *Training centres (i.e., gyms, fitness facilities, Canadian Sport Centres) *Interview rooms on UBC campus *Community Centres

CO-INVESTIGATOR(S):

Andrea M. Bundon

SPONSORING AGENCIES:

N/A

PROJECT TITLE:
The Use and Experience of Complementary and Alternative Medicine Among Elite Canadian Female Athletes

CERTIFICATE EXPIRY DATE: December 3, 2008

DOCUMENTS INCLUDED IN THIS APPROVAL:	DATE APPROVED:
	December 3, 2007

Document Name	Version	Date
Consent Forms:		
Appendix A - Information and Consent Form	v. Nov.15	November 15, 2007
Advertisements:		
Appendix B - Recruitment Poster	v. Oct.12	October 12, 2007
Questionnaire, Questionnaire Cover Letter, Tests:		
Appendix C - Interview Schedule	v. Oct.12	October 12, 2007
Letter of Initial Contact:		
Appendix D - Letter of Contact	v. Nov.15	November 15, 2007
Other Documents:		
Appendix F - CAM practices	v. Oct.12	October 12, 2007
Appendix E - Biographical Data	v. Oct.12	October 12, 2007
Appendix H - Memo to UBC	N/A	November 15, 2007
Appendix G - Peer Review Form	N/A	October 12, 2007

The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.

Approval is issued on behalf of the Behavioural Research Ethics Board and signed electronically by one of the following:

Dr. M. Judith Lynam, Chair
Dr. Jim Rupert, Associate Chair
Dr. Laurie Ford, Associate Chair