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Béla József Pavelka

Open Water as a Sportscape

Analysis of Canoeing in Finland for Developing Sport Infrastructure and Services

JYVÄSKYLÄN YLIOPISTO

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ABSTRACT

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Canoeing, as a nature-based sport, is suitable for both leisure and competitive purposes in its various forms. The canoe provides a more close-up experience of aquatic nature than any other vessel, and in its competitive form there are a dozen disciplines available for differing tastes and talents. Canoeing as a sport and recreational activity has not yet been researched from the sport services point of view; though nature tourism has been studied frequently.

This multidisciplinary work challenges misconceptions about canoeing in Finland. The historical-cultural and natural environment, activated economic and non-economic resources will be examined. The research by nature is descriptive, with both quantitative and qualitative methods being used. The Triangular pillar structure of sport services was developed as the theoretical framework of this study. The target of the research is Finnish canoe clubs and the Finnish Canoe Federation.

Contributions to the socio-cultural capital of the nation have been unfolded from historical references, art and literature. Canoeing had been an integrated part of Finnish culture since ancient times but due to unknown reasons this once flourishing activity diminished. The natural environment and climate are suitable for canoeing for between 80 to 130 days a year in different parts of the country. Concerning available resources in canoeing it was found that the canoe clubs and the Federation operate with a very low profile. Recreational canoeing routes and competitive sport facilities are randomly dotted around the country, and their quality does not meet today's requirements. Canoe clubs in general are short of economic resources due to a low level of operation and unprofessional management, while available non-economic resources are not utilised adequately.

In recommending actions to be taken the researcher suggests that the Federation should act as the responsible representative of all canoe clubs and canoe sport in Finland. It should develop an involving operation towards the lower organisational layer with the clubs at the same time playing a proactive role with regard the national administrational layer in order to support the development of recreational and competitive canoeing in Finland. Clubs should become more customer oriented service providers rather than the introverted operation that currently exists. The increase of youth involvement, development of facilities, infrastructure and services are the major issues to deal with in the near future so as to further the development of canoeing in Finland.

Keywords: Sportscape, Infrastructure, Service, Environment, Resource Management

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By presenting to the wider public this thesis I have arrived at the current peak of my academic career, a place I had not planned on being when I was younger. I was told that as a young child I used to say: "why study, I will be a sportsman anyway!" Therefore, I have to thank my parents, József and Ágnes for their devoted love and patience; and the experience of my teachers for guiding me through the first and second grades of education. I am also grateful to my junior coach, Ákos Leidinger, who always kept an eye on my school progression besides my development as a sportsman. The first time I ever became enthusiastic about studying was when I undertook my first university course; this was after being a full-time professional athlete for two years. I would like to thank all my professors and lecturers for the contributions they have made to my intellectual capital I have collected throughout the different courses in three universities, and also the understanding towards the hurdles present as a professional athlete-student. Special thanks go to the late Mihály Nyerges, whose support and encouragement to continue my studies from Bachelor's to Master's level led me to the University of Jyväskylä, where at a later stage I was offered the chance to undertake doctoral studies. As one of his last works he contributed to this thesis as a reviewer.

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I would like also to give credit to the athletes, coaches, recreational paddlers and other active people in the Finnish canoeing world who encouraged me to perform this work, including all those representatives of clubs and the Federation, who took the time to cooperate with me during the data collection process and beyond. I hope they all will find some usefulness in reading this book.

My gathered experiences in canoeing as athlete, coach, event manager, recreational programme organiser and guide over three decades and seven years of devoted academic research are compressed in the following pages.

Jyväskylä 10.1.2011
Author

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“On a quiet river or lake it [canoeing] has a timeless quality that refreshes the mind, relaxes the body, and is an experience we share with our remote ancestors.”

[An interviewee]

1 INTRODUCTION

Finland is known the world over as the land of a thousand lakes. The abundance of inland lakes, rivers and coastal seawater are excellent for practising water sports of every kind. More than a tenth of the country is covered by rivers and lakes (Maanmittauslaitos 2007). This makes Finland the country with the richest source of inland water surface in the European Union. The legislative basis for practising nature-based activities and sports is laid down in the "Everyman's Right". This law has evolved from age-old habits and commonly practiced unwritten codes of behaviour in the Nordic countries into its present form. In its written form in Finland the law provides broader possibilities to experience nature than do similar laws for citizens in any other European countries. It secures public access to land and water regardless of its ownership status. The law entitles people to temporarily stay or set up camp, to pick wild fruits, such as berries and mushrooms, and to fish (The Finnish Ministry of the Environment 1999). Restrictions apply in natural reservations, sanctuaries, and more widely during the nesting and breeding season, yet more than 90% of Finnish territory is covered by the "Everyman's Right".

The public sector generally welcomes developments in organised sports activities as they have positive effects on individuals and on society as a whole (Taks, Renson & Vanreusel 1995; Telama et al. 1999; Gratton & Taylor 2000; Hylton and Bramham 2007). In modern societies leisure activities and sport evolved as tools to satisfy the human need for movement (Nádori & Szilasi 1976), and the demand for leisure activities is continuously growing (Priestley 1995). Even though sports federations and clubs are non-profit organisations, they occupy a position in the industry of their sport (Bayle & Robinson 2007). Sport clubs, which are dependent on voluntary work, are not capable of efficient resource activation so as to answer demand for quality sport services (Puronaho 2006). Changes in sport financing, emerging expenses of sport participation and the professionalising process of the voluntary based sport structure in Finland force sport organisations to enrich their resources in innovative ways (Puronaho 2006).

Elementary human activities, such as hunting, fishing, or berry picking, are all connected to physical activities, and they have taken place since historical times in nature (Tarasti 1988). Even today nature is still experienced as being a more favourable place to be than urban environments (Herzog et al. 1997; Suomi 1998). Nature has an effect on well-being and also helps in the recovery of medical patients (Ulrich 1981). Finnish people enjoy participating in outdoor activities (Suomi 1998; Xiaolin 2000), and the vast majority of them engage in some kind of nature-based recreational activity (Sievänen 2001).

The term 'sportscape' originates from John Bale (Bale 1994) when he described the applied environment for sporting purposes, as an analogue for 'landscape'. Landscape is not only the visible scenery of the built and natural environment, but the way it is experienced through the influences of the socio-cultural environment, the people whom the experience is shared with, the climate in general, and the actual weather, while the experience is taking place. Continuing along the line of Bale (1994) sport is a social phenomenon, thus sporting activity is not natural. The landscape of sport develops along with the main purpose of the sporting activity - achievement sport, recreational sport, or occasional physical activity for experience. The higher the performance level is, the more artificial, standardised environment is required (Bale 1994). Standardisation and independency from natural influencing factors such as temperature changes, wind, precipitation, and variations in light are meant to provide equal conditions to all participants and a comparable basis for records to be set in different parts of the world at the top level. In general the "sportscape", just like the 'landscape' includes the socio-cultural, natural and architectural environment (Bale 1994). In this sense, the sportscape of canoeing is not only the surrounding nature, but also the waterways, the facilities in use, the used equipment, the people the experience is shared with and the personnel in service.

Canoeing, as a nature-based sport, is suitable for both leisure and competitive purposes in its various forms. As a leisure activity it provides a unique way for experiencing nature (Räsänen & Saari 2004). This was expressed picturesquely by one of the interviewees, whose words were chosen to be the motto of this work. The canoe and kayak are harmless to the environment. They transport adventurers and their equipment conveniently and provide a more unique perspective for experiencing aquatic nature than any other vessel (IOC 2006). The equipment needed for canoeing is simple and it is easy to learn the basic techniques to use it. It is safe and is a suitable way of exercise for many physically challenged people (Zeller 2009). Nearly half of the population is involved in waterborne activities in Finland. It is estimated that as many as between 28,000 to 250,000 people participate in canoeing, in rowing activates between 240,000 to 1.8 million people, and in yachting and sailing between 5,200 to 62,000 people (Sievänen 2001). These sports share rather similar needs. The large deviations in estimations are due to the used methods. Is a fisherman in a rowing boat considered as a rower? In order to keep the scope of the dissertation within limits I am going to focus solely on canoeing activities.

In this research the infrastructure i.e. the network of facilities their quantity and quality is examined. The largest and most expensive part of the infrastructure is the open water area. That is the space where the activity takes place. As for facilities, storage places of boats and other necessities, embarking and landing places, equipment and service quality, like toilets, fireplaces, or the possibility to stay overnight are considered.

In its competitive form, canoeing provides a wide variety of opportunities for differing talents. There are at least six international federations governing more than a dozen types of competitive paddle sports, which differ in nature from canoeing, yet are at the same time similar to it. The International Canoe Federation (ICF) today is the sole representative of paddle sports in the Olympic movement and is recognised by the International Olympic Committee (IOC). ICF administers sprint, slalom, wildwater and marathon canoeing and kayaking, canoe polo, canoe sailing, freestyle kayaking, dragon boating and ocean racing. The International Dragon Boat Federation (IDBF) is the world governing body for the dragon boat sport. It is a member of the General Association of International Sports Federations and is also recognised by the Olympic Council of Asia. There is a debate ongoing between the ICF and IDBF to who has the governance rights of dragon boating. The World Waveski Surfing Association, International Rafting Federation, International Va'a Federation supervise the respective paddling discipline in their name.

Among the numerous variations of paddling sports, one can find technical, endurance, power, and skill dominated disciplines for both individuals and teams alike. Moreover, canoeing is an integrated part of many multi-sport events. For example, in Quadriathlon, swimming, running, biking and kayak paddling are the featured disciplines, and in x-adventure events individuals, pairs or teams orientate a several-hour, sometimes even 2-3 days long route, by foot, bike and canoe. The International Life Saving Federation in its work on water safety and rescue, lifeguarding and lifesaving sport, has also put effort into paddle sport education.

The Finnish media has recently increased interest in canoeing (City-lehti 2005; Helsingin Sanomat 2007). An increase in the number of occasional visitors, both Finns and foreigners, renting canoes has been experienced. The demand for nature tourism has grown and numerous companies have started operating recently in this field in Finland. Most of them also provide canoeing activities in their programmes (Saarinen & Järviluoma 2002).

Starting from the 1990s, nature tourism has been studied, where forestry and environmental scientists were the pioneers, and are still the most active today (Tarasti 1988; Sievänen 2001; Saarinen & Järviluoma 2002; Tyrvänen &Tuulentie 2007). The aquatic environment (Ryhänen 1999; Tuohino 2002), socio-economic aspects (Page & Getz 1997; Olkio & Eloranta 2007) and social interpretation (Kane & Tucker 2004) of activities have been of minor interest to researchers. Canoeing is represented in publications only in its recreational form and as a segment of tourism (Tuohino 2002; Olkio 2006; Maaja Vesi Oy 2006). From this the demand and supply of Finnish canoeing services was iden-

tified and it was concluded as to whether or not opportunities that lay within canoeing and nature tourism were being utilised (Ryhänen & Härkönen 2002).

During this thesis the terms canoe and canoeing refer to the activity made in either a canoe or kayak, unless explicitly defined, as these are referred to as being basically the same thing in British English. Canoe and kayak are defined as lightweight boats, pointed at both bow and stern, with the paddlers facing the bow. A canoe is propelled by single bladed paddles, a kayak by double bladed paddles. A Canadian canoe is open on top from end to end. It was originally used on the rivers and lakes of central Canada by indigenous people. The kayak has a covered deck with a cockpit opening, into which the paddler fits. It was originally used by the Inuit of the Arctic region for hunting and transportation. (Encyclopaedia Britannica 2010 [online]). When using the term 'paddle sport', it refers to a broader group of water sports, which use paddles to propel a boat. These are among others, rafting, dragon boating and outrigger paddling.

2 PURPOSE OF THE STUDY

This work belongs to the field of sport planning and administration. The purpose of the study is to gather information about and unfold the inherent opportunities of infrastructure and sport service development in waterborne activities, and more explicitly in canoeing in Finland. To reach this, available related tangible and intangible resources are examined by a triple approach. Information is produced by examining the natural, cultural and economic environment, which in turn are utilised or not by the social, organisational environment.

The socio-cultural, physical, and organisational-economic environments determine the level of practice and popularity of a sport in a given society. Sports service organisations possess and acquire resources and utilise them in order to be able to perform planned operations and ensure further development. Even though separate works of literature concerning the work of sport organisations (Heinilä 1986; Koski & Heikkala 1998; Suomi 1998; Heikkala 2000) and resource management in sport (Freeman 1994; Gratton & Taylor 2000; Li, Hofacre & Mahony 2001; Puronaho 2006) and the cultural and historical aspects of sport (Suomela 1944; Bale 1994; Itkonen 1996; Korpela et al. 2001) are widely available in libraries, up until now no comprehensive research has been performed, which handles these issues at the same time. By limiting the work to one sport discipline and to the realm of the canoe federation the combined examination of these issues is possible in one work.

The research questions were defined as follows:

1. Is the natural environment favourable for canoeing activities in Finland?
2. In what physical settings does canoeing occur?
3. What culture-historical development phases has canoeing gone through in its history?
4. What are the available and activated resources in the production of canoeing services in Finland?

These research questions crystallised through receiving commonsense replies - such as ‘Finland is a cold country’, ‘on the lakes no canoeing is possible’, ‘canoeing has no history in Finland’ - during the preparatory phase of the thesis.

3 REVIEW OF THE LITERATURE

Scholars of different fields define and examine sport on different bases. This research approaches the topic with the broad eye of the sport manager. There are many influencing factors concerning the development of the circumstances of a service or activity in a given physical, social or economic environment. Nature, on its part, provides or limits possibilities for the activity. Circumstances change very slowly in this respect. Society determines the place and role of each sport discipline in time and in space. Changes in the society happen at a higher speed than in nature, yet generations pass until the changes become visible. The economy influences growth and development or decline with its set of factors at a much higher speed than the previous two factors. In the following chapters the relevant literature on the above topics will be examined.

3.1 About Canoeing

Since early historical times humans have settled down close to water. The multiple advantages of utilising water for trade, transportation, traffic, and exploring, were quickly realised. Water vessels in different parts of the world developed in very versatile ways. Size, used materials and methods of building vessels differed depending on the nature of the local water bodies, the materials available and the purpose for which a craft was to be built. (Townes 1996)

According to our current knowledge, the simplest form of intentionally built water transportation device is a dugout log, nowadays used by indigenous people in tropical areas (Vilkuna 1998). The word 'canoe' appeared in English with Spanish mediation when Columbus recorded it first from Indigenous people in the new world he found (Encyclopaedia Britannica 2010 [online]). On the islands of the Pacific Ocean the out-rigged form of boats developed, whereas in the Arctic region a decked form built of animal skin and bones was used. Whatever the fabric, or the used method, they are common in that a paddle is held in the hands and the passenger faces forward. These characteristics identify the

crafts as canoes and kayaks (Townes 1996). British English, unlike American English, does not distinguish strictly between the two types of canoes, but uses the same word for both canoe and kayak.

One of the two types of canoe originated in the Arctic region of the Bering Sea and Greenland, where Inuit people used fully covered canoes – in their language kayak – propelled by double bladed paddles. Since they were cruising on open seawater it was essential to have a craft which was watertight in case of capsizing, though at the same time large enough to accommodate the hunter, the needed equipment and the possible prey. This was the first type of canoe that was brought to Europe. Its popularity was established by an enthusiastic Scottish lawyer, John MacGregor. In the mid-1800s, based on the traditional Inuit kayak, MacGregor built his own wooden canoe, the Rob Roy, which was also equipped with a portable mast and sail. He toured rivers across the UK and Europe. His appearance attracted wide media attention everywhere he went. MacGregor's adventures were published in a book called A Thousand Miles in the Rob Roy Canoe (MacGregor 1866) and he also gave lectures about his excursions. (Levinson & Christensen 1996).

The other type of canoe also originated from the northern transatlantic. Central Canadian native people were using the more simple open canoes. The art of log digging and later canoe building required fine skills, time and carefully selected and prepared materials. Canadian native tribes are said to be the first to actually build canoes by stretching birch bark over a white cedar frame. Canoes were considered valuable items in their culture. These canoes were propelled by a single bladed paddle. European explorers, fur traders and gold miners acquainted themselves with the skills of canoeing and canoe building. They developed this craft so that it had a much lighter structure and so that these relatively large and modest vessels were durable, lightweight and nicely designed. The open canoe became an essential piece of transportation equipment for gold miners, hunters, trappers, and other adventurous immigrants. On the rivers of North America open canoes proved to be handier than the covered decked canoes. The shallow draft allowed the passing of rapids, which would destroy other craft. The world's first known canoe factory was founded at Trois-Rivieres, Quebec, in around 1750. Many of the canoes that fur traders used were capable of carrying over ten people and over two tons of weight. (The History of the Canoe 2007 [online].)

As canoeing was introduced to Europe by MacGregor in its kayaking form, the sport developed from this for both recreation and competitive purposes. In North America the open – also called Indian - canoes became popular mostly amongst touring paddlers. The decked canoe - the kayak - became the equipment for racing sport. This required more practice and skills so as to handle it and was practised in clubs. The phenomena can be explained by paddlers being more free in open canoes as they are not sealed in the cockpit, They also sit at a more comfortable height in canoes than in kayaks, moreover loading of camping gear is easier.

The natural environment positively influences people's perceived and objectively measured health and well-being**.** For a recent review of findings related to nature's influence on health see for example the article of Mitchell and Popham (2008). The physical and emotional impulses in the natural environment bring about anti-stress and revitalising effects (Korpela et al. 2001). A natural environment is preferable over an urban area for many people (Herzog et al 1997). For adult Finns nature represents a sort of mythical place, whereas the young experience it as a place for adventure. Nature oriented activities tend to be self-guided, and independently performed (Suomi 1998). Traditional sources of livelihood, such as hunting, fishing, collecting edible fruits, are all connected to sporting activities in nature (Tarasti 1988). Nature seemingly represents a central role in human life, regardless of the relatively long urbanisation process that has occurred in our lives (Tyrväinen et al. 2007).

In modern societies, canoeing as a nature-based recreational activity requires transport of the relatively large equipment from the urban environment to a water or a storage place near the shore. In the Nordic countries the "Everyman's Right" grants free access to everyman, but in many other countries it does not apply. Hence, in those countries often a further expense is to acquire a waterway access license. Partly due to the above listed reasons, from a social stratification point of view, canoeing is a pastime of the upper-middle class (Renson & Careel 1986). Yannakis (1975) defined that "higher class sports tend to be more costly, individual in nature, noncontact and receive relatively lower exposure or publicity in the culture". Participants are educated and intellectually recognise the inherent risks. Nature sports require skilfulness via mastering forces of nature, the complexity of the sport movement and by overcoming impersonal obstacles. The man-against-man competition is transformed into a man-against-nature competition, or even more into a man-with-nature performance. In this sense each participant must solve the task against or with an objective opponent - nature. Competition is therefore not amongst participants (Renson & Careel 1986). Sievänen, Neuvonen and Pouta (2003) identified certain patterns among canoeists in Finland: they are typically young (15-44 years old), are students in a third level educational institution, or have a higher education and are upper-level employees (Sievänen, Neuvonen & Pouta 2003). Canoeing as a nature-based outdoor activity is a significant element in active tourism. The term is used to describe travels, which requires physical and mental participation in the destination's local life and culture. Participants in active tourism tend to be higher educated and wealthy (Gibson 1998). Today, in certain parts of the world, canoeing is still merely a means of transportation and commonly practiced regardless of socio-economic status.

Independent research has been conducted by the Swiss Federal Institute of Technology (EFLP) in Lausanne in response to the new Guide on Sport, Environment and Sustainable Development of the International Olympic Committee (IOC 2006), and analyses the impact that various sports have on the environment. According to the report, canoeing and kayaking can be practised with no impact on the natural environment. It is, though, recommended to follow envi-

ronmentally friendly practices while planning and constructing the required infrastructure and facilities for competitive activities, for sport events, and for recreational routes.

That report recommends environmental areas of lower value to be the preferred places amongst possible venue sites. Permanent constructions should be minimised along water courses. For major events, required temporary structures, such as terraces for spectators and routes, toilets, and catering facilities, should be planned and placed so they have the least possible impact on flora and fauna. Particular attention should be given to waste disposal and avoiding any leaking or sinking into the living water. Temporary structures should be removed and the surrounding nature restored after any given event (IOC 2006). The main concerns of pollution appear during the production phase of boats and paddles, and from the exhaust gas emission of safety motor boats and during the transportation of equipment. It was written that "canoeing requires an intimate relationship to the aquatic nature and its close environment" (Canoeing International 2006: p. 99.). Through this, canoeing teaches respect for nature, and it is a "unique way to discover and develop places and societies outside the traditional tourist circuit". (IOC 2006: p. 75-77.)

3.1.1 Recreational Canoeing

Canoe touring is one of the most popular ways of outdoor recreation in modern societies. A drift down a river provides the opportunity to observe nature that would otherwise not be seen (Ryan 1997). The environment where this activity mainly takes place is on inland lakes and on calm rivers. Sea touring and white water canoeing attract recreational paddlers, with some experience in kayaking. Over the centuries different water environments made people develop vessels perfect for the particular water body. Ideal equipment for canoe touring depends on the nature of the local waterways, the length of the tour and the technical level of the participants.

Recreational canoeing has two main branches: 1) Firstly there is the paddling, as a regular or irregular activity, in one's own home region 2) The other branch includes the travelling, thus part of nature tourism, which can be split into canoe tourism – where the aim of the tourism is to do canoeing - and tourism canoeing – where canoeing is one activity in a versatile vacation programme (Ryhänen 1999). Canoeing provides a real experience of nature with much time for relaxing. The image of canoe touring is strongly bound to simplicity and austerity. Accommodation is mostly in tents, or in simple cabins on camping sites or on free shoring places; food is self prepared (Ryhänen 1999). With the development of nature tourism, however, services are differentiating towards more demanding customers' wishes. Lovers of recreational canoeing usually leave urban environments in small groups to avoid an unnecessary large impact on nature and the logistical problems that are part of belonging to a larger group. In most places tour operators put a limit on the maximum size of groups. A canoe tour can take from a few hours to several weeks, with most lasting 2-7 days (Ryhänen & Härkönen 2002; Härkönen, Ryhänen & Tuohiono

2002; Maa ja Vesi Oy 2003). The attractiveness of a canoe tour, at least from the route design point of view, is not dependent on the density and quality of available facilities, but rather the needs and demands of the target group, to which it is going to be sold (Siivonen 2001).

Canoeing and kayaking is among the fastest growing outdoor activities in North America (Bell et al. 2007 [online]). In Europe there is hardly any outdoor recreational research that takes canoeing into its research context, but American research may suggest a trend, along with the knowledge that world wide nature tourism is expected to grow six times faster than other tourism segments (World Tourism Organization 2006). Due to the risks related to the aquatic environment and the arctic climate, even as a recreational sport, canoeing in Finland requires a certain level of expertise in order to pursue it safely. The level of canoeing competence and the possible risks in different aquatic environments set the level for the required technical and physical preparation that is needed, and whether a guide is required.

Canoeing services are often classified as adventure programmes. Adventure programmes suggest the inherency of risk. In the case of difficult water conditions and in challenging environments this classification is appropriate. In a tropical "crocodile river paddling" or an "Arctic Iceberg tour" the service of a local guide is essential for security reasons, even if canoeing would be easy otherwise. Safety issues should be taken into consideration in all circumstances in canoeing services. Canoeing can be practiced as a self-guided or guided activity. As a self-guided activity the responsibility of every action lays on the customer. As a guided tour, knowledge about the canoeing competence of a participant and the type of water should be evaluated before embarking or a very short time after. Priest & Bunting (1993) have developed a model to describe the level of adventure a paddler experiences in white-water kayaking tours (FIGURE 1).

The model is applicable to any canoeing experience. The risks in an aquatic environment can be classified as objective and as perceived. The objective risks are the whirlpools, drops, eddies, rocks in the river bed which are consistent in time, at least in the time frame of the experience. Among the objective risks should be counted also the weather; first of all the wind, which is changeable in direction and strength. The perceived risk is how the individual participant experiences the same objective risk. The less experienced the person is, the higher risk is perceived with regard the same element of risk object. As long as a participant's technical and physical abilities corresponds to the challenges the aquatic environment may pose, a self-guided canoe tour can take place. The relationship between the individual competence level and the perceived risk level can define the type of adventure a canoeist experiences in a given environment (Priest & Buntling 1993).

The higher the perceived risk level is, the more competence the tour requires from the individual paddler to experience the same security or challenge. With the development of skills, technical knowledge and experience in handling the equipment, the adventure level of the same environment "devaluates"

and the risk becomes 'tamed'. In FIGURE 1 this development is marked by the horizontal dotted line.

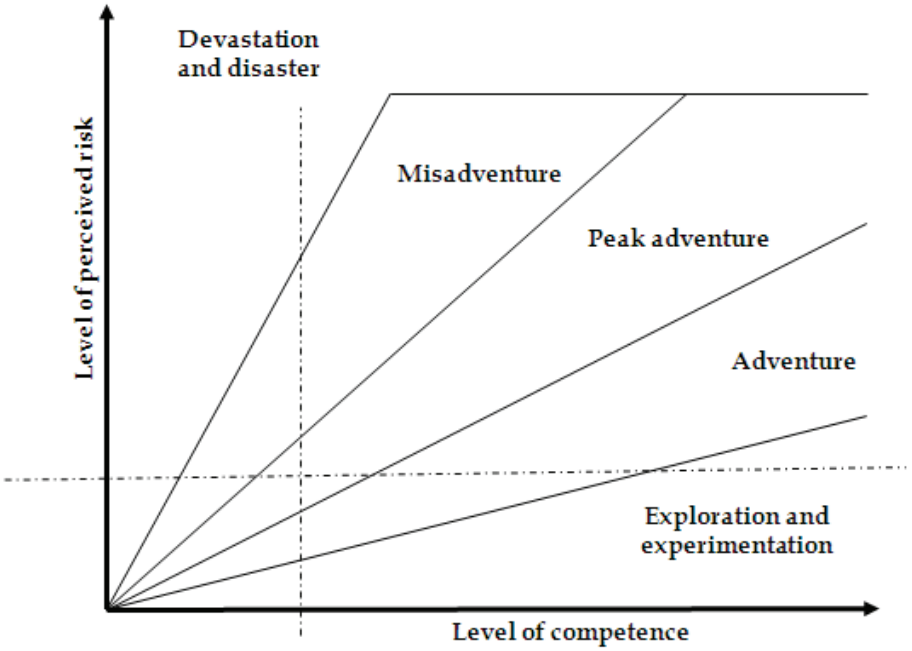

FIGURE 1 Factors of competence and risk (applied from Priest & Bunting 1993)

In guided recreational waterborne activities, the scenario which is marked with the vertical dotted line is more likely to occur. Customers with limited experience come to participate in a programme, and the scope of the programme is rarely broad enough to develop skills. During the adventure, customers rely on the guide. It is unfortunate that some participants assume adventures in nature are engineered to be completely safe, like in an amusement park, and are not aware of the real risks (Ryan 1997). The role of the guide is central to the outcome of the programme. 'Misadventure' can occur on a quaint and calm lake on a sunny summer's day if a storm suddenly breaks out. The higher the objective risk level is the more safety measures should be preset in the programme, just in case something goes wrong.

It must be noted that development of individual competency does not mean that the same programme would become boring. By developing, a participant will be able to give attention to other things, which were not observable before. A beginner's world shrinks to the diameter of the boat as all their attention is focused on balancing and steering it. Due to this a novice is not capable of paying attention to the surrounding scenery for example. Through learning how to paddle, a canoeing programme turns from 'mere survival' to 'enjoyment'.

Organised recreational canoeing in Finland was at first limited to commercial river rapid ridings, which began as early as 1908 in the Helsinki area, on the river Vantaa. By 1920 the sport spread to the north and the first tourist rafting company was founded in Kuusamo, in the Kainuu region just south of Lapland. However, customers were only passengers on boats, which were guided by expert skippers. (Paakkinen 2002) The used boats were similar to the earlier described Church boats, but modified for the purpose.

About half a million cottages can be found on the shores of Finland's waters. Many of these cottages accommodate a canoe or rowing boat among other equipment. As Sievänen (2001) found, 5% of the Finnish population, around 250,000 people, paddles recreationally on an occasional basis in Finland. It must be noted, however, that most of these canoes serve as waterborne 'toys' much akin to inflatable tubes and are used only in favourable weather conditions. Numerous examples are that people with "experience" in good weather canoeing end up in danger when a short summer storm surprises them on the water – the misadventure just happened.

According to the National Sport Survey 2001 and 2006 annually about 18,000-20,000 people participate in canoeing in Finland. Around 50% of them canoe about once a week, 25% of them more often, and 25% less than once a week. On average 62% of paddlers spend more than two hours on the water, and 26% between one and two hours. Out of those paddling at least once a week, in the survey 35% practice canoeing self-guided, alone, 35% with friends in groups, and only 20% in canoe clubs. (SLU 2002a; SLU 2002b; SLU 2006a; SLU 2006b) Most of these people are, however, equipment and service provider dependent as they need to rent equipment.

In a report about Kolovesi National Park in 2001 – one of the most popular and extensive protected water areas in Finland - it was stated that all prerequisites are missing for group tourism in the park. When development of canoe services began in 1995, despite the abundant and attractive water area, market research suggested that the supply in place for feasible business activity was not sufficient. The lack of support facilities such as landing and overnight places, toilets, and missing marketing and professional management were pointed out. (Siivonen 2001.)

3.1.2 Competitive Canoeing

The first canoe clubs were established in the last quartile of the 1800s in North America and in Europe too. In Europe, John MacGregor and his friends founded the first canoe club In London named The Canoe Club in 1866, and they organised the first canoe regatta in 1867 (The Royal Canoe Club 2010 [online]). The American Canoe Association was the first national association in the world founded in 1876 (ACA 2010 [online]). In Europe canoeing became popular mostly in Northern and Central Europe, where MacGregor undertook his tours and popularised his passion.

In Europe by that time the popular sport of rowing gave a good basis for the first canoe and kayak paddlers in the urban environment. Canoeing gath-

ered fans with its simplicity and that it provided the opportunity to explore places, which were not accessible with larger vessels. The popularity of canoeing activities quickly spread and by 1924 there was international demand for an umbrella organisation. In that year in Copenhagen representatives of 19 national federations established the Internationale Representationschaft des Kanusport (IRK), the first international umbrella organisation for canoeing. At the beginning, racing kayaks, sailing canoes and Canadian canoes were recognised as racing disciplines. Though IRK was representing competitive canoeing, in its operation it focused much more on recreational activities, the development of equipment and safety issues.

The first European Championships were held in 1933, in Prague. The International Olympic Committee (IOC) approved canoeing as an Olympic sport in 1934 and the first time canoeing was included in the Games was in Berlin in 1936. The first world championship was held only two years after the Olympic debut, in Vaxholm, Sweden, in 1938 (ICF 2007).

Following the Second World War, IRK had a reforming general assembly in 1946. At this meeting, among the many reform initiatives, the organisation was renamed as the International Canoe Federation (ICF 2010 [online]). In the following decades the organisation was restructured, new disciplines appeared, and others disappeared. Values and interests in the operation changed, but the ICF remained the sole international umbrella organisation for canoeing sports. The sport is concentrated in Europe. European athletes have won over 95% of all awarded medals in the Olympic Games (IOC 2007), and the overwhelming majority of ICF officers are from European countries.

With the emergence of new paddle sports, new international and national sports governing bodies were founded. Low-access-limit paddling sports – where people without previous knowledge of the sport can be involved - like rafting and dragon boating were extremely successful in enticing people to the water. The programmes of those events attracted many more participants compared to canoeing. The opposing interests of different governing organisations lead to political debates within the sport, which are still present today (Dragon Boat International 2007). With regards the Olympic movement, canoeing, for example, is the only paddle sport and the ICF is the only recognised international federation for paddle sports by the IOC. In contrast, the Olympic Council of Asia admitted the Asian Dragon Boat Federation as the representative body for dragon boating in Asia (OCA 2010 [online]), and the International Dragon Boat Federation is a member of the General Assembly of International Sports Federations, today named SporaAccord (Sportaccord 2010 [online]).

In the Olympic Games sprint canoeing and white water slalom canoeing are in the programme. Sprint canoeing is practiced on still water and athletes compete in parallel lanes. They approach towards the final through an elimination system, based on the finishing position in the eliminative rounds. The aim of sprint canoeing is to complete a given distance in the quickest time possible. Sprint canoeing has been in the Olympic programme since 1936. The white water slalom is the most technical discipline of canoeing. Athletes navigate be-

tween numbered upstream and downstream gates on a foamy white water course. Along with being fast, it is important not to touch or miss any of the gates, as penalty seconds are added to the paddled time on the course. The Slalom was in the Olympic programme in 1972 and 1976, and has been a constant since 1992. Slalom canoeing courses used to be set up on natural rivers in the early times of the discipline, but nowadays there are built canoe courses where obstacles can be modified, thus the difficulty of the course can be adjusted (ICF 2007).

The ICF further administrates marathon, white water racing, canoe polo, freestyle (rodeo) and canoe sailing disciplines, and moreover has attempted to cover the other paddle sports in recent years. Other international paddle sport organisations conduct their own competitive schemes. Who has the right of organising such events is often debated in sport politics. Below are some examples from the other paddling sports, which have an independent international governing body.

Surf Kayaking, and Waveski are a combination of surfing and kayaking. Kayaks are specially designed for seashore use. The aim is to ride ocean waves while making different manoeuvres. Competitions are held using a similar system to surfing competitions. The difference between the two disciplines is that the athlete is sitting *in* the surf kayak, but sitting *on* the waveski. Compared to the similar ICF discipline, freestyle kayaking, there paddlers are sitting in a spot where water runs through underneath them, whereas in surf kayaking and waveski paddlers are in movement with the waves, which results in a diverting sport technique. Very similar to these disciplines is the Surfski, which is also a sit on top kayak, but made for distance paddling in ocean waters. That requires a longer, more direction stable and more paddleable boat.

Rafting boats are large inflatable rubber boats with a crew of 6-10 and a steersman. Through an experienced steersman, rafting affords instant access to everybody, and the ability to experience the exhilarating feeling of white water paddling in relatively safe conditions. This is a key factor, and in the recreational paddling business rafting is a great success. For experienced paddlers, on the other hand, rafting gives access to rivers, which would be very difficult or dangerous to ride with kayaks. At the competitive level, rafting has sprint like and slalom like disciplines over a few hundred meters long river section (IRF 2010 [online]).

Outrigger canoes (also known as Va'a) were developed on the Caribbean and Pacific islands independently. The large boats with outside balance support allowed native people to cross open sea between islands that were further away than the horizon. They were used for war and trade purposes. Today outrigger canoeing is a strong part of the tourist business in the regions of Hawaii, Tahiti, New Zealand, with a well organised competitive structure. (IVF 2010 [online])

Dragon Boating originates from China, and as a competitive sport is based on a legend that is over 2000 years old. The boats accommodate 20 paddlers plus a drummer and an oarsman. The combined effect of the decorative elements of the boat, the simplicity of the technique and good marketing have

made dragon boating extremely popular in the West during the past two decades. Events attract large amount of people, from serious competitors to occasional paddlers alike (Dragon Boat International 2007).

Different paddle sports have a large diversity in the popularity, with regards both participation and spectatorship. Slalom canoeing is attractive to the audience and is media-friendly (IOC 2005). Participation in slalom canoeing, however, is strongly limited by the required level of skills and facility demands. Dragon Boating in contrast is a low access sport. It is festive-like even at the international competitive level. Hence, it attracts a large mass of people as participants and spectators. There are 50,000,000 (fifty million) regular dragon boaters paddling solely in China, where it has its 2500 years of festive like cultural, historical and competitive roots (IDBF 2007), but also in Europe it draws masses from all kinds of social groups.

Even though the many paddling sport disciplines seem to be different in technique and physics, with intense competition making elite athletes specialise on one narrow field, it is still not rare to find athletes performing in elite international events in more than one discipline with good results. Michala Mruzkova of the Czech Republic and Ian Tordoff of Great Britain are jus two examples from the recent past. These athletes successfully competed in white water and sprint world championships (Kamber 2008). In elite dragon boat and outrigger events sprint and marathon canoe paddlers often make up part of crews, which are a match for real dragon and outrigger paddlers. Similarly, white water canoeists and kayakers regularly appear in rafting competitions These athletes are living proof that, even though to be the best in a discipline needs not only talent, but enormous effort and specialised training, the 'sportisation' did not reach the level in paddle sports to make shifting between disciplines impossible. Technically, when the core of canoeing is mastered in one discipline, then it can be mastered in all disciplines. To evaluate the possibilities for such transposition is in the scope of other sport sciences, like sport physiology, biomechanics, or sport psychology.

Competitive canoeing has roots in recreational paddling. In the first decades of modern competitive canoeing the more training one had the more successful an athlete could become. Enthusiastic paddlers made regular paddling tours on the lakes and rivers of Finland, which developed their skills and physical abilities to the level that they could successfully represent the country at the international level. Competitive canoeing in Finland had its zenith during the Helsinki Olympics Games in 1952 (TABLE 1), where Finnish athletes won 4 gold medals, and 1 silver and 1 bronze medal in the canoeing competitions. Since that time there was only one major success for Finnish paddlers, and that was in the 1992 Olympic Games in Barcelona (Kamber 2008). However, Finland regularly has representatives participating in the Olympic Games, and the World and European Championships.

TABLE 1 Olympic medals for Finland in canoeing

Gold	1952	K-2	1,000m	Hietanen Yrjö Jalmari
				Wires Kurt Oskar
	1952	K-2	10,000m	Hietanen Yrjö Jalmari
				Wires Kurt Oskar
	1952	K-1	10,000m	Strömberg Thorvald Lennart
	1952	K-1	500m	Saimo Sylvi Riitta
	1992	K-1	500m	Kolehmainen Mikko
Silver	1948	K-1	10,000m	Wires Kurt Oskar
	1952	K-1	1,000m	Strömberg Thorvald Lennart
Bronze	1948	K-2	1,000m	Axelsson Ture Wilhelm
				Björklöf Nils Torolf
	1948	K-2	10,000m	Axelsson Ture Wilhelm
				Björklöf Nils Torolf
	1952	C-1	1,000m	Ojanperä Arvo Olavi

3.2 About the Physical, Natural Environment

3.2.1 Topography

Geographically, Finland lies in Northern Europe beyond 60 degrees latitude, and is bordered by Norway, Russia, Sweden, the Gulf of Bothnia, Gulf of Finland and the Baltic Sea. Finland's total area is 338,417 km², sea area excluded (Maanmittauslaitos 2007). The vast majority of the land (80%) is natural environment and about 10% is covered by water bodies. The continental glacier of the last ice age shaped Finland's geography. Around 10,000 years ago the withdrawing ice left ridges, and a moraines patterned landscape. During the past geologically short period of time a thin layer of soil gathered on the granite base, which still rises in view in many places today (Tikkanen 1994). In the valleys the melting ice gathered into lakes. The glacial stream aligned lakes in a northeast to southwest direction. The relatively young geological area is still only just recovering from the pressure of the ice, and there is about 7 km² of new land recovering every year from the sea (Maanmittauslaitos 2007).

There are four distinguished geographic regions of Finland. Firstly, there is Åland, the archipelago of Finland in the Gulf of Bothnia in the South-Western region in front of continental Finland, which consists of close to 200,000 islands. Many of them are bare rock reefs, but on the numerous larger islands about 50,000 inhabitants live. Secondly, there is the coastal belt of about 100 km wide along the seashore, which is covered mostly by clay and sediment. The plain tilts from inner Finland to the seashore. This area contains most of Finland's arable land. Thirdly, there is the plateau of the Lake District of Finland, which

remains from glacial times. The landscape is hilly. Forest covered ridges, eskers separate the estimated 180,000 relatively shallow lakes, which are mostly linked with short rivers, rapids or waterfalls. The mean depth of all 1,844 lakes, larger than 50 acres in Finland is 3.7 meters only (Kuusisto & Hakala 2007), therefore the volume of the stored fresh water is not extensive. Consequently, the temperature of water bodies rises quickly in early summer. Finally, there is Upland Finland, which stretches from the Lake District to the north-east, to Lapland. The taiga area with numerous rivers and massive bogs has a soft, hilly landscape in the south, which changes to a harsh rugged surface in the north (FIGURE 2).

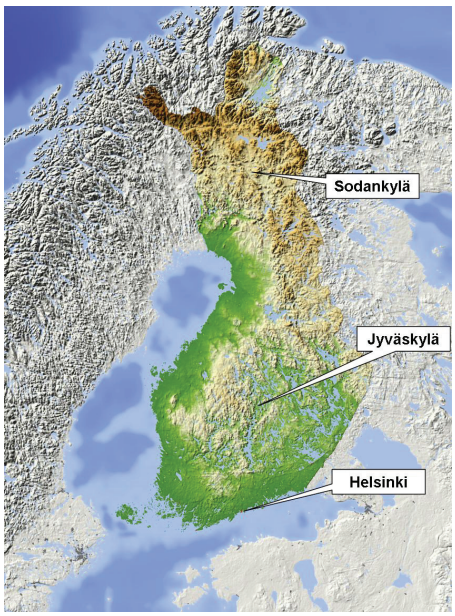

FIGURE 2 Topographic map of Finland (© Michael Schmeling, Arid Ocean)

3.2.2 Hydrography

Linked to the differing geographical patterns, different types of water bodies make up the hydrological map of Finland in the different regions. In the archipelago, sea water is almost solely present. It is suitable for canoeing activities in good weather conditions and where islands provide enough shelter against wind and waves. In the coastal lowland slow flowing, relatively shallow rivers are the most typical. Many of these rivers have been utilised by industries, and this region is the centre of agriculture as well (Olkio 2006). Industry and agriculture together have made Finland's rivers relatively polluted (FIGURE 3). The Lake District is made up of over 180,000 different sized, still or nearly still water bodies, which are linked by short rivers or waterfalls. The quality of water in the majority of these basins is good or excellent, thus providing a good envi-

ronment for canoeing. In larger open lakes, however, wind can bring about challenging or even dangerous circumstances for canoeing. In the upland, shallow white water rivers are typical, which are mostly accessible by kayaks and canoes, though in many places, the water level has a great influence on safe accessibility and enjoyment. The main discharge of water in Finland is to the Baltic Sea, except from the eastern upland region, where rivers descend to the east, via Russia to the Barents Sea.

In Finland, lakes, rivers, and creeks cover a 34,331 km² area and another 52,500 km² make up the coastal sea water surface (Mustonen 1986). Most of the inland waters and the archipelago sea area are suitable for canoeing by nature. There are numerous limitations to access these waters with canoes. On large lakes and the open sea wind can have significant power and enlarge waves, making canoeing problematic or even impossible. Industrial objects, such as factories and power plants, were built on the shores of water bodies. Water flow was regulated, dams built for the use of mills, hydro electric power and paper production. From the canoeists point of view these all further limit access to water today. In FIGURE 3 it can be seen that water bodies in the Lake District are overwhelmingly in good or excellent condition, while most of the polluted waters are in the rivers on the coastal belt. Many of the water based industrial plants have been shut down or have turned to environmentally friendly production and river rehabilitation projects have been carried out (Oliko 2006).

Finland's terrain is rather flat. Rivers are often so shallow that navigation is difficult even with canoes and kayaks. A final issue to take into consideration with regard to limitations to access is that Finland has a low population density. Many waterways are situated in such places that local sport practice is not arranged due to lack of participants. At the same time, canoe tourism – which is attracted due to the missing inhabitancy - is faced with the problem of long transportation distances. (Ryhänen & Härkönen 2002)

Finland's water bodies can be divided into three major groups: 1) coastal sea; 2) lakes and 3) rivers (SYKE 2005).

Along the coast of the Finnish archipelago open sea is to be found. But on open sea water, virtually no canoeing is pursued. However, at close distances from the shore on open segments of the sea, canoeing is possible, and it is practiced to a limited degree. Some extreme programmes, such as the Helsinki-Tallinn crossing across the Baltic Sea, or the tour around the Gulf of Bothnia, are arranged, but participants must be well equipped and prepared for this type of challenge (Backman-Winquist 2008; Marno 2009; Westermark 2009). In the archipelago, water is sheltered enough to allow accessibility to canoes, kayaks and rowing boats.

There are an estimated 180,000 lakes in Finland. The vast majority of them (99%) are less than 1 km² in size. Due to the slow theoretical change of water in lake beds and the northern location, the natural recovery of lakes are slow and human influence throughout time has had a detrimental effect on the water quality. Thanks to the effective nature rehabilitation programmes started in the 1970s, today 80% of Finnish lakes have recovered from the industrial pollution

of the previous centuries (Olkio 2006). The wide open areas are not favourable for canoeing, as wind can gain power that makes paddling very challenging. The numerous smaller lakes and also the sheltered coastal line of the larger lakes are practically perfect for canoeing.

Finland's rivers are relatively short and shallow. The main discharge direction from the Lakeland and the coastal belt is towards the Baltic Sea, whereas rivers in Upper Finland flow partly towards the east and discharge into the Barents Sea via Russia, partly to the west and ends up in the Gulf of Bothnia. Less than half of Finland's rivers are in a good or an excellent condition, whereas one third of all rivers are in a passable or in poor condition. Despite the strict environmental legislation and the control of human habitation, agriculture, and riverside industries are still polluting the water. Despite the relative uncleanness of Finland's rivers, they are suitable for water sports, like canoeing. There are, of course, troubles and challenges for canoeists with regard to rapids and industrial sites, where portage is needed. Many of the former industrial plants nearby rivers have already closed. There is a river rehabilitation project being undertaken, however, the interests of different user groups, like industry, fishermen, inhabitants on the shore, often conflict with each other (Olkio 2006; Olkio & Eloranta 2007). It was found that over 40% of paddlers experienced less favourable conditions for paddlers after rehabilitation work had been completed (Olkio 2006).

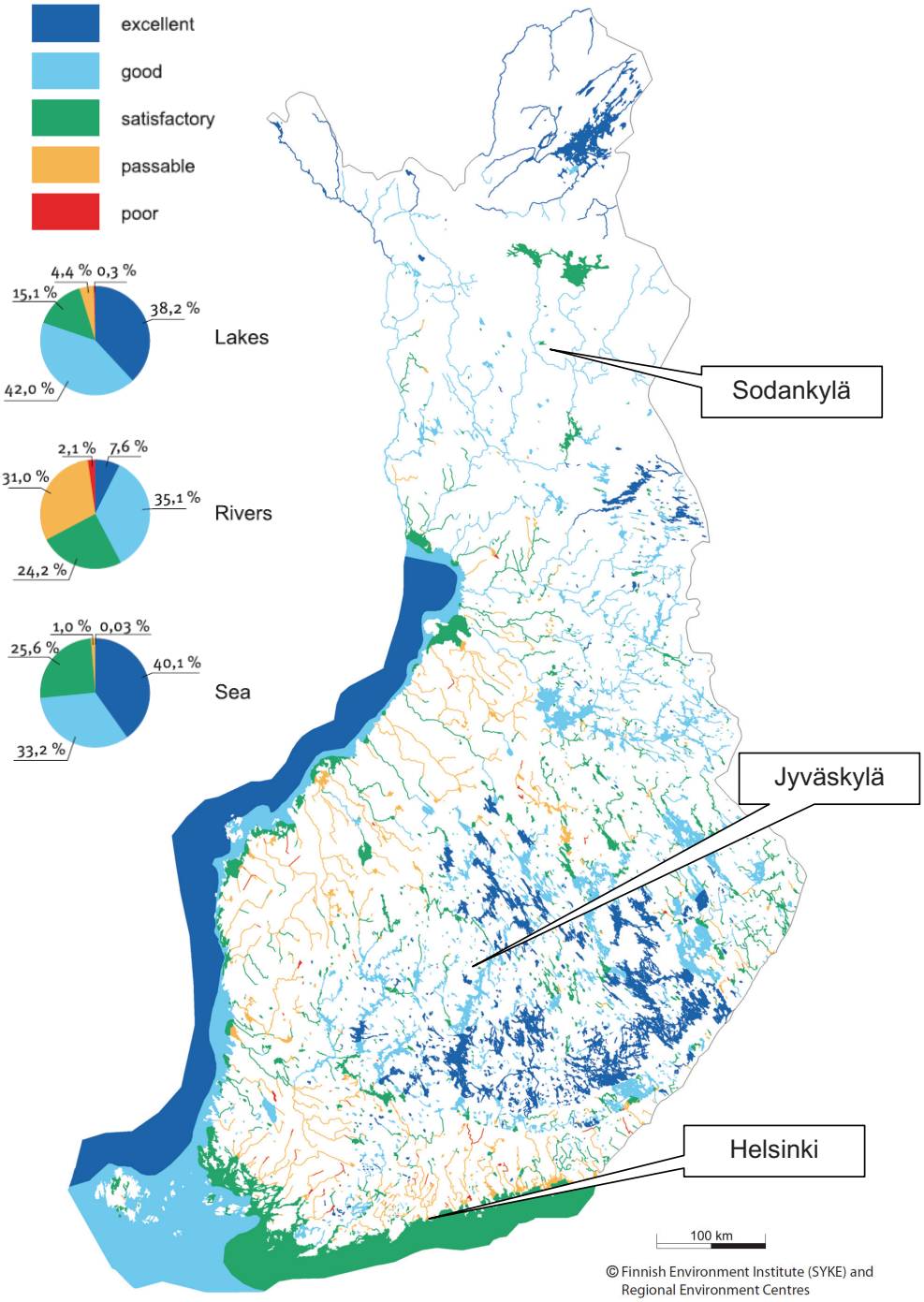

FIGURE 3 The quality of water bodies in Finland in 2003

3.2.3 Climate

Finland's climate is influenced by the country's geographical position between the 60th and 70th northern parallels of latitude in the Eurasian continent's coastal zone, which shows characteristics of both a maritime and continental climate, depending on the direction of the air flow. The mean temperature in Finland is several degrees higher than that of other areas at these latitudes, e.g. Siberia and south Greenland. The temperature is raised by the Baltic Sea, inland waters and, above all, by airflows from the Atlantic, which are warmed by the Gulf Stream. The mean annual temperature ranges from +5.5 degrees Celsius in South Western Finland to -2 degrees Celsius in the north. (FMI 2010 [online])

The Eurasian continental climate causes extremities in weather conditions both in winter (down to -50C) and in summer (up to +35C). The climate is warmest on the south-western coast and has a cooling tendency generally towards the east and the north. However, the climate is coldest in the north western part of the country, where the high elevations occur. Finland has four seasons, which are clearly distinguishable. In the northern part of the country winter is the longest season lasting almost 200 days. In the southern part winter and summer are equally long lasting approximately 120 days. Spring and autumn are the shortest seasons. Lakes are mostly frozen during the winter; however rivers are navigable all year round, with some exceptions (Hanski 2000).

As is visible in FIGURE 4, since the start of meteorological observations the mean annual temperature of Finland has increased about two degrees. In the 1930s in Finland similar climate conditions prevailed as today. Following this period, various cooling and warming periods have alternated, reaching the lowest point in the early 1980s. There has been an evident warming period in the past quarter of a century. Comparing the Arctic region to the global average, the rise in annual mean temperature was nearly double (Alley et al. 2007). In FIGURE 4 the thin curves show the changes of annual mean temperatures since measurements were started by the Finnish Meteorological Institution (FMI) in three locations. The thick curves show the development of the ten year annual mean temperatures, while in Helsinki, the medium thick line is a calculated curve for the ten year mean temperature corrected by the estimated effect of urbanisation (FIGURE 4). The warming trend has been at its strongest during the springtime. Recent research found no significant change in Northern Finland's climate during the modern sport era, but there have been strong warming periods between 1901-1945 and since the 1990s (Lee, Press & Lee 2000).

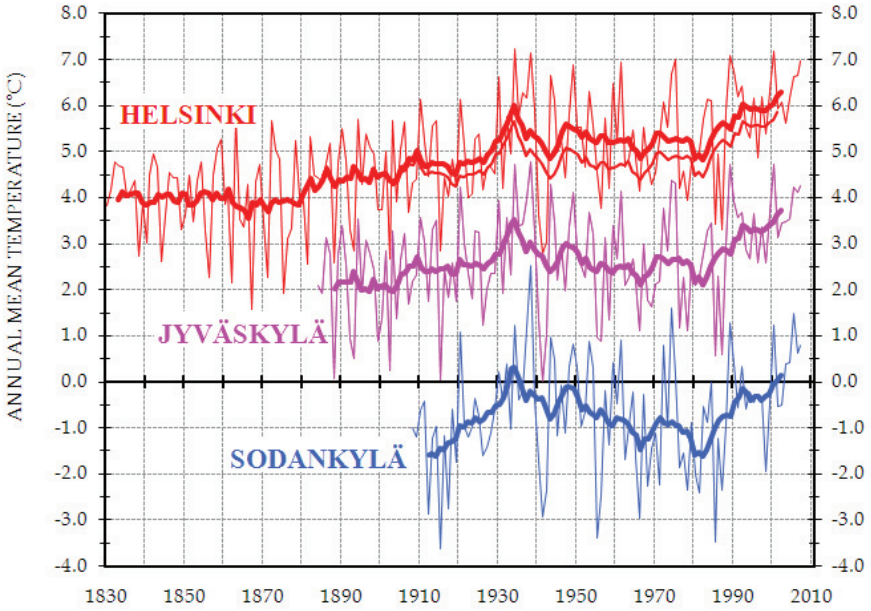

FIGURE 4 Changes in the annual mean temperatures (© H. Tuomenvirta, SYKE 2006)

The average temperature of surface waters in the past century did not statistically change in Finland. However, large deviation can be observed in maximum surface temperatures at one time in different water bodies geographically close to each other. Lakes with still water react sensitively to air temperature changes, but even a minimal flow mixes water layers effectively, thus surface water temperature follows air temperature changes less closely in moving water bodies (Korhonen 2002; Elo 2007). The sun warms surface water quickly, and heavier cold water stays underneath, which produces layering of different temperature water masses. Wind and stream mixes water layers effectively. Surface water temperature can deviate by even 5 degrees Celsius within an active daytime. Stormy weather and flow decreases, whereas clear sky and calm weather increases surface water temperature noticeably. (Korhonen 2002)

On average, ice melts on the lakes in the middle of April in the south of Finland, in the beginning of May in the middle of Finland, and in the third week of May in the north part of Finland. (Korhonen 2002) The temperature of water bodies rises quickly after the ice has melted. It is also worth mentioning that rivers often do not freeze at all in the south and middle part of Finland, whereas in the north rivers are usually frozen over for 3-4 months (Hanski 2000; Korhonen 2002).

For outdoor activities relative temperature is probably more important than the absolute temperature value. Ignoring influencing factors, such as wind and precipitation, can lead to hypothermia and in serious cases have fatal consequences in cold conditions. The cooling effect of the wind is calculated with a

so called wind chill index. The cooling effect of wind is squared with the increase in speed. The importance of wind chill rises significantly when the air temperature is under 10 C (Wilkerson, Bangs & Hayward 1986).

The heat loss from the human body increases by magnitude with wetness. Water conductivity is 240 times greater than that of dry air (Wilkerson, Bangs & Hayward 1986). In Finland, the relative humidity of air is on average 60-70% in summertime (FMI 2010). The occurrence of fog is most common in the spring over the sea and near the coast, and during autumn at any water bodies, as the air temperature drops and water evaporates. Short showers are the most usual precipitation type in the summer season, whereas light continuous precipitation is common in the spring and the autumn seasons. (FMI 2010)

3.2.4 Nature as an Infrastructure

Nature is historically the oldest sport environment (Tarasti 1988). Activities like hunting, fishing, and berry picking, are still linked to it today. Further sportive activities, such as running and paddling also took place there, while hunting game or for approaching fishing spots. The significant difference when compared to modern sport activities is that these activities were not for pleasure but were a part of everyday life. Finnish people consider nature and forest trails as essential sports places. Whereas adults and elderly people mostly enjoy purely the time spent in nature, children and the young are interested in non-standardised, adventure trails (Suomi 2000). Recreational canoeing takes place in the natural environment, and leaves no permanent influence on it. For the purposes of elite sport, however, white water stadia and water sport centres are built. With regard to Olympic sports, they are among the most extensive and expensive constructions (Bale 1994). At the same time, these purpose built facilities can be utilised for post-Olympic interests offering services to the wider public (IOC 2005).

According to Page and Getz (1997), people are interested in visiting remote places, due to the ability to meet wildlife, to see unique landscapes or ecosystems, and to find peace and quiet. Similar values were reported in a piece of Finnish tourism research upon international demand and Finnish supply of outdoor activities (Räsänen & Saari 2004) To maintain the natural state of nature, business interests should consider the intake-limits of the destination, to prevent its destruction by the invading visitors (Urry 1990).

Participants in canoe tourism in Finland claimed that the provided facilities and services for recreational canoeing are not sufficient (Räsänen & Saari 2004). Suomi (2000) found that the majority of the population regularly uses general purpose outdoor facilities, which usually lack any supporting facilities, such as toilets, showers, dressing rooms or kiosks. Specially designed sport facilities such as golf courses, archery fields, etc attract only a small proportion of the population. It is also noted that many of the special sport facilities are designed to serve elite sport, and therefore the number of users is limited (Suomi 2000). In canoeing, the attraction of the destination is not dependent on the quality and density of the available infrastructure. What is more decisive is the

aim of the programme and the awaited level of services of the actual user group (Siivonen 2001).

The use of water as a sport space is particularly low in Finland. Suomi (2000) found that only 3% of Finns are engaged in waterborne activities at least once a week. On an occasional basis 5% of Finns engaged in canoeing (Suomi 2000; Sievänän 2001). The first comprehensive outdoor recreational facility research was performed in 1997-2000. The National Outdoor Recreation Demand Supply Assessment (LVVI) found that there were 45 recreational canoeing routes in the country, and close to half of the recreational canoeists go paddling 1-4 times per summer (Sievänen 2001).

In Finland the socio-economic stratification of the practitioners of the nature based sports is similar to other European countries, where canoeing and rowing are sports practiced by people with a higher socio-economic background (Taks, Renson & Vanreusel 1995; Sievänen 2001). Suomi (2000) suggests that consideration should be given to water sport facilities during city planning in Finland. In rural areas the density of services should have emphasis, whereas in urban environments the quality of services should be considered. He also found a clear correlation between the distribution of the socio-economic background of participants and the existing quality services for different sports disciplines in Finland. (Suomi 2000.)

The natural environment in Finland for practising canoeing is favourable. Rivers, lakes and sheltered seashores are suitable or even excellent for practising canoeing. Riverside industrial sites, open seashores, and restored rivers for fishing, are general obstructions to be considered for canoeists. This latter issue is a sensitive point during the design and implementation of canoeing activities in Central Finland, the Lake District. The water restoration project started in the 1980s by investigating the interests and wishes of potential users. These included those that lived along the shores, the fishing industry and tourism enterprises in the area, and hobby users, such as individual fishermen, and canoeists. At the preparation and planning stage of the restoration work, no significant canoeing activities were registered and taken into consideration (Olkio 2006). The results of the completed project are ambiguous. In larger rapids, and traditional canoe routes, where canoeing activities were present 25 years ago, the result of the rehabilitation project is experienced as being a positive change. Negative changes were reported by canoeists in those places where canoeing activity was not present at the time of planning, and therefore not considered during the planning phase of the rehabilitation project. Recreational paddlers with better equipment can have access nowadays to places, where two decades ago there was nothing to do for a canoeist. (Olkio 2006.)

One of the main civil organisations with regard to water activities is the 'Keep the Archipelago Tidy'. In the four regional branches the non-profit organisation maintains services such as waste collection, earth closets, small harbours and shoring rigs, recycling information and education on sustainable water tourism. The organisation started as an initiative of individual people in the archipelago area and later spread to the coastal areas and the Finnish Lake Dis-

trict. The organisation's 'Rubbish Seal' logo is today a well known emblem around the country. Apart from the above described operative activities the association started special local projects in order to better the perspectives of recreational activities in the aquatic environment. The association maintains active relationships across borders throughout the Baltic shores and to the east with Russia. (PSS 2009 [online].)

3.3 About the Socio-Cultural Environment

Sport disciplines, in their structured modern forms, were developed for thousands of years in a socio-cultural environment. What kind of disciplines emerged in a particular culture was determined partly by the natural environment, partly by politics and partly dependent on the level of development of the actual society and technology.

Eichberg's (2003) contradiction theory (FIGURE 5) separates sports in the post-modernity on a triangular basis where competitive sport, organised disciplinary activities and leisure activities were contradicting in their ideology, driving intentions and core meanings. Simultaneously they represent different national ideologies, even diverse self-identification.

Competitive sports, according to Eichberg (2003), carry the features of production, where the product is the result. In that sense competitive sport resembles the ideology of a market economy. Here the breaking records and the growing number of gold medals or bettering positions on the ranking list are synonyms to growth, expansion, profit. Competitiveness incorporates strong individualism. Patterns of chauvinistic nationalism become visible in spectator violence and even sometimes on the track or on the field.

Organised disciplinary activities, such as synchronised group gymnastics, express unity and integrity, with explicit partition from the "others". Participants are supposedly equal in values, size, gender, and outfit. It is patriotic and demonstrative. In this sense organised disciplinary activities represent the ideology of state, in its extreme form the totalitarian order, where everyone is equal, but where control is easily lost as in the Fascist or in the Soviet state model (Eichberg 2003).

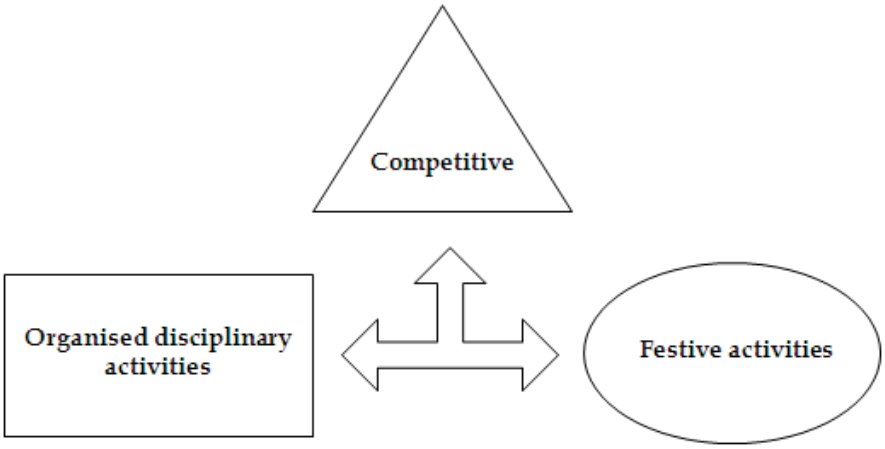

FIGURE 5 Contradiction of sports segments (applied from Eichberg, 2003)

Festive activities and unregulated plays are compared by Eichberg (2003) to civil society and popular culture. It is versatile as it appears in various forms of activities like at festivals, in theatres, and as part of dance culture. It is based on temporary community and emphasises the acceptance of divergence sometimes on a grotesque level. These activities are inclusive, everyone can participate. By representing the civic, it can choose its side between liberalism and order, depending on its own interests.

From the above described structure Eichberg (2003) concludes that competitive sport manifests hierarchy, disciplinary activities normative ordinance, whereas festive programmes disorder or diversity, and that none of the three basic groups can exist separately but all are integrated into one complex unit = society.

By analysing the thoughts of Eichberg (2003) that competitive sport follows the logic of market and festive events as voluntary activities without regulation, a number of questions arise. When competitive or leisure sports are in question, the service provider has the basic interest to secure reward for the work. It is worth noting that organiser(s) may acquire reward in other forms than money. Even when just a local festival is in question, the organising process does not take place without committed personnel. The strength of an organisation is limited by the least competent person with responsibility (Emery, King & Kriemadis 2002). From this perspective it is not important whether the person in question is an employee or a voluntary worker. If the event is truly voluntary based and all personnel work free of charge a number of expenses must still be covered, which leads to the necessity for a proper business plan or project plan.

Another perspective is that civil society's voluntary work contributes noteworthy value to the local community (Ala-Vähälä 2008). In the truest sense of the word, voluntary work in the civil sphere is the black market of the economy. Sports events involve large responsibility and financial value, which increases along with the size of the event. In response to the broadening volun-

tary activities of the third sector, the Finnish tax authorities are aiming to collect tax on voluntary work done for sports clubs (Verohallinto 2005).

In contradiction to the negative understanding of commercialisation of sport, commercial sport services provide the chance to enjoy leisure time physical activity in a safe environment as a response to the demand from sport consumers (Yoder 1996). Another explanation for the growth of demand for guided activities is the included social feature, which in the individualising world gives extra value to the pursued activities (Urry 1990).

Chick & Loy (1996) in the Encyclopaedia of World Sport (Levinson & Christensen 1996) defined physical activities through the concept of play, game and sport as it is visualised in FIGURE 6. Play, as such, is observable not only in humans but also in the fauna, but it is most likely to be observed among juveniles, and is associated with the learning process for becoming adults, through which necessary skills and capabilities of subsistence and survival develop. Yet play is characterised as a non-utilitarian and unorganised physical activity in humans.

In the concept of game, non-competitive and competitive games are distinguished. As non-competitive games have no outcome or result they can be defined as pastime activities and have common features with play. Competitive games, however, are defined as inclusive, exclusive or exhaustive, according to chance, strategy or physical skill in determining the outcome of the game. Commonly all games characterised by rules take place in defined space and time (Chick & Loy 1996.)

The concept of sport is characterised by institutionalisation and the demonstration of superiority over the opponent. Sports can be pursued against a direct opponent (like tennis, basketball and boxing), parallel opponent (as in track athletics, rowing and sprint canoeing), or against a standard opponent (such as archery, orienteering, slalom canoeing). (Chick & Loy 1996)

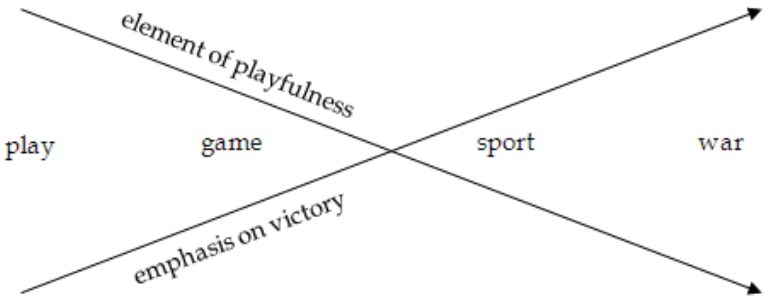

FIGURE 6 The theory of play, game and sport (applied from Chick and Loy 1996)

In conclusion Chick and Loy (1996), citing others, express that all physical activities can be placed somewhere along a non-scaled line where activities without any importance of winning – the play – are at one end and activities with a terminal importance of winning – duel and war – are at the other. Along with

the rising importance of winning, the playful element of the activity loses its importance.

The phenomenon of 'play' is extensively examined in Huzinga's Homo Ludens (Huizinga 2000). He suggests that play, in human civilisation and in fauna alike, is essentially training for expected or possible challenges in life. Play in essence includes fun, and fun seems to have no purpose in life. Play is fully voluntary, including the voluntary acceptance of the rules and of the supremacy of the referee. Even though every play has limitation in time, in space and in its rules, length, place and limitations are determined on the spot of the actual play. Play gains these obligatory features, along with the development of societies. Play also serves as a moderator for tension, and in this sense the rules of the actual play are set by the player so as to reach success in the end. Huizinga (2000) also notes that connected rules and rituals aim to produce a perfect unreality in limited time, space and scope, to escape from reality, aiming for beauty. Play, in its performance, "re-presents" something, and its presentation in turn calls for an audience. (Huizinga 2000)

The term 'sportisation' (Maguire 1999), emerged to describe the process as pastime physical activities are becoming evermore institutionalised, standardised, specialised and competitive. In that sense 'sportisation' is the horizontal axis in FIGURE 6. The start of the process is placed as being two centuries ago; it occurred in phases and the process is still ongoing today (Maguire 2007). The phenomenon has been widely examined in the field of sport sociology. Though this thesis does not take the concept as a central focus, due to its influence on the development of the sportscape of open water, we will refer to it later on in this work.

The consumption of leisure activities is not based on rationalistic decisions, but is rather the satisfaction of pleasure (Urry 1990). A customer meets the destination first, in the presented marketing materials. Pictures in these brochures are carefully selected to represent the wished for interpretation of the potential customer. The sole meaning of these materials is to sell the destination (Tuohino 2002). The presented image in the brochures raises certain expectations. The customer then confronts the reality, which may be better or worse than expected. The positive or negative outcome of this experience is decisive for future re-consumption. The image of certain environments is attached to certain activities in the mind, and these activities are expected to be performed in this affixed environment (Urry 1990).

3.3.1 Canoeing in Finnish Culture

Finland has always had a low population density. When roads did not exist, waterways provided access to the deep wilderness. The first permanent inhabitants of Finland travelled the land via waterways in rowing boats and canoes (Suomela 1944). It is more economic to transport large amounts of goods and equipment on waterways than on roads or even on snow. In the period when human and animal power was only available, water proved to be the optimal solution to transportation.

In Finland and the Karelian region of Russia, numerous cliff paintings show figures of paddlers that can be dated to as early as the Stone Age (Autio 1981). A number of related archaeological findings also exist. Many items were found, from those in very good condition to those being hardly recognisable. These findings were dated to 3000-4500 BC by radiocarbon methods (Vilkuna 1998). From the evidence of archaeological paddles, it is highly probable that canoe culture had flourished once in Finland (Kotivuori 2006).

The growing demand on tar transportation and fishing industries made the development of larger and larger human powered vessels a necessity. These were on the whole powered by rowing movements (Vilkuna 1998). Similar boats were the so called Church boats that appeared from the late 1600s and were in frequent use until the middle of the 1900s in Finland. Church boats were a common transportation device in the rural areas, and were used for carrying people from the outlaying farms to churches (Suomela 1944). These boats were able to accommodate up to 40 people.

A pioneer of modern canoeing in Finland was Anders Chydenius (1729-1803). He was one of the most significant people of that time in Finland. The doctor, economist, parson and politician is remembered for promoting democracy, equality and human rights, and furthermore a number of economic and technical innovations are linked to him (Hyttinen 2010 [online]). He became acquainted with canoeing in his youth, through Pehr Kalm, one of his teachers at Åbo Akademi, who brought to Finland a number of innovations from a four-year journey to North America. Chydenius became enthusiastic about the building of birch-bark canoes and was an active canoeist himself. He wrote his dissertation with the title 'American birch boats' (Chydenus 1753). The efforts of Chydenius helped root canoeing in Finland. The first canoe events were organised, and in woodwork lessons the technique of canoe building was taught.

One possible explanation of why the building of birch canoes in Finland did not spread despite the input of Chydenius is that in Canada the birch (Betula neoalsakana, Betula papyrifera) used grew bigger and its bark peeled off in larger pieces than the common species in Finland (Betula pendula, Betula pubescens) (Halkka et al. 1994; Halter & Turner 2003).

Another public figure in the early history of canoeing sport in Finland was August Ramsay (1859-1943). His civil work was to develop industrial insurance and financing in Finland. He filled a number of state level offices and was nominated to the position of councillor of state. Besides his public roles, August Ramsay was confident that "Finland is the land of promises for canoe–sport" (Ramsay 1891). He admired the endless chain of lakes and rivers and realised the advantages of the canoe for personal transport and recreation over other vessels. He wrote that "Based on the map countless journeys can [a canoeist] orient wherever water is seen, however narrow and tiny it is" (Ramsay 1891 p.81). His canoe excursion diary was published as a light worded picture book called S*ummer journeys in a canoe* (Ramsay 1891).

In the development of the Finnish national identity, water in its various forms played an essential role. A number of references to paddles and paddling

can be found in the Kalevala, the Finnish national epic. The Finnish landscape was visually presented to a wide international audience through the interpretations of Akseli Gallen-Kallela, Albert Edelfelt, Fanny Churberg, Magnus von Wright, Eero Järnfelt and other painters during the national romanticism. Water represents cultural values also for contemporary researchers. Itkonen & Kortelainen (1998) argue that lakes provide physical, functional and symbolical resources for local communities. Symbolical values are subjectively experienced in various forms, for example as landscape or the source of myths. (Itkonen & Kortelainen 1998) A well known example with symbolical values, although not Finnish, is Loch Ness in Scotland, which attracts large amount of tourists due to the legend concerning its monster, though the neighbouring area does not have any exceptional scenery (Ryhänen 2001). In the social context the physical environment gains added values, which are not reproducible, but are bound to time and place (Urry 1990). There are no two identical sunsets, and even the same sunset is evaluated through the individual eye.

3.4 About the Organisational, Economic Environment

Regardless of whether public authorities based on political decisions, private investors in the hope of capital gain, or participating individual customers pushed by passion are securing funding, the available money and other resources determine the scope of the operation. Sport services bear some special features when compared to other business activities. For example, there is an intangible, experienced value of sport consumption in either participating or attending. Zethaml and Bitner (2000) defined the "perishability" of services, since they cannot be stored, saved or reproduced (Zeithaml & Bitner 2000). Sport production is mostly ruled by special rules, separated from the 'normal' environment (Mullin, Hardy & Shutton 2007).

3.4.1 Theories on Demand for Sport Services

The demand for sport services cannot be presented without first briefly introducing the demand for sport consumption in general. I will therefore start by describing sport consumption in the broader sense before turning my attention to sport services in particular.

The sports industry and the market of sport services are often considered as being like any other industrial segment and are examined with an economic approach. Among others, Rodgers (1985), Salvatore (1993), Taks, Renson and Vanreusel (1994), Heinemann (1995), Gratton and Taylor (2000), and Li, Hofacre and Mahony (2001) have modelled sport consumption. Consumers are expected to make rational decisions. Colander (1998) stated that "If relevant benefits exceed relevant costs, do it; if relevant costs exceed relevant benefits, don't do it". Colander's (1998) theory was constructed to be used to explain the consumer economy in general, yet his work is often quoted by sport researchers. His cost

benefit analysis is comprehensively illustrated in FIGURE 7, and adopted in the explanation for sport consumption.

$$\sum \text{price} = \sum \text{costs} - \sum \text{benefits}$$

FIGURE 7 The price of the consumption (adopted from Colander, 1998)

Costs, in the case of sport consumption, do not only consist of the money spent on entry or participation fees, but also consist of travel expenses, refreshments, travel to and from the place of the sport, the actual sporting activity itself, and lost income if, for example, one has to take a day off work. Benefits in this equation include monetary reward, mental and physical health benefits, social benefits, and personal, immaterial values of amusement, and leisure time (Colander 1998). There is no numerical way of expressing the result of the calculation. Repetition or refusal of consumption empirically proves whether the service was worth its 'price' and whether the consumer was satisfied or not. It is worth emphasising that personal preferences are determinative in the evaluation (Urry 2000). These are first, the sense of value, second the experienced service quality and third the encountered emotion (Hume, Mort & Winzar 2007). While one particular activity can have great value for one participant, others may experience the same activity as being unsatisfactory.

Taks and her colleagues (1994) modelled sport consumption from a purely economic view point, and described the total expenses of sports participation. In their view, sport is not a single product that is consumed as a whole. The entire price of a sport is constructed as the sum of the prices of goods and services spent on it. Direct and indirect costs are distinguished. Direct costs are membership fees and entry fees, expenses of coaching, training camps and equipment including clothing, footwear and equipment maintenance expenses. Indirect costs are considered to be travelling expenses occurring due to sport practice, expenses for 'obligatory' social events, and other indirect costs, such as medical expenses, insurance, babysitting, magazines and such like. In the model of Taks, Renson & Vanreusel (1994) sport earnings are calculated as a reducing factor of total expenses. Occurrence of sport earnings, however, is probable only at a high level of performance.

In contrast to the above, Rodgers (1985) for example, emphasised the decisive importance of non-economic elements in sport participation and consumption. Rodgers argues that social filters like age, gender, the level and orientation of personal education, and the cultural influence of the social class are more significant than economic factors in sport consumption. Due to these social filters only a small part of the whole population are potential customers for a certain sport product. Potential customers are further filtered due to errors in management, marketing and policy, or lack of contact. Non-economic factors are unique to each individual consumer (Rodgers 1985.). Further, Puronaho

(2006) notes that political decisions over sports facility developments, usage fees and rights, taxation of non-profit organisations or even changes in the Every Man's Right markedly influence participation in sport activities.

Puronaho (2006) points out that participants play the key role during production of sport services. Sport service providers ensure the stage is set for the experience, but the experience itself is produced by the participants. If the experience is positive, it will encourage further participation. Many cases of participation make together a hobby. In the club context the offer of a sport service is not a sales procedure, but is instead an offer for mutual cooperation (Puronaho 2006).

Gratton and Taylor (2000) classified the consumption of sport and its benefits as durable and non-durable consumption. Durable consumption is for example the physical development, which influences one's health, quality of life, and working capacity. Non-durable consumption, which is the esthetical joy and fun that only exists during sport practice, the capital good, which results from a higher working capacity and the generated consumption activities connected to sport practice, all offer participants a higher quality of life when compared to non-active people.

As for practicing a sport, during a sport career the amount of invested money is not distributed in equal terms. At the beginning, every sports discipline requires a certain initial investment, which includes for example required equipment, and clothing. After the start, regular expenses constantly rise. Regardless of whether talking about recreational or competitive sport, after a period of three to five years of regular practice, sportsmen feel an internal urge to acquire better equipment and enjoy better circumstances at the time of practice. This results in a sharp increase of expenses. The more equipment demanding a sport is, the wider the price range of equipment on the market to fulfil the differing demands. In TABLE 2 the price range of some canoeing equipment from one exemplar retail shop is presented. We can see that there is a vast array of price ranges, with the most expensive products being eight times more expensive than the cheapest.

TABLE 2 Examples of canoe equipment prices

Item	Minimum price	Maximum price
Single kayaks	395 €	3,790 €
Double canoes	690 €	3,790 €
Kayak paddles	50 €	395 €

With advances in sport technique sportsmen are capable of utilising the benefits of better quality equipment, reaching higher accuracy, speed or force, whether it be in a competitive or recreational setting. When a sportsman does not aim to attain a higher level of practice and performance, regular expenses in their sport practice remain consistent until the sportsman's performance declines due to aging or changes in their life circumstances. In a lifespan examination Gibson (1998) found that there is a relationship between individual economic status

and sport practice. With higher education and income people are more likely to remain actively involved, particularly in individual sports (Gibson 1998). It was also found that there is a relationship between the economic status of the participant and the chosen sport discipline (Taks, Renson & Vanreusel 1995).

Financial income occurs from sport practice in many ways. In recreational sport, material benefits are mainly occasional prize draw gifts, which are distributed among all participants. The chance of winning is equal among all participants regardless of the level of performance. Winners' prizes might be money, but more often they consist of sponsors' products. In competitive non-professional sport there are also winning prizes for the top performers, which also can be money or products. In professional sport money prizes are common. To reach the level of winning prizes in any sport, however, participants need to have practiced over a long time period and need a relatively large investment of money. The necessary level of performance depends on the discipline. In team sports, football for example, even low-level performance can result in substantial earnings, while in less popular individual sports, like rowing, financial benefits are available only at a high level of performance. In FIGURE 8 a comprehensive illustration of the career long financial investment-earning relationship is modelled. It should be emphasised that an overall profit from the invested money is available only to a few, successful professional or semi-professional athletes.

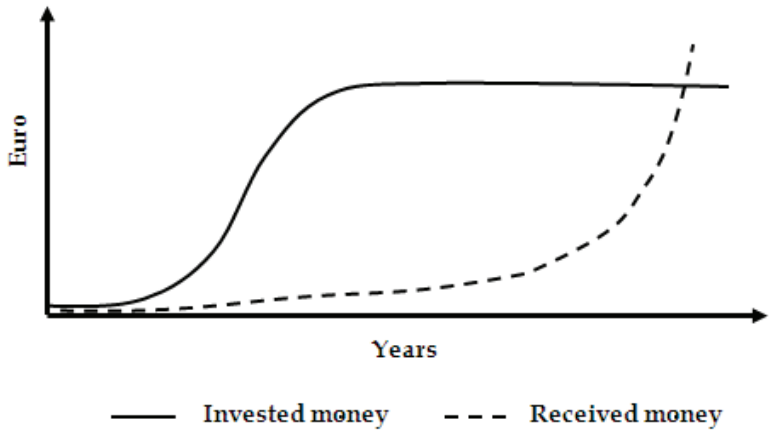

FIGURE 8 Investments and earnings of a sports career (applied from Puronaho 2001)

When questioning the rational decision-making in consumption, Urry (1990) states that leisure consumption is not a materialistic, rational decision-making process, but it arises from the pursuit of pleasure and it is relational. In the leisure industry almost all services are produced at the same moment as they are consumed. The service is part of the product. Consumers' anticipated quality of the service is largely influenced by the media, and social pressure, for example

friends or other customers expressing their experiences after using the same service.

The experienced quality of the service is the complex result of the physical experience and the social interaction between people, the consumer and the service provider, and fellow participants. The personality of the personnel, which represents the service provider, plays a key role in the experienced quality of the service. Furthermore, in the leisure industry, a certain service belongs to a certain cultural, natural environment and it often loses its meaning when it is taken out from its original context. Due to the large social influence on the experienced quality of the product, leisure consumption cannot be defined purely on economic based determinants. Urry (1990) adds that the experienced quality of the service depends also on the anticipated level of service. Too good a marketing can cause disappointment for customers, when their actual experience does not reach the expected level.

3.4.2 Theories of Supply of Sport Services

Supply is the answer to the demand, and it follows closely any changes in the demand (Li, Hofacre & Mahony, 2001). Factors, which have an impact on supply, can be economic or non-economic. Economic factors are, for example, the price of the product's raw material, the costs of production, technology, other suppliers' charges, and taxes. Non-economic factors are the suitability and quality of the applied managerial tools, the available amount of personnel and their quality, and the natural and cultural environment (Liu 2007).

Like Urry (1990) described, the experienced quality of leisure services, is highly influenced by the social interaction between the customer and the service provider. The longer this interaction lasts, the greater significance it has on the final evaluation of the service. In the prices of services, labour costs represent a significant part of the total cost. Unlike in manufacturing, where mass production can reduce per item costs, in services the cost will remain regardless of the quantity. The more the service costs to the customer, the more it is expected that it will meet personal desire. The personnel, who are in contact with the customer, represent an important part of the actual experienced quality of the product. In many cases these employees are only loosely involved and engaged in the production (Emery, King & Kriemadis 2002). The service provider is the company, which gives the name to the programme, does the marketing, deals with administrative issues, and also gains the reputation, while the performer of the service – and the one who built the reputation - are the personnel in contact with the customer. As interpersonal contact exists only in the present time, it is unpredictable. This issue heightens the importance of personnel training and motivation.

As Urry (1990) described, the service is context dependent. It is bound not only to the social but the physical environment in which it occurs. Every place, including natural space, has its own capacity. In human built facilities construction standards determine the capacity of the facility. In the natural environments the speed of recovery regulates the maximum amount of people, which it

can accept without it being destroyed. For example, in excessively visited places vegetation is being destroyed just by walking on it, waste management is becoming difficult and visitors may find that nature has become too crowded by other visitors. In leisure services, which occur in the natural environment, the sustainability of the services conflict with short-term business interests (Page & Getz 1997). The quantity of the service must not reach the limit of sustainable usage, as that is already negatively affecting the experienced quality of the service. This issue points out that non-economic factors play a significant role in leisure services.

The issue of non-rational decision-making appears also in the supply side of sport services. While analysing competitive sport Knowles, Sherony and Haupert (1992) and Li, Hofacre and Mahony (2001) stated that winning-maximisation might go beyond economic rationality both in professional and amateur sport. The greater the uncertainty of the outcome is of a race or match, the greater the chance of an exciting game. Audience demand grows in those events where the final result is hard to predict. This feature is most visible in professional team sport leagues, where regulations for the management are in force, which try to maintain uncertainty.

Li, Hofacre and Mahony (2001) suggest a list of core preferences for describing the decision-making process of non-profit oriented sport service organisations. The first preference is to reach the largest quantity and best quality in the services with the available resources, and to produce neither financial surplus, nor loss. The second preference is to attain the best result on the sports field or in the league with zero financial losses. The difference between the two models is that in the latter case the focus is on competitive success, the result, whereas in the first case the focus is on the participants and filling their demands to the highest possible standard. The third preference, according to Li and his colleagues (2001), is to keep financers, sponsors, and cooperative partners satisfied in order to ensure the continuity of financial backing. (Li, Hofacre & Mahony 2001) In this sense sport becomes a sort of entertainment business similar to theatre, cabaret or music.

The fourth preference is to maximise the interests of the management in charge. In these cases the focus of the organisation is not on the sport service nor on the athletic achievements, but on the external financer or on the organisation itself. This was pointed out also by Koski and Heikkala (1998). Financial interests and better results on the sport course do not necessarily correlate. To buy and employ a very expensive player, for example, may affect the financial status of the sport organisation noticeably. The team will not necessarily perform better due to having this star player, but financers enjoy having a star in the team. (Li, Hofacre & Mahony 2001) In this case non rational decision-making (Urry 1009) can be witnessed.

The basis of the fifth preference given by Li, Hofacre & Mahony (2001) in the decision making process is sufficient performance, where management monitors the accepted minimum level of service in order to provide service with the lowest possible expenses. This model is typical for budgetary organisa-

tions (Li, Hofacre & Mahony 2001.), like local municipalities. In their decision making process the provided resource from one side and the public demand on different sport services from the other side collide.

The sixth preference is lead by the principle of long-term survival. In this case, management usually resists any change, as "we have done it like this for the last fifty years, so it will be good for the future as well". Finally, Li et al (2001) suggest the preference for growth maximisation. Since non-profit organisations cannot have a financial surplus on their balance sheets, management verifies its efficiency through the growth of the service scope or of the organisation. However, besides its "noble" activities, non-profit organisations can have capital, property, financial investments and can enjoy the benefit of these (Autio & Perälä 1981, Ala-Vähälä 2008) as long as the operation stays non-profit and all gained resources are returned to the original aim of the organisation.

Service quality and its customer evaluation were the main focus while developing the SERVQUAL method, which later was further refined (Zeithaml, Parasuraman & Berry 1990). .The five determinant characteristics of customer satisfaction in services are the following: the *reliability* of the service, the *responsiveness* and the *empathy* of the personnel to the customer's personal needs, and the *assurance* for safety and confidence. These all are immaterial values and solely dependant on the social and personal abilities of the people in contact. The fifth characteristic is the *tangibles* of the service, the equipment in use, the facilities and the appearance of the staff. (Zeithaml, Parasuraman & Berry 1990) In outdoor activities the weather represents an uncontrollable factor, which is often an afterthought in programme planning. Hallowell (1996) argues that customer satisfaction is the result of the received value perception. The value is defined as the perceived quality compared to the price (Hallowell 1996). However, Cronin, Brady and Hult (2000) found that "service consumers seem to place greater importance on the quality of a service than they do on the costs associated with its acquisition", and therefore in service industries for the management it is beneficial to put emphasis on the quality of the services (Cronin, Brady & Hult 2000, p 209).

Barnery (1991) has described the resource based view (RBV) of the firm. In his book Barney claims that any firm can sustain competitive advantage over the rest of the market participants if and only if the firm possesses and uses in its production chain the following resources. It is *valuable*, in the sense that its organisational efficiency has the best performance among market competitors. The production is *rare* that raw material or knowledge is either non available or too expensive to others due to technological reasons or physical existence. The product must be *imperfectly imitable*, or in other words difficult to reproduce or copy. This also can be due to the quality of the tangible product or the level of knowledge inbuilt, and even can be the result of a complicated social networking chain in the production line. The last but not least resource is that it is *non-substitutable*, that a competing product would not be able to reach the same value-price level at any quality level. In Barney's (1991) definition, a resource can be any tangible or intangible asset, know-how, organisational process con-

trolled by the producer in the service of the production (Barney 1991). At least Priem and Butler (2001) debated the validity of the RBV, which Barney (2001) reflected on very shortly.

3.4.3 Specialities in Sport Service Production

Nurminen (1988) described the difference between the economy of a profit oriented and a non-profit organisation, as is illustrated in FIGURE 9. A profit oriented organisation invests available resources into further production. By doing this means that the expected income is higher than the investment costs. In comparison a non-profit organisation is looking for adequate resources to invest in order to be able to provide the wished for product. There are two main differences in the process. Firstly, in the market economy initial investment is available for a project, whereas non-profit organisations have to acquire resources before starting a project. The second main difference is in the aim of the operation. Profit oriented organisations aim to maximise the monetary difference between the invested money and the gained income, the profit, whereas non-profit organisations focus on the desired production. (Nurminen 1988.)

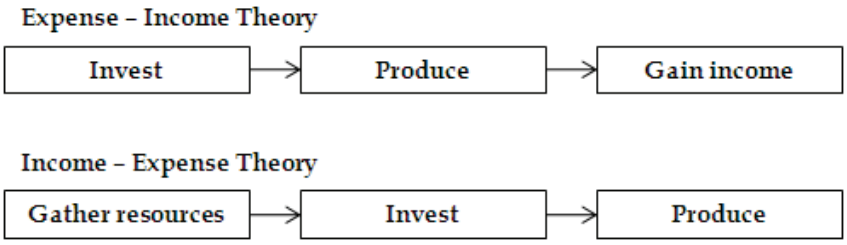

FIGURE 9 The expense-income and income-expense theory (Nurminen 1988)

Whatever goals a sport organisation has, it requires the appropriate resources to be able to attain those goals. In the case of a new organisation, when a group of people decide to fulfil their demand for sport practice, new initial investment is needed, as in the market economy. The main difference is that in a business enterprise the capital exists and the aim is sought while in the voluntary sector the aim exists and the capital is sought. It is difficult to secure sufficient public funding, sponsorship money or to find cooperative partners to finance a start-up sport service operation. Initial expenses include the registration fees and licences, equipment, rent of the facility, marketing, just to mention a few. Depending on the sport discipline the total necessary investment and the proportion of the different parts in the budget are changeable. In the case of canoeing the needed equipment, their storage space, transportation equipment represent a large initiative investment, whereas the sport place, where the activity occurs is free of charge. Already in short-term operation, however, we have to remem-

ber the need of the infrastructure development with the embarking places, and supporting facilities, like toilets, fireplaces (Luoto 2006).

The home of organised sports activities in Finland is the sports club. The operational structure of sports clubs evolved into being fully voluntary, where both participation and work is based on voluntarism. In this type of structure all members of a club, including the management, put their effort into fulfilling the commonly set goals of the club, and receive no financial refund for the work performed (Koski & Heikkala 1998). In the early 1990s sporting clubs became more service oriented (Heinemann 1995), as the extent and level of sporting services grew. And as the level and extent of services in sports clubs correlates to the available resources (Heinilä 1986), any such change requires a growth in resources also. Puronaho's (2006) observation, that clubs, which rely solely on voluntary work are not able to provide sufficient resources for the present day demand on sport services, stand firmly. Resource acquisition is a profession. In Finland it was found that the relative contribution to a sports club's finance was 43% from active fundraising and 8% from membership fees and the rest is public subsidy in different forms (Koski 1999; Koski 2000).

Active fundraising is any activity, which aims to provide better financial or material resources to enable the operation of an organisation. Active fundraising in this thesis is understood as being canoeing related or non-canoeing related activities and can be business like or non-business like depending on the statutes of the club. Recognition is important from the point of view of taxation. Some examples for active fundraising are equipment or facility rental, retail shop of paddling goods, kiosk or restaurant, beach guarding, event organising, consultancy, teaching and education.

General changes in society resulted in a diminished amount of available public resources for sporting services in the 1990s. Negative changes were observed in the quality and quantity of human resources in the services of sporting clubs (Puronaho & Mattilainen 1994). At present one of the key weaknesses of voluntary based sport organisations is the lack of knowledge in coaching and guidance, in management and in marketing (Puronaho 2006). To fill the gap between dwindling traditional public resources and the growing demand on services, sports clubs looked for alternative ways of gaining resources.

In this environment, partnerships between the public, private and voluntary sector strengthened and could be clearly seen (Heikkala 2000). It is claimed that public organisations aim to delegate the realisation of the basic service of sport to the private and voluntary sector (Puronaho 2006). Kainulainen (1994) for example does not categorise sport services as being a part of the basic services of the public sector (Kainulainen 1994). Sport is in many municipalities administered by educational, social or cultural services in Finland. Knuutinen (1994) presents three spheres of basic services. Sport is placed as a 'useful' service out of the scope of 'necessary' and the even tighter 'inevitable' services of the public sector (Knuutinen 1994). Further, it must be noted that sport has many appearances and professional sport is out of the realm of public services.

Participation in sport activities provides many forms of experience. Apart from the physical sporting experience, the social context of sport activity is valued by the participants (Urry 1990, Puronaho 2006, Karlis 2006). With regard to youth involvement the first experience of the sport practice is decisive for both the practising youth and his/her parents. In the case of positive experience, seeking for a similar experience is probable and can be the main reason for starting a regular activity or hobby. This in a social context involves the whole family in children's and youth sports activities (Puronaho 2006).

In parallel to increasing education levels and the wealth of the population, participation in sport and leisure activities also grows (Rudman 1984, Wilson 2002). In Finland sports clubs are the main sport service producers, and their work is mainly based on voluntary workforces (Heinilä 1996, Heikkala 2000, Koski 2000, Puronaho 2006). The approximate 9,000 sports clubs in Finland provide regular sport practice for about one million people (SLU 2006a; SLU 2006b; SLU 2008).

Because there is unsatisfied demand for sport services (Karlis 2006; Puronaho 2006), in most of the clubs the management aims to maximise the quantity and quality of service production with zero financial balance and keep financers and cooperative partners satisfied. The management of sports clubs acquire the elements of production, thus they are in a key position in the quantity and quality outcome of the operation (Puronaho 2006). Active volunteers in sport organisations represent a wide contact surface for many fields in the private sector, whereas through local, regional and national sports organisations, club management can utilise resources of the public sector (Puronaho 2006).

One of the main weaknesses of sport service organisations is the lack of professionalism in management. In operating a sport service organisation, knowledge about the sport in leisure or at the competitive level does not compensate for the necessary knowledge and skills required in working in the economy, marketing and other business affairs (Itkonen 1996, Karlis 2006, Puronaho 2006). In voluntary organisations a further challenge is that volunteers often have no experience in the task they are volunteering to perform (Coleman 2002, Puronaho 2006). Public resources are diminishing due to the rising number of fund applicants, i.e. more service providers are on the market, and local governmental funds are on the decrease (Koski 1999, Karlis 2006, Puronaho 2006). This has a direct effect on consumer prices rising (Karlis 2006, Puronaho 2006). The emphasis on competitive sport or the expectation of regular and certain levels of participation in practices often discourages people, youth and adults alike, who are interested in leisure activity (Puronaho 2006).

One of the major opportunities of sport services is that employers are more and more realising the value and advantages of cooperating with sport organisations. Through partnership a business can gain exposure, regular customers, positive image, affiliation to social responsibility, and a healthier, stronger workforce. On the other hand, the sport organisation can gain significant economic benefits and more customers (McDonald & Milne 1999; Puronaho 2006).

The raising level of education in the population brings about awareness of active lifestyles, and in turn this provides more demand for sport services (Karlis 2006; Puronaho 2006). Further applications of developments in communication technology increase the efficiency of matching demand and supply. Different mobile technology applications provide real time information to those interested in what, when, and where to do things (Karlis 2006). Economic recession through the diminishing public funds opens up opportunities for innovative organisations in the field of sport services, which can provide better and more versatile services for the actual demand (Karlis 2006).

During an economic recession, policy makers tend to lean towards promoting recreational activities to uphold the well being of citizens, which are mentally pressed by vacationing or unemployment (Vuori, Lankenau & Pratt 2004). The leisure sector is sensitive to economic changes. Even though people would rather save on housing, clothing and other issues than on hobby expenditures, especially if children are in question (Puronaho 2006), the leisure industry is one of the first to shrink when the financial wealth of customers is downsized (Karlis 2006). Here it is worth reflecting on the fact that recession as a threat concerns primarily sport consumption of the attendance of sport programmes and consumption of sporting goods (Mullin, Hardy & Sutton 2007). In contrast, during difficult economic times participation in sporting activities was found to grow (Cushman, Veal & Zuzanek 2005). Connected to the previous, rising expenses of renting a facility, and the labour cost constrains for example will be reflected in rising consumer prices, which in turn raises the access threshold for participation and decreases the number of potential customers (Ury 1990; Puronaho 2006; Karlis 2006).

Sport is also widely used as a tool for social inclusion and integration (Bordieu, Dauncey & Hare 1998; Cameron & MacDougal 2000; Bailey 2005). Elite athletes are an example for youngsters, and adults are eager to participate in events with them. The participation of successful athletes in the everyday life of the sport organisation, making them the "public face" for marketing the sport and clubs, would bring about a positive influence on the reputation of the organisation (Puronaho 2006). Further developments in cooperation of organisations would lead to a higher level of utilisation of resources for the common good. Cooperation can be set up between organisations, which supplement each other's operations, for example between outdoor activities and catering services, between organisations in the same field for exchanging experience and knowledge, or combining resources to enhance the quantity and quality of services, or perhaps amongst organisations which work in different spheres of society, such as sports, cultural or ecclesiastical organisations (Härkönen, Ryhänen & Tuohino 2002; Ryhänen & Härkönen 2002; Puronaho 2006).

4 APPLIED THEORETICAL FRAMEWORK OF THE RESEARCH

For the purpose of this research a triangular model was built as the supporting structure for sport services. As in the statement of the research problems it was found that socio-cultural, physical, and organisational-economic environments determine the level of practice and popularity of a sport in a given society. The researcher presumes that these factors together, the weakest element in determination, position the level of development of a certain sport service in time and space. If any of these basic pillars is not supporting the desired / demanded level of service, tension occurs, and the equilibrium is offset and the balance eases on the lower level (FIGURE 10).

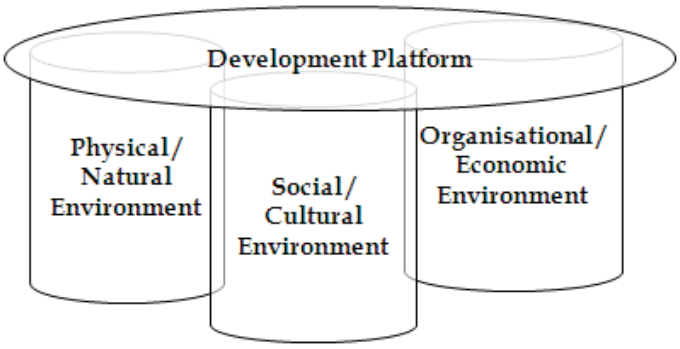

FIGURE 10 Triangular pillar structure of sport services

The socio-cultural environment, the history of the sport discipline, its cultural significance, the represented social values and its image are going to be examined in detail (Yannakis 1975; Tarasti 1988; Vilkuna 1995; Levinson & Christensen 1996; Vilkuna 1998; Gibson 1998). In factors of the physical environment geography, the climate and weather are counted (Wilkerson, Bangs & Hayward 1986; Urry 1990; Suomi 2000; Korhonen 2002; Räsänen & Saari 2004; Olkio & Eloranta 2007). Cultural geography (Chydenus 1753; Ramsay 1890; Suomela

1944; Karjalainen 1993; Itkonen & Kortelainen 1998; Kotivuori 2006) concerns partly both of the previous pillars. Among the organisational-economic factors the available economic and non economic resources, level of their utilisation, personnel, and organisational efficiency are considered (Hoselitz 1957; Rodgers 1985; Heinemann 1995; Li Hofarce & Mahony 2001; Puronaho 2006).

The platform level of sport service development responds to changes with delay, therefore temporary, short-term changes do not affect the level of development noticeably. For example a doping scandal in a competitive sport discipline may influence its popularity in the short-term, the socio-cultural pillar shrinks, yet in the long-term the level of development does not decrease. Through good management work the negative effect can be diminished quickly. Also organisational crises may occur in the leading national or regional organisation, without changes in a physical or cultural sense taking place and hence no effect is observed at the grassroots level. If, however, unbalance in the supporting pillars continues for long, the whole structure will be affected, and the sport services will descend to a lower level. For example, regardless of whatever perfect physical, natural environment exists, without suitable socio-cultural and organisational support, no sport service development occurs. Through marketing (short-term influence on the socio-cultural environment) the masses can be attracted, however, without the readiness of the organisational pillar and a suitable physical environment most of the potential customers will be turned away.

4.1 Research Methodology and Data

By reviewing the relevant literature the aim was to get to know the research phenomenon and outline the terminology, the most important aspects and used theories. Based on the literature the applied framework of a triangular pillar structure supported service platform was developed. The guidelines for data collection and its handling were set up and moreover limits to and the scope of the research were drafted. In the preparation phase of the research also possible hindrances the researcher could face were evaluated. With the help of the literature review, results and findings of former researches related to the field were examined.

The topic of the research concerns actors in the field of canoe services in Finland. These include: the Finnish Canoe Federation, its member clubs and their members; the Outdoor Recreational Association of Finland (Suomen Latu) and its members; manufacturers and retailers of canoeing equipments and goods; canoe rentals; canoe tour operators; environmental agencies; other sport governing bodies, like the Ministry of Education. To be able to handle the scope of the research, this work will closely examine those actors within the organisational structure of the Finnish Canoe Federation.

4.1.1 Quantitative Data Sources and Methods in Use

The Finnish Meteorological Institute (FMI) and Finnish Environment Institute (SYKE) provided the data concerning the climate and weather of Finland. For the purpose of this research archived observation data from Vantaa (lat: 60° 19‘ lon: 24° 57‘), Jyväskylä (lat: 62° 24‘ lon: 25° 40‘), and Sodankylä (lat: 67° 22‘ lon: 26° 37‘) representing the south, middle and north part of Finland was used. The surface water data was collected from the nearest possible locations to the selected weather stations. The study period ranges from 1996 to 2005. Each day during the 10-year period between 01.01.1996-31.12.2005 was classified based on different weather variables into one of six categories ranging from “ideal” to “impossible”. Variables were studied only during an “active time of the day” that was defined to range from 06UTC (Coordinated Universal Time) to 18UTC (9am to 9pm local time in Finland in summer).

The empirical base of the calibration was set so that recreational sport is done mainly in good and in ideal circumstances. In suitable conditions active participants still go out but occasional recreation is not usual. In poor weather, mostly only enthusiastic practitioners keep going out. In extreme conditions even competitors seek alternative forms of exercise. Air temperature is defined as the average temperature during the active time. Wind speed is ranked by the highest average wind speed in 10 minute periods measured during the active time. Precipitation is the 12-hour rainfall measured at 18UTC (9pm). The temperature of the surface water is measured once per day when waters are open (i.e. no ice cover) at 05UTC (8am). Regardless of other variables, when the surface water temperature is not measured, or in other words when the water is covered by ice, the days were classified as impossible to canoe. Out of the four variables, the weakest variable set was the daily level for classification. A one year average for the number of ideal, good, suitable, poor, extreme, and impossible exercising days was then calculated by dividing the number of days in each category by the number of years, i.e. by ten. In TABLE 3 the six categories of the weather classification are defined for this research.

TABLE 3 Weather criteria classification

	Weather classification for canoeing					
	Ideal	Good	Suitable	Poor	Extreme	Impossible
Air temperature (C)	over 20	15 to 20	10 to 15	5 to 10	under 5	
Wind speed (m/s)	0 to 2	3	4 to 6	7 to 9	over 9	
Water temperature (C)	over 21	16 to 21	10 to 15	4 to 9	0 to 3	under 0
Precipitation (mm)	under 0.3	0.3 to 0.9	1.0 to 4.0	4.1 to 8.0	over 8.0	

The National Sports Facility Data Bank of Finland is an internet-based geographical information system (GIS). The system provides versatile information on indoor and outdoor facilities designed for different sports. It includes nationwide information about sport facilities, recreational areas, outdoor facilities

and their management. The system was put into service in 1989, and is in continuous development through cooperation between the University of Jyväskylä – Faculty of Sport and Health Sciences, the Ministry of Education, the Alliance of Finnish Municipalities, the Finnish Sport Confederation (SLU), other sport authorities, sport and leisure associations and business enterprises. From the data bank, information was collected in May 2007 with selected sampling of recreational and competitive water-sport related sport-, recreational outdoor facilities and designated water-sport routes and areas. Water sports are defined as canoeing, rowing and boating. The data source does not provide the opportunity for the sampling of only canoeing facilities. From the detailed description of each individual facility, area and route applicable facilities for canoeing were selected, analysed, and evaluated. The service is also available to the public in the Finnish language at www.liikuntapaikat.fi.

The National Sport Survey of 2001-02 and 2005-06 investigated general sporting activities and exercise habits of Finnish youth (aged 3-18 years) and adults (aged 19-65). From the research it was discovered at what level Finnish people are practising sport, fitness or physical exercise, with whom, how often and in what sports they actually take part in. It was also investigated what services and facilities they use during these activities. Respondents' willingness to participate in different types of sports and their interest in organised sports were also charted. For both ages group and in both time scales about 5,500 respondents were randomly drawn from a national household telephone directory. The selection was based on quota sampling and only one interview was conducted in each household. Data collection was performed by the Finnish Gallup institute between March 2001-March 2002, at the rate of about 500 interviews monthly (SLU 2002a, 2002b, 2006a, 2006b). From this data base questions concerning canoeing activities and practices were selected.

A postal questionnaire to the management of member clubs (n=72) of the Finnish Canoe Federation (FCF) was posted on 19 February, 2004 and it was requested that it be completed and returned within a week. The return rate was 46% (n=33). The questionnaire was structured into five major parts, for examining General information, Personnel, Operation, Facilities, Equipment and Finance and it included 39 questions

Each group of questions were analysed using the SPSS statistical programme for calculating the intercorrelation matrix with Pearson's correlation coefficient at 0.05 and 0.01 significance level. Between variables, which were estimated to have a stronger influence on each other, a more detailed examination was performed with cross-tabulations, bivariate and frequency analysis. It was expected for example that active youth operation, number of coaches, time used for coaching, number of members positively influence each other. The low return frame of the questionnaires required that the results be weighted. The clubs which responded had a higher mean value for scope and level of most of the variables included in the questionnaire. This was cross checked through collecting reference data from independent sources such as sports boards of

municipalities, where canoe clubs are registered, the Finnish Canoe Federation, and the SLU.

The data base of the Finnish Canoe Federation was utilised in order to fill missing data and strengthen the validity of the received data from the postal questionnaire with regard to clubs membership and scope and level of canoeing activities.

4.1.2 Qualitative Data Sources and Methods in Use

An e-mail interview took place with Mr Csaba Szántó, at that time the Technical Director of the International Canoe Federation (ICF) on 26 March, 2003. A personal meeting and a second, face-to-face interview with Mr Szántó, at that time the ICF Director of Development Programme took place on 26 August, 2005 in Zagreb, Croatia. The interviews focused on Mr Szántó's view on the actions and trends in Finnish canoeing and looked at the possibility of implementing policies and practices from other canoe federations into the Finnish socio-cultural and physical environment

A personal interview took place on 8 October, 2004 with Mr Péter Horváth, vice-chairman of the Hungarian Canoe Federation (HCF), who was responsible for development of sport at that time at HCF. Since its foundation the Hungarian Canoe Federation has grown from a voluntary based and recreational oriented organisation into a professionally managed elite sports organisation. In operation it focuses on competitive sport and canoeing is widely represented in the media. The interests of recreational paddlers had for a long-time been neglected, but recently this issue has been put under the spotlight again. During the semi-structured in-depth interview, development phases of the HCF, and its present strengths and weaknesses were discussed. Also, possible similarities and differences to Finland with regard to culture, environment, and attitude were talked about.

A computer-assisted telephone interview (CATI) was performed with 10 out of the 11 members of the executive board (n=11) of the Finnish Canoe Federation on the 15 March, 2007. During the interview, discussed topics were individual value orders, decision-making interests, future strategic plans and trends within the board of management of the FCF. Interviews were note-recorded and transcriptions done, which were then sent, to be proofread and possibly corrected, to each respondent. The proofed texts were used as qualitative data sources.

All qualitative data was examined with key-word mapping analysis and the data investigation was supported with Atlas.ti software. Any direct quoting of an interviewee is presented in italic throughout the dissertation. Short quotations, like expressions or distinctive word combinations are embodied in the text of the dissertation, longer quotations are, however, separated from the text body with wider margins and put into their own paragraph.

4.2 Research processes

Planning of the empirical part of the research started in 2002. From the very beginning the main target group of the research were the actors within the organisational structure of the Finnish Canoe Federation. Already in the preparatory phase it was decided that canoeing should be researched as a whole and that competitive and recreational issues should not be looked at separately. Even though the two sport branches have very distinctive interests and needs, the status and development of one of them notably influences the other branch's status and development, thus justifying the common analysis. The project examines the mutual relationship between competitive and recreational activities in canoeing services and the benefits of this dualism. As part of this doctoral dissertation project, research results were presented at international congresses, and in article publications

Further qualitative data were gathered from the following persons: Janne Vikuna, Professor of Museology, University of Jyväskylä; Ms Kristina Honkanen, Chairman of Vesisamoilijat Canoe Club; Mr Heikki Sinkkonen, former Chairman of the Finnish Canoe Federation. The unpublished mostly informal data was used to support the research project in versatile ways.

5 RESULTS

5.1 About the Physical, Natural Environment

The number of classified days ranging between ideal and impossible for practicing canoeing per year in the three different locations is given in TABLE 4. Variables were set at a strict level and weather classification is presented only as the combined results of the variables. The outcome of this is that the quality of the daily weather evaluated in this work is often lower than most outdoor people would experience. Air temperature has obviously influence the comfort of an outdoor activity. The relative temperature, which is the experienced temperature with wind chill and air humidity, the precipitation factor, is even more important (Wilkerson, Bangs & Hayward 1986).The stronger the wind, the colder is experienced the same measured temperature. Perspiration takes energy, thus it has a cooling effect and a wet environment feels colder. The importance of water temperature in waterborne activities is identified as a risk factor as the heat radiation to the person moving on water is strong, whereas accidental capsizing submerges the paddler into it.

The number of days that are according to our classification at least suitable for practicing canoeing is largest in the middle part of the country. Due to the open location of the wind gauge in Vantaa, the wind factor has a relatively high impact on the results for the southern part of the country. The high latitude of Sodankylä brings the water and air temperature down. According to our weather study, ideal or good weather for canoeing seldom occurs in any part of the country. However, it should be noted that weather factors were strictly set for all categories. The wind factor alone influenced classification significantly in the south and the middle part of the country, as is shown in the first column of TABLE 4.

Experimental observation shows that on many days there are a number of hours, which are good or ideal for canoeing, according to the classification in this study, but the rest are poor or extreme. In early spring, for example, temperature variations during the day can be as large as 15 to 20 degrees Celsius,

the coldest time being in the early morning. Likewise, summertime morning and evening hours can be calm, whereas in the daytime the wind blows considerably, meanwhile the temperature does not change notably. With regard to precipitation, one heavy rainfall for example of more than four millimetres in volume, which may last only one hour, places the day in the poor category, though weather conditions can be much better during the rest of the day. People, who can fit their schedule to the changes in weather, can often find more ideal or good times for canoeing, than our analysis would suggest.

TABLE 4 Annual number of classified days for practicing canoeing

	Number of days for practising canoeing per year (Wind factor excluded)					Number of days for practising canoeing per year				
	Vantaa (lat: 60° 19` lon: 24° 57`)									
Ideal	20.7	75.2	132.6	172.7	208.8	0.1	4.3	89.1	165.2	208.8
Good	54.5					4.2				
Suitable	57.4					84.8				
Poor	40.1					76.1				
Extreme	36.1					43.6				
Impossible	156.2					156.2				
	Jyväskylä (lat: 62° 24` lon: 25° 40`)									
Ideal	8.0	56.2	113.2	163.3	197.7	1.1	20.9	103.7	162.6	197.7
Good	48.2					19.8				
Suitable	57.0					82.8				
Poor	50.1					58.9				
Extreme	34.4					35.1				
Impossible	167.3					167.3				
	Sodankylä (lat: 67° 22` lon: 26° 37`)									
Ideal	0.7	29.6	83.5	122.4	166.2	0.4	14.6	80.0	122.3	166.2
Good	28.9					14.2				
Suitable	53.9					65.4				
Poor	38.9					42.3				
Extreme	43.8					43.9				
Impossible	198.8					198.8				

In the north, there was only one day per year with ideal surface water conditions. In the south and the middle part of Finland the numbers of ideal days were 15 and 35 with regard to surface water temperature for canoeing. Water bodies freeze in the beginning of December in the south and middle part of Finland and during the end of October in the north

The 10-year study period showed that during the summertime for about eight weeks the average daily air temperature during the active time period is over the 20 C degree level in southern Finland. The 15 C degree level is ex-

ceeded from the beginning of May until the first half of September, and the 10 C degree level from the end of April until October. In Central Finland the 20 C degree level is stable for six weeks in the middle of the summer and the 15 C degree level stretches from mid-May until the end of August and the 10 C degree level from the beginning of May until the end of September. In the northern part of the country the 20 C degree level is only present usually in July, though the 10-year mean temperature does not reach that level on any given day. The 15 C degree level stretches from June until August and the 10 C degree level from mid-May until mid-September. The air temperature can be suitable for canoeing any time during the open water season, though poor or extreme levels are possible in the early spring and late autumn (FIGURE 11). The average temperature of the air tends to be higher in the spring season compared to the water temperature. However, from the middle of summer onward it is the opposite.

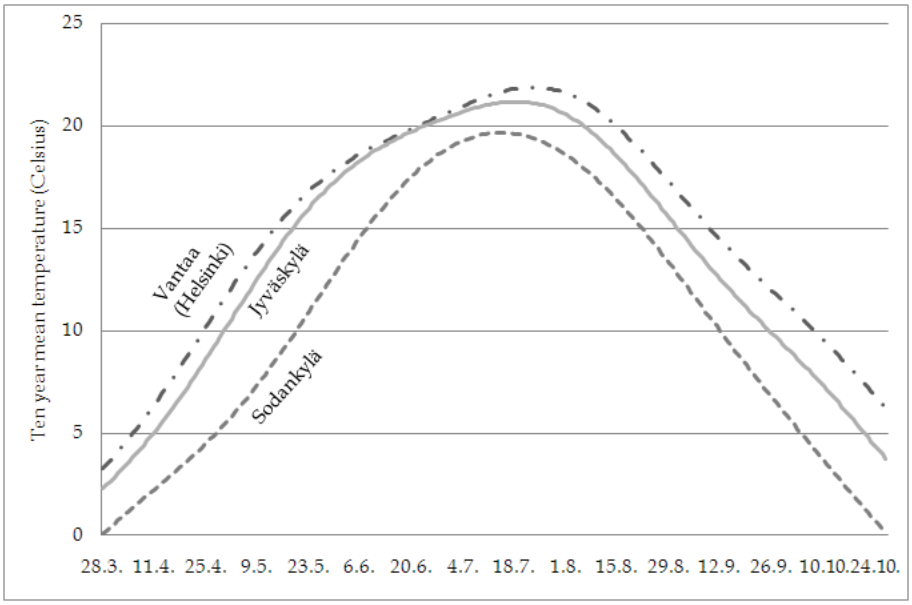

FIGURE 11 Mean air temperature from the three examined locations

In the weather classification a 12-hour precipitation sum measuring between 6 UTC and 18 UTC was considered. During the study period, when a rainy day occurred, precipitation was over 1 mm in 31% of the cases and over 4 mm in 11%. Regardless of how long the rain lasted the days were classified to the relevant grade.

5.2 About the Infrastructure and Facilities for Waterborne Activities in Finland

In the Finnish Sports Facility Data Bank there were 103 locations registered for canoeing purposes in 2007. These were canoe trails (n=91) mainly for recreational purposes and canoeing/rowing stadia (n=12) and white water stadia (n=0) for competitive sport training and events. These 103 areas are located in 65 municipalities. Out of these municipalities, 29 of them have member clubs in the Finnish Canoe Federation. The rest of the canoe clubs (n=44) operate in municipalities, which have no designated canoeing route or place (FIGURE 12). The fact that in certain places no designated canoeing area is registered in the data bank does not mean that there are no possibilities for canoeing. Rather, in these places, there are canoeists using water areas, which are otherwise unused, or the usage of the available water surface is so low that no explicit need was seen for designating an area for canoeing purposes.

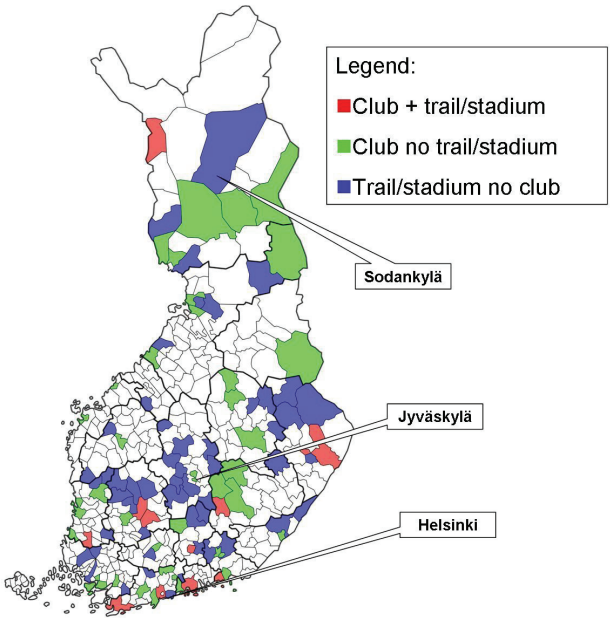

FIGURE 12 Distribution of canoe infrastructures and clubs

In the Finnish Sport Facility Data Bank, 91 canoeing routes are registered. In extension the variation is between a dozen to several hundred kilometres, allowing thus activities between some hours t up to weeks at a time. These routes are maintained by several organisations, including state, regional or local public and voluntary organisations. The network consists of nature trails, picnic sites, free camping places, shelters and wilderness huts, many of which have drinking water facilities, compost toilets, and waste collecting stations. Due to rea-

sons of scenic beauty, a number of these facilities are located along rivers or the shore of lakes, and thus serve water travellers. There are regional and local associations, organisations, which provide similar facilities for boaters and hikers.

Competitive canoeing requires slightly different types of facilities for its purposes than recreational canoeing. In the Finnish Sport Facility Data Bank (FSFDB) two codes are provided to find information about racing facilities for human powered watercrafts. These are 'rowing-canoeing stadiums' for sprint racing and 'white water centres' for mainly slalom canoeing, but rafting, WWR and freestyle canoeing are also possible. There were a dozen sprint stadiums found in the data bank. However, based on the available information in the database and from personal experience, out of the twelve facilities, only four are actually sports stadiums and suitable for organising national level sports events (Lahti, Tampere, Valkeakoski, Jämsänkoski). Out of these, competitive canoeing is practiced only in cubs at the first two locations. The stadium in Lahti features good support facilities, such as dressing rooms, showers, a small gym, a boat shed and repair room, and an office for the club management, which acts as a competition office if needed. However, the course is not sufficient for larger sporting events.

The racing course in Tampere hosted the World Championships in 1973, but it lacks most of the supporting facilities required to practice civilised sport. Three other sprint canoeing stadia also were once good quality sport facilities, but over time the race course structures and supporting facilities have deteriorated or were destroyed, due to different reasons. At the location of the rowing and canoeing events of the 1952 Olympic Games is still an active club life, but the race course is not suitable for competitions.

All other listed facilities in the FSFDB are designated 'boating places' where citizens can store their own fishing boats for a small charge per season, but canoeing and rowing sporting facilities do not exist. Two, rather good quality and actively used canoe stadia of Finland, are not found in the data bank. In Kangasala and in Ruovesi, thanks to an active canoe club management and the positive attitude of local authorities, race courses were built in recent years, along with which supporting facilities were also developed.

There are no white water centres in the registry of the National Sports Facility Data Bank. In practice, however, there are several restored or modified river sections in Finland, which were purposely applied for canoeing interests (Olkio 2006, Olkio & Eloranta 2007, Vesirakentaja 2008). At least two places must be named here: in Taivalkoski and at Pernoonkoski on the Kymi river two modern white water training centres have been founded and are working. As with sprint race courses and facilities, the demand for constructing white water courses and stadia requires active local canoeing life and a good relationship with the local government.

Though a white water course requires much less space than a sprint course, safety issues and possible opposition from environmental authorities and the fishing industry may hinder such an initiative. Though interests are not necessarily conflicting, willingness for cooperation is often lacking (Olkio 2006).

It is important to note that recreational and commercial white water canoeing can be enjoyable activities for the general public and facilities do not only need to serve competitors.

Commissioned by the Ministry of Education a covering research was executed in 2003-2005 to evaluate the conditions and necessities of water sport facilities in Finland (Luoto 2006). In that publication related legislation, the operational description of open water activities, planning and design recommendations of water sport facilities and some examples were presented. Beside the numerous objective recommendations concerning the suitable size and level of equipment a facility should have, some noteworthy remarks were found in this research paper that are relevant to my thesis. Luoto (2006) notes that most of these facilities are in the possession of sport clubs, open to members only. The level of services in these places is typically low. According to Luoto (2006) these facilities should serve the open public, but that prerequisite is that there should be an improvement in the service level, for example, the presence and availability of knowledgeable personnel, and preferably the facilities being accessible to people with disabilities. Cooperation between sports could be developed to a much higher degree than it is at present. For public authorities the finance of open water sport facilities is a relative advantage, especially if potential service providers and customer groups are involved in the project. As examples, six planned, ongoing or executed project descriptions are in the report for multipurpose all year use water sport centres. (Luoto 2006)

5.3 Resources of Finnish Canoe Clubs

The postal data questionnaire with the Finnish canoe clubs (n=72) was performed in 2004. Representatives of the clubs were the Chairman, Secretary General or Treasurer of the clubs. The return rate from the clubs' management was 47% (n=33). Some of the returned questionnaires were incomplete. These questionnaires were used in the extent that they were completed. Returned questionnaires were weighted by the province of the clubs and by the number of members the individual clubs represent. The level of representativeness varies from province to province. The lowest return rate of questionnaires and the lowest representativeness occurred in the Province of Lapland with one-third of the clubs responding, representing 60% of all registered paddlers in the province. The highest return frame of questionnaires occurred in the Eastern Finland Province with a 56% return frame, while the highest representativeness of paddlers was from the Province of Oulu with 89% of all registered paddlers. (TABLE 5).

Data shows that larger clubs by number of members were more eager to participate in the research compared to smaller clubs. All clubs participating in the competitive activities of the Finnish Canoe Federation responded to the query. Because the responding clubs are those, which participate actively in the Federation's work, and represent at the same time three-quarters of the mem-

bership, it can be assumed that in these clubs more resources are available, their range of operation is wider, their facilities better, and networking is stronger than for those left outside the realm of this research.

TABLE 5 Response rate to the questionnaire and its distribution

Provinces	Clubs		Members in clubs	
Southern Finland	n	%	n	%
Total	26	100	4,880	100
Responding	12	46	3,620	74
Western Finland	n	%	n	%
Total	23	100	2,320	100
Responding	11	48	1,656	71
Eastern Finland	n	%	n	%
Total	9	100	490	100
Responding	5	56	373	76
Oulu Region	n	%	n	%
Total	6	100	591	100
Responding	3	50	524	89
Lapland	n	%	n	%
Total	6	100	149	100
Responding	2	33	89	60
Finland	N	%	N	%
Total	70	100	8,430	100
Responding	33	47	6,262	74

Within canoeing, competitive activities represent a small part in Finland today. In 2007 five Finnish Championships were held in canoeing, namely in the sprint, slalom, marathon, polo, and freestyle disciplines. There were 145 A-licenses sold in that year to 31 out of 73 member clubs of the Finnish Canoe Federation. There was only one club in the whole country, which sent participants to all of the championships. Three other clubs participated in three of the championships and a further eight clubs in two championships. Athletes from another 19 clubs participated in one out of the five championships. This data was taken from the championships' reports and results. From the postal query sent to the clubs it turned out that over 80% of the clubs regard recreational activity as the most important of their activities (TABLE 6). It is worth noting that the club, which sent athletes to all the championships, also saw recreational activities as the most important in their operation.

TABLE 6 Main interest of the canoe clubs in Finland

Main interest of the sport club	n	%
Recreation	27	82
Youth sport	3	9
Competitive sport	3	9
Other	0	0

5.3.1 Finance

In TABLE 7 the percentile distribution of annual budgets of canoe clubs in Finland is shown. The combined financial operation of the canoe clubs in Finland can be estimated at around 500,000 Euro per year. In the weighting of the calculation we have considered that larger clubs have larger yearly budgets. Participating clubs in the research represent the majority of registered club members in the Federation. About one-third of the clubs have less than a 5,000 € annual budget, with 25% having up to 10,000 €. It is worth noting that the collected data concerns only budgeted for activities of the canoeing clubs. Due to canoe clubs in Finland being mostly recreation oriented and the organised activity level being low, it is assumed that in clubs many sport related financial activities do not appear on a clubs account, but they are paid by sportsmen. Equipment is privately owned, and transportation for competitions are arranged in ridesharing, for example. It is highly probable that the budget of a small club is smaller than the sum of the sport related expenses paid by individual members in total.

TABLE 7 Annual budget of canoe clubs in Finland

Annual budget of clubs	n	%
Less than 5,000 €	11	33
5,001-10,000 €	8	24
10,001-20,000 €	5	15
20,001-30,000 €	5	15
Over 30,001 €	4	12
Total	33	100

As expected, clubs with a larger number of members have larger annual budgets (r=.530, sig=.002, n=32). Although the largest club in terms of membership reported the largest annual budget, the largest budget category also includes clubs with a fairly low number of members as well. In contrast, some clubs with a fairly high number of members were reported to the smallest financial category. This is illustrated in TABLE 8.

TABLE 8 Number of members and the annual budget of a club

Annual budget of the club	Number of members in the club				Number of clubs
	1-30	31-100	101-300	301-	
Less than 5,000 €	0	7	3	0	10
5,001-10,000 €	2	3	2	1	8
10,001-20,000 €	0	0	4	1	5
20,001-30,000 €	0	0	3	2	5
Over 30,001 €	0	1	1	2	4
Number of clubs	2	11	13	6	32

A positive correlation is found between the size of the annual budget and the active fundraising activities within canoeing related services (r=.388, sig=.028, n=32), but a negative correlation is found for services outside of canoeing (r=-.331, sig=.064, n=32). Clubs with a small annual budget are likely not to have any active fundraising, yet two-thirds of the clubs operate services, which are related to canoeing. Only four clubs reported active fundraising with activities unrelated to canoeing. These activities included running a kiosk and other leisure and tourism related services.

The level of active fundraising outside canoe related services and employed management with related education (e.g. management, economic, sport planning and -administration) have a high correlation (r=.523, sig=.003, n=30). This seems to be necessary and normal, because the work in the management of a sport club requires knowledge, time, effort, which might exceed the voluntary enthusiasm and is done by professionals, or at least by paid personnel.

All the financially larger clubs practise active fundraising, but only two of them are also active with services unrelated to canoeing. One club even reported being active only with services unrelated to canoeing. It is worth noting that two financially smaller clubs are also pursuing active fundraising outside of canoe related services. It may indicate that a club's sport activities are subsidised by the active fundraising income. The results are presented in TABLE 9.

TABLE 9 Budget and fundraising practices

Annual budget of the club	Active fundraising is practiced			
	within canoe services		outside canoe services	
	n	%	n	%
Less than 5 000 €	4	12	0	0
5 001-10 000 €	5	15	1	3
10 001-20 000 €	3	9	1	3
20 001-30 000 €	4	12	0	0
Over 30 001 €	4	12	2	6
Total	20	61	4	12

Based on the received data from the questionnaires the geographical location of the club and the size of the annual budget are independent factors. Three out of four of the financially largest clubs are located in the Southern Finland Province

and one in the Eastern Finland Province. There were two respondents from the Lapland province and they reported having the smallest annual budget group, as can be seen in TABLE 10. It can be also seen that financially strong clubs can be found in most Provinces.

TABLE 10 Size of the annual budget and the province of a club

Annual budget of the club	Province of the club									
	Southern Finland		Western Finland		Eastern Finland		Oulu Region		Lapland	
	n	%	n	%	n	%	n	%	n	%
Less than 5,000 €	3	25	4	36	1	20	1	33	2	100
5,001-10,000 €	1	8	4	36	2	40	1	33	-	-
10,001-20,000 €	3	25	2	18	-	-	-	-	-	-
20,001-30,000 €	2	17	1	9	1	20	1	33	-	-
Over 30,001 €	3	25	-	-	1	20	-	-	-	-
Total number of clubs	12		11		5		3		2	

In TABLE 11 the most important financial sources of Finnish canoeing clubs and their proportional importance is shown. The main income of canoe clubs in Finland is reported to be the active fundraising, which contributes 45% to the total income in mean value. In the answers it was not specified as to whether the activities are related to canoeing services or not. Also about 30% of all incomes arise from membership fees. Here it is worth reflecting on the literature reference that stated that the membership fee in the recent past in Finnish sport in general has lost its importance in contributing to sport clubs' financial resources, with different license and service fees being applied instead (Koski 2000). The third most important source is local governments' subsidy, with a 10% mean value.

In four cases, active fundraising is practiced in non-canoeing related services. In these cases the majority of all income of the club was from these services. Sponsorship sources represent a minor income source for canoe clubs. A state subsidy is granted to two clubs, where it represented 20% and 35% of the annual budget. "Other" sources, such as the EU and other sport funds, were granted to four clubs during the studied period. In those cases the relative contribution of "other" sources to the annual budget was 20-30 %. In the written explanation, it was stated in all cases, that these funds were project oriented, and were only once grants.

TABLE 11 The contribution of different resources to the budget

	Contributive financial resources and their percentual share in the annual income of the clubs											
	state subsidy		membership fee		local subsidy		business		sponsors		other	
	n=2	%	n=29	%	n=26	%	n=30	%	n=11	%	n=4	%
Mean		2		32		13		48		4		16
Median		0		30		10		45.5		0		16.5

Over half of the financial resources are used for covering administrative and other operational costs, such as facility rental, electric and heating costs, licenses, and renewal of equipment. In three responding clubs the whole budget was used for these purposes. Paid personnel are not employed in the majority of the clubs. In the three clubs, where a salary was paid, it amounts to only a minor share of the total budget. Voluntary work is used in canoe clubs, with an average of 280 hours a year. Two-thirds of the responding clubs actively organise events and participate in events. On average, both event organising and participating in events represent about 15% each in the budget of these clubs. One club reported that its whole budget is used for organising events. Other major issues in the usage of financial resources in building, expanding or renovating clubhouses, saving for future investments and expenses related to the upkeep of non-canoeing related services. The aims and proportional distribution of usage of financial sources of the canoe clubs in Finland are presented in TABLE 12.

TABLE 12 Usage of financial resources

	The way of use of financial sources and their percentual share in the budget									
	operation		salary		organising events		participating on events		other	
	n=26	%	n=3	%	n=22	%	n=22	%	n=8	%
Mean		59		1		15		13		38
Median		70		0		0		5		27.5

5.3.2 Facilities

In TABLE 13 a cross-tabulated analysis of the perceived quality of the location of the clubhouse and the required time to reach it from the local centre is presented. Most canoe clubs are in a good (48% n=16) or in excellent (37%, n=11) location. No reply was received that stated that a club was in a bad location. In the evaluation of the quality of the location, the distance between the centre of the municipality and the canoe shed played an important role (r=.559, sig=.001,

n=31). Most of the canoe clubhouses are easily accessible by bicycle. Close to 80% (n=26) of the canoe clubs are reachable by bicycle within 15 minutes from the centre of the municipality, but they are likely to be reached in about 10 minutes.

TABLE 13 The location and accessibility of the canoe clubs

Perceived quality of the location of the clubhouse		Time span of the bicycle ride from the centre to the shed				Total by perceived quality of location	
		less than 15 minutes	15 to 30 minutes	30 to 45 minutes	more than 45 minutes	n	%
satisfactory		1	0	0	3	4	12
good		15	0	1	0	16	52
excellent		10	1	0	0	11	36
Total by time	n	26	1	1	3	31	
	%	85	3	3	9		

A canoe club's clubhouse should serve as the place for storage of equipment, the meeting place of members, centre of courses, equipment maintenance, etc. Practically the whole life of the club happens there, yet the sport activity itself does necessarily take place on the spot. In many cases in Finland a canoe clubhouse is nothing more than a simple storage building for keeping boats and other equipment behind lock. In 85% (n=27) of cases, canoe clubs have a clubhouse which they own, rent or have a co-operative agreement with the owner. Five participant clubs (15%) reported not having a clubhouse at all.

A former member of the Board of the Federation expressed during a development seminar of the Federation, where sports clubs were present in 2008, that "If my child wanted to start canoeing I wouldn't bring him/her a second time to Kaukajärvi" (Honkanen 2008). As was earlier elaborated in the literature review, Lake Kaukajärvi in Tampere hosted the 1973 World Championship in sprint canoeing. Today it is the training location for two canoe clubs in the town, but the facility is in such a condition that people (who are also parents) involved in canoe racing in Finland have often given negative opinions about it such as the one above.

The majority of the Finnish canoe clubhouses (72% n=23) are missing basic sanitary services: no toilets, showers, or dressing rooms are available. In contrast to the above, more clubs reported (38%, n=12) having a club room, for social get-togethers and other events, than sanitary facilities. In clubs, where a dressing room is provided, other sanitary and supporting facilities are significantly more likely to be present (r=.845, sig<.001, n=32). The correlation coefficient shows significant correlation between the perceived level of accessibility to the clubhouse and the equipment level of the facility. The better the location, the higher the equipment level of the facility (r=.537, sig=.002, n=31) or vice versa. Access to the water at the clubhouse is secured in 87% (n=26) of the cases

via a pontoon or other floating device, which is designed to help safely launch paddlers.

Clubs which maintain cooperation with nearby educational institutions have significantly better facilities than those clubs which are not in cooperation with schools (r=.674, sig<.001, n=31). As expected, along with better facility services, expenditures, reflected in the budgets, are larger as well (r=.845, sig<.001, n=32). Clubs which have showers, toilets, and a social room for members have a higher membership ratio than those, which do not have such facilities, and the correlation is high (r=.365, sig=.043, n=31). The correlation coefficient is small between the geographical location of the club and the level of equipment in the facility (r=.081, sig=.658, n=32). The correlation coefficient is small between the equipment level of the facility and the length of active club operation throughout the year (r=.094, sig=.609, n=32), which can be understood as meaning that relatively well equipped facilities are out of use at certain times of the year, or that other than canoeing related activities take place there.

5.3.3 Equipment

The use of the trainer's motorboat considerably lifts the level of safety in many waterborne sports activities. During teaching and training of sprint canoeing or kayaking a motorboat not only increases safety, but also the potential for the trainer to provide prompt and appropriate advice where it is needed at any time during a training session. A motorboat is available in 22% (n=7) of the clubs. Significant correlation is found between the number of sprint kayaks and the availability of a motorboat (r=.573, sig=.002, n=26). When more kayaks are available, it is more likely that a club will also have a motorboat. In contrast, the correlation coefficient between the number of hours spent on coaching and the number of available racing kayaks is low (r=-.114, sig=664, n=17).

In TABLE 14 the number of different types of boats available is presented in canoeing clubs in Finland. I assume that sufficient amount, size and quality of boats, along with expert guidance, is a determining factor in the decision to start up practice.

> "It would be great to have in every club a bunch of boats designed for kids." (Szántó 2004)

Equipment designed for the use of youth was not reported in any clubs. These vessels are smaller in size, lighter, and are easier to handle for teaching canoeing to smaller sized people.

The only team discipline of canoe sport is canoe polo. No equipment is available for canoe polo in 42% (n=14) of the clubs. In eight clubs (24%) the available equipment is not enough to equip even one full team. In five clubs (15%) polo equipment is available for one team and in three clubs (9%) for two teams – in other words to simulate a game in training. In 2007 six teams from four clubs participated in the Finnish championship tournament according to the Federation's archive.

TABLE 14 Number of available paddling boats in canoe clubs

Types of boats	Number of available different types of paddling boats in clubs								Accessibility in general	
	over 10		6-10		1-5		0			
	n	%	n	%	n	%	n	%	n	%
Sprint/Marathon	5	15	2	6	9	27	12	36	16	49
Slalom	-	-	1	3	11	33	18	55	12	36
WWR	-	-	1	3	11	33	18	55	12	36
Polo	3	9	5	15	8	24	14	42	16	49
Freestyle	-	-	3	9	9	27	18	55	12	36
Raft	-	-	-	-	1	3	29	88	1	3
Dragon	1	3	1	3	-	-	28	85	2	6
Touring	13	39	9	27	5	15	-	-	27	82

In commercial canoe services dragon boats and inflatable rafts represent great value, due to their low-access-limit and popularity among tourists and corporate sport programmes. Dragon boats or rafts are to be found in three clubs. One of these three clubs has active fundraising activities both within and outside canoeing services. The second club only has this within canoeing services and the third club reported no activities besides normal club operation. The correlation between the financial strength of the club and whether these boats are available is diverse. Dragon boats significantly influence the financial strength of the club (r=.440, sig=.015, n=30), whereas the availability of rafts show less influence (r=.207, sig=.273, n=30).

The majority (82%) of the canoe clubs reported having touring kayaks. In 15% (n=5) of the cases less than 5 boats are available, and in about 30% (n=9) of the clubs there are less than 10 of these boats. In 40% (n=13) of cases more than 10 boats are available for members to use. Clubs, which have more touring equipment, tend to have a larger budget (r=.525, sig=.005, n=27). No similar correlation is found between the amount of competitive class boats and the budget of the club. Where equipment is available for more paddlers in general, the number of members tends to be higher. The clearest correlation of this was shown for recreational boats (r=.589, sig=.001, n=27), sprint racing (r=.422, sig=.028, n=27) and water polo boats (r=.418, sig=.024, n=29). No significant dependency was found between the available equipment and the geographical location of a club.

5.3.4 Personnel

Demographically the questionnaire respondents were 30% (n=6) female and 70% (n=14) male. The questionnaire was filled in by the chairman of the club in 80% (n=25), by the treasurer in 10% (n=3), by the secretary general in 3% (n=1), by the vice-chairman in 3% (n=1) and by the leader of coaching in 3% (n=1) of the cases.

Concerning the repliers' educational background 58% (n=17) of them have a third level education, 8% (n=2) secondary education, and 34% (n=10) a professional education. Only three of the replying clubs have personnel in the management with an education in sports management or a related field, such as economics. One of these clubs employs a manager, but in the other two clubs the managers are voluntary workers.

With regard to their age, representatives were between the ages of 43-52 years in 52% (n=10), between the ages of 53-62 years in 27% (n=5) and between the ages of 23-38 years in 21% (n=4) of the cases. In the total sample the average age of the replying clubs' leaders is 46.3.

The vast majority of club activity related work is performed by voluntary workers. Most of the voluntary works are related to obligatory duties of every organisation, such as management and administration. Course guiding, coaching and maintenance of equipment are the follow-ups. The amount of voluntary work spent on administration, maintenance, events organising and course guiding are positively correlated with each other. Where more work has been done in one field, then more work has been done in the other mentioned fields as well. A positive correlation has been found between the budget of a club and the amount of voluntary work performed in course guiding, administration and maintenance.

Only one club reported that they have paid personnel working as full-time employees in the club administration and services. Besides employing certain people, the club uses a great number of voluntary workers, especially in services, maintenance, event organising, and programme guidance. Additionally, four clubs reported employing seasonal part-time workers for coaching, maintaining equipment and facilities, or for providing services such as that of a kiosk tender and cleaning. Clubs, where personnel in the management have a sports management or related education, tend to have larger annual budgets (r=.460, sig=.009, n=31). Also in these clubs employees are more likely to be hired (r=.382, sig=.034, n=31). It seems that the job specific educational background and the size of the budget, thus the scope of operation, number of members, etc, are related. Whether or not the influence is bi-directional was not shown.

The short dialogue below is from an informal discussion of the author (BP) with Mr Heikki Sinkonen (HS), Chairman of the Finnish Canoe Federation, which took place in 2002, in Lahti during the Junior Finnish Sprint Racing Championships.

> "BP- Who are those guys in the K-4?
> HS- That is the national K-4 team, they are training for the World Championships.
> BP- Who is their coach?
> HS- They don't have one."

The senior team in question had its training during the competition break, and the lack of coaching supervision in their training was obvious. Mr Sinkonen's answer inevitably brought me to asking the question: If there is no nominated trainer for the national crew, how can coaching possibly work at a grassroots level?

As is illustrated in TABLE 15, in more than half (52%, n=17) of the participant clubs in the research no educated coaching personnel is available. Six clubs reported having one trained coach and eight other clubs reported having between two to four coaches. In one club there are seven coaches and in another one thirteen. Most coaches work only during the summer season and work on a voluntary basis. In clubs where more than one coach is available (n=10), only in three cases do trainers share the work on a designated sports-pedagogical basis. Two out of the four clubs, which reported competitive operation as their main interests, have no qualified coach.

TABLE 15 Number of trainers and number of members

Number of members in the club	Number of educated trainers working in the club							Number of clubs by the number of members (n)
	0	1	2	3	4	7	13	
1-30	1	0	0	0	0	1	0	2
31-100	8	3	0	0	0	0	0	11
101-300	7	1	0	3	1	0	1	13
301-	1	2	3	0	0	0	0	6
Number of clubs by the number of trainers (n)	17	6	3	3	1	1	1	32

On average in one year 116 hours of voluntary work is performed for coaching in clubs (n=20, 60%) and for course guidance 370 hours (n=11, 33%). The median value in both cases is 100 hours per year. Only a few clubs (n=5) reported organising events. They reported that a median of 200 voluntary working hours takes place per year with regards event organising.

Some observations regarding the personnel in clubs, based on individual examination of the presented cases in TABLE 15, are described below in this section. One of the competition oriented clubs has only five members, four junior and one adult licensed competitor. No trained coach is reported as being available for them. The two other competitive oriented clubs, which reported having one and four coaches respectively, do not employ their coaches. The club, which reported possessing 13 trained coaches, has 231 members, but none of them have a competition license, and the club has only touring boats and is oriented towards recreational paddling. In the club which has the second highest number (seven) of coaches, only slalom and freestyle paddling is practiced. The club has 26 members, out of which four have a competitive license. The only club, which reported having daily supervised sessions (five times a week) has two trained coaches. It has 418 members of which 18 have a competitive license.

The correlation coefficient is high when examining the relationships between educated and trained personnel in the management and the size of the annual budget (r=.460, sig=.009, n=31), and the number of members in the club

(r=-.364, sir=.048, n=30). If a club has an employee, the person tends to be the manager of the club. The number of hours spent on voluntary administrative work correlates to the number of hours spent on maintenance, event organisation and courses, the activity level of the club.

5.3.5 Operation

One third (n=11) of the responding clubs have sporting activities less than six months a year, and 40% (n=13) of clubs are active all year round. Active cooperation exists between the club and a nearby educational institute in 22% (n=7) of the cases. In TABLE 16 it can be seen that most of the clubs having year long activity have no cooperation with schools. A low level of dependency has been found between the length of active operation and whether cooperation with nearby educational institutes exists (r=.376, sig=.034, n=32).

TABLE 16 Length of operation and cooperation with schools

cooperation with nearby school	Active operating time in a year			Number of clubs (n)
	3-5 months	6-10 months	All year round	
yes	5	1	1	7
no	6	8	11	25
Number of clubs (n)	11	9	12	32

No supervised training session is provided in 18% (n=6) of the clubs. One session is provided weekly in 40% (n=14) of cases and in a further 31% (n=10) of the clubs two sessions a week are provided. In these clubs guided sessions are provided only during the summer season. One club (3%) offers guided sessions daily and two other clubs (6%) three times a week. These clubs operate all year around. In TABLE 17 the distribution of the number of guided sessions and the length of the active operation in a year is presented. Strong statistical dependency has been found between these two factors (r=.476, sig=.005, n=33).

TABLE 17 Length of operation and amount of guided sessions

Active operating time in a year	Number of guided sessions a week					Number of clubs (n)
	0	1	2	3	5	
3-5 months	4	5	2	0	0	11
6-10 months	2	4	3	0	0	9
years round	0	5	5	2	1	13
Number of clubs (n)	6	14	10	2	1	33

The quantity of offered supervised sessions in a week correlates significantly to the annual amount of voluntary coaching works (r=.766, sig<.001, n=19) and the length of the active operation in a year (r=.476, sig=.005, n=33). The more

guided sessions are provided in a club the larger is the number of licensed youth (r=.619, sig<.001, n=33) and adult athletes (r=.544, sig<.001, n=32) and the number of all youth members (r=.422, sig=.016, n=32).

TABLE 18 shows that a low statistical correlation can be found between the number of guided sessions and if cooperation with a nearby school exists (r=.166, sig=.362, n=32). In contrast, clubs which operate longer in a year, are more likely to have cooperation with a nearby educational institution (r=.376, sig=.034, n=32).

TABLE 18 Cooperation with schools and number of guided sessions

Cooperation with nearby school	Number of guided sessions per week					Number of clubs (n)
	0	1	2	3	5	
yes	2	3	2	0	0	7
no	4	11	7	2	1	25
Number of clubs (n)	6	14	9	2	1	32

Under the supervision of the FCF and its member clubs, about 100 canoeing events yearly are organised for recreational and competition level participants in all the sub-disciplines of canoeing. One noteworthy mass event is organised annually, in which about a thousand participants take part (FCF 2006).

5.3.6 Membership

It can be seen that many club members around the country are members only because they are living in an urban environment but have no place to store their kayak or canoe and so use their membership solely as a way of renting a storage place for the vessel. No data was gathered over the usage of the private boats in clubs.

There are 8,839 members in the clubs of the Finnish Canoe Federation, with an average of 150 members per club. In the participating clubs in the research the membership ratio is considerably higher. In the participating 33 clubs there are 6,332 members registered, making an average of 192 members per club. It must be noted here that the deviation of the number of members in Finnish canoe clubs is large. The total number of members in canoe clubs is between five and 1,080. The number of licensed athletes in a club varies between one and 53.

No statistically significant relationship was found between the number of members in a club and the size of the municipality where the club is located (r=.272, sig=.162, n=28), but a provincial location has some influence on the number of members. TABLE 19 shows that all respondent clubs with over 300 members are located in the Southern Finland Province and Western Finland Province of the country.

TABLE 19 Number of clubs and of active canoe paddlers

Province of the club	Total number of members in the club				Number of clubs by province (n)
	1-30	31-100	101-300	301-	
Southern Finland	1	2	4	5	12
Western Finland	-	3	6	1	10
Eastern Finland	1	3	1	-	5
Oulu Region	-	1	2	-	3
Lapland	-	2	-	-	2
Number of clubs by the number of members (n)	2	11	13	6	32

The youth participation in canoeing in Finland is low, with only 15% (n=978) of club members being under 18 years old. The share of licensed junior athletes in this group is 12% (n=118). These junior athletes are registered in 15 (45%) of the participant clubs, out of which seven clubs have between them 84% (n=96) of all junior athletes, as is illustrated in TABLE 20. The number of youth members is statistically the most influential factor on the total number of club members (r=.609, sig<.001, n=32), besides the number of adult members (r=.402, sig=.023, n=32) and the length of the active operation of a club in a year (r=.391, sig=.027, n=32).

TABLE 20 Provincial spread of junior aged licensed athletes

Provice of the club	Number of licensed U18 athletes in the club				Number of clubs by province (n)
	0	1-5	6-10	Over 10	
Southern Finland	7	3	-	2	12
Western Finland	6	2	3	-	11
Eastern Finland	3	2	-	-	5
Oulu Region	1	1	1	-	3
Lapland	1	-	1	-	2
Number of clubs by the number of U18 athletes (n)	18	8	5	2	33

Licensed adult competitors are found in 18 of the responding clubs (54%).The majority (60%, n=59) of adult licensed competitors are concentrated in five clubs. There is a clear positive correlation to be found (r=.790, sig<.001, n=32) between the number of junior aged licensed and adult licensed competitors in clubs. In TABLE 21 the relative distribution of adult athletes in different provinces is presented

TABLE 21 Provincial spread of adult licensed athletes

Provice of the club	Number of licensed adult competitors in a club				Number of clubs by province (n)
	0	1-5	6-10	Over 10	
Southern Province	7	4	-	1	12
Western Province	2	5	3	-	10
Eastern Province	3	2	-	-	5
Oulu Region	1	1	-	1	3
Lapland	1	1	-	-	2
Number of clubs by the number of licensed athletes (n)	14	13	3	2	32

With regard to the number of members in canoe clubs interesting information was turned up by chance during the data collection process. One identified club reported on the questionnaire a certain number of members. In the same year the same club announced to the Department of Sports Services of the town in question a number which was 40% smaller, and to the FCF one which was 80% smaller.

The estimated number of active recreational paddlers in Finland varies depending on the source. The Canoe Federation estimates that there are 80,000 active paddlers in Finland. The National Sport Survey found that around half a percent of the population (young and adults together) is interested in canoeing (SLU 2002a, 2002b and 2006a, 2006b), which is about 21,000 people. According to the National Outdoor Recreation Demand and Supply Assessment in 2000 (Sievänen 2001), 5% of the population (about 260,000 people) are interested in canoeing. These numbers do not represent however the real number of participants in canoeing. Different researches use different statistical methods. While one research includes all those who occasionally participate, another classifies people purely on membership, regardless of their activity level, and a third would require at least once a week participation from a person in order to be classified as being a "participant". Many of those, who practise canoeing or take part in canoe touring outside the organised activities, are not included in these statistics.

5.4 The Values Canoeing Represents

The CATI Interview was performed with the board of management of the Federation. Results show that closeness to nature is generally recognised as one of the most important values linked to canoeing in Finland. This answer appeared in six out of eleven answers and *activity with the conditions of nature* in three answers (n=9). Closeness to nature makes canoeing one of the most significant waterborne activities in Finland in the field of nature tourism (Sievänen 2001; Härkönen, Ryhänen & Tuohino 2002). Therefore, canoeing can be suggested as

being a favourable way to explore nature or to be included in programmes when designing recreational activities that take place in nature. There is a high level of education with regard to environmental awareness in the schools of the Nordic countries, and the general population recognises it as being an important issue. The "Everyman's Right" gives the opportunity for freely exploring nature. Health benefits were the second most frequently linked value. Healthy environment, health sport, and physical workout were mentioned in eight answers (n=8). Easy access, low threshold for beginners, inclusion of versatile groups and social values were mentioned as synonyms for the inclusiveness of canoeing, and appeared on six occasions (n=6). Of competitive aspects, values as successful competitive sport appeared in three answers (n=3) and immediately following this the doping free image of canoeing was mentioned (n=2).

Competitiveness represents a very narrow segment in Finnish canoeing, yet success on the international level brings temporary media attention to canoeing from time to time. The use of forbidden substances and methods are a huge problem in contemporary competitive sport. Canoeing internationally has a doping free or at least a low doping involvement image.

The strengths of canoeing in Finland were identified as being the nature, long-held traditions, inclusiveness, large demand and international success in competitions.

> "The circumstances for practising canoeing are exceptional in our country. Water is all around us."

Countless lakes, rivers and the seashore are mostly suitable for canoeing. The natural environment is spacious and clean. Due to the low population density and the relatively small-sized centres of municipalities, nature can be easily accessed from any inhabited place. The "Everyman's Right" ensures access to explore nature freely.

The low threshold for beginning canoeing and its suitability for various age and disability groups show that inclusiveness was reported also as one of the strengths of canoeing. Paddle-Ability is in the official programme of the ICF (Canoeing International 2006) and the initiative has been implemented in Finland too (Selkäydinvamma 2007), yet so far at Federation level no visible action has been taken.

In recent years continuous expansion has happened due to the demand for supervised and unsupervised canoeing activities. This is also reflected in the rising number of participants in canoeing events and activities. It must be emphasised that this demand is mainly focused on recreational programmes (Helsingin Sanomat 2007). Even though competitive canoe sport is a marginal sport, from time to time notable success at the international level occurs.

Based on the CATI interview, the board of management of the Federation recognises the weaknesses in Finnish canoeing as the insufficient supply, unprofessionalism and lack of marketing knowledge, low level of youth involvement, narrow competitive operation, lack of systematisation, and the image of the .sport.

Service supply is insufficient, low profile operation, weaknesses in club activities, and missing coaching/guiding activities were mentioned in every answer (n=11) in the CATI interview, which were grouped under the name 'insufficient supply'.

> "The weakness is that there are not so many clubs and/or places with access to canoes… The lack of guides and coaches are a barrier against beginning canoeing."

> "A major deficiency is that we have a low profile. In club operations we don't utilise marketing. This is applicable also to the Federation."

> "Previous successes in Olympics Games and the following media attention were not taken advantage of to the full."

From the replies in the interview it can be understood that the management is aware of this weakness, but due to running tasks, lack of personnel, financial limits, and knowledge in marketing and unprofessional attitude, the gap between supply and demand has not diminished. *"We are missing some kind of orderliness"* said one of the interviewees.

Involvement of youth in the sport and competitive activities are two large issues that are regarded as weaknesses, thus need to be developed.

> "Participation in competitive canoeing is diminishing, which is not a favourable tendency."

> "The number of recreational paddlers is growing nicely, but club operation is out-of-date. … People are practising canoeing for self-interest."

As was shown earlier only a small proportion of the clubs are pursuing an active competitive scheme or have youth programmes. Youngsters eagerly participate in programmes where they can be with similar aged people and where the programme sparks their interest (Puronaho 2006).

> "If canoeing was included in the school PE programme, at least in larger towns, we could get new generations and a large mass of youth to be involved."

This note made by a FCF board representative is in harmony with the ICF Technical Director's remark:

> "The best scenario would be to create a canoe school or canoe class, but that is just a dream right now." (Szántó 2004)

The ignorance and misconceptions about the safety of canoeing were referred to during the CATI interview, which in turn have consequences when the image of the sport is examined. In recreational aspects, canoeing has the image of being dangerous and an uncomfortable way of spending ones time, whereas with regard to youth and competitive aspects it is considered as being an equipment demanding and expensive sport. Moreover, parents tend to discourage children to participate in canoeing, as it is perceived as being dangerous. The low quality or the nonexistence of facilities lowers the image of canoeing in

Finland. Representatives of canoe sport today in Finland acknowledge the hindering effect of this issue as one barrier to the involvement of youth in canoeing. (Honkanen 2008)

Concerning the safety on water it is also worth noting that in Finland no license or education is needed for participation in water traffic, except occupational captaining. Anybody is eligible to drive a motorboat or other vessel without any knowledge of water traffic rules, safety regulations or operating features of waterborne equipment. In places, where motorised water traffic is low, the risk of accidental counteraction between paddlers and boaters are minimal, but on busy waterways the threat of collision is real. Annually, police statistics record the number of lethal accidents of paddlers. (Keski-Suomen Rikostietopalvelu 2007)

The Federations management sees the opportunities of canoeing in the development of education of coaches/guides, the enhancement of youth participation, and the enhancement of quality and quantity of recreational activities throughout the country. Through developing the coach/guide education scheme expert help would be provided to a larger number of the novice customer segment compared to today's situation where mostly enthusiastic but unqualified recreational paddlers are teaching. In today's practice safety issues are highlighted in introductory courses, indirectly feeding the dangerous image of canoeing. In contrast the technical merit of the coaching is often insufficient. Since the social inclusion is also forgotten in most of these courses, there is no pull for the beginners to become involved in the regular club activity.

> "In the member clubs of FCF mostly recreational, free-time canoeing is pursued. For most of those people it is impossible to imagine that competitive and recreational sport can be side-by-side in the same club. Promoting elite sport in my opinion should be one of the fundamental tasks of the FCF."

With regard to this comment, it is the attitude of the management of each canoe clubs that needs to be changed. As in most social interaction, people involved have differing value orders, goals and plans. It takes nothing from one side to allow the other to expand in new directions. As with the enhancement of the quantity and quality of activities, when economic resources increase, and customers are ready to pay higher fees for quality services (Cronin, Brady & Hult 2000) it would be in the interest of the whole community.

> "The number of recreational paddlers is many times more than the number of competitive canoeists, yet the Federation has nothing to offer them."

The above quote points out that the interest in canoe tourism and recreational canoeing should be examined and considered not only at the club level but at the national level too. Firstly, developed, quality infrastructure attracts more participants to the activity. Second, it helps to preserve nature as intrusion is designed and orientated. Third, it secures opportunity for sustainable development.

Parallel to the development in the infrastructure, the international marketing of Finnish waterborne tourism would open Finland up to self-active pad-

dlers, who take responsibility for their own excursions, and also to groups, which need the help of local guides. Through this, new jobs would be created. The mild and warm summers in Finland make it an alternative holiday destination to the hotter southern European countries. The versatile selection of paddle sport disciplines ensures that programmes can be provided for pretty much anybody, with some limitations. The warming tendency of weather also prolongs the paddling season in Finland by several weeks, which can be mainly utilised by active paddlers, who choose travel destinations according to their paddling interests. In a number of rivers in Finland the spring and autumn floods are the only time when paddling sports can be practiced enjoyably.

Finland has been almost unexplored by waterborne activities, which means there is great opportunity in the development of canoeing services. Service providers may need to spread their services more evenly out in order to prevent excess supply in popular areas and lack of supply in less favourable places. The rising popularity of outdoor activities among urban citizens intensifies the call for nature-based activities to the unexplored regions.

The "Everyman's Right" providing free movement in nature is more and more utilised by business interests too, by arranging group tours in nature. Uncontrolled expansion of tourism into nature is one existing threat, which should be dealt with in advance. During the marketing of Finland as a travel destination, responsibilities for nature should receive more emphasis. The "Everyman's Right" and its duties are not always evident to urbanised people even if they were born in the Nordic countries, not to mention people from the rest of the world.

In recent decades non-waterborne tourism in nature and fishing has developed significantly. Not too far n the future waterborne activities will become part of the overall packages in larger tourist-centres. This may help or hinder the development of water-specialised small service enterprises. In competitive canoeing new technologies and materials provide a substantial advantage to athletes, thus as an equipment demanding sport canoeing may be too expensive to afford for many families. The Finnish Canoe Federation could make a stand against rising expenses at least in youth activities by ruling that competitive youth canoeing activities should be pursued in low cost and unified equipment, and by arranging local and regional racing programmes. As part of that, the FCF also should develop a system to encourage regional cooperation among clubs. Clubs should provide the sufficient quantity and quality of equipment for youth programmes. By building active cooperation with all levels of educational institutions a large number of potential customers can be reached and better cost efficiency can be achieved. The rising costs of transportation and travel can make Finland unreachable for many people. Though tourism at the moment is going through somewhat of a boom period and the leisure industry has not proved to be sensitive to it (Cushman, Veal & Zuzanek 2005), in general a recession in tourism and recreation is one of the biggest fears which can strike in the short-term. Policy-making is possibly the strongest enemy, as fear may obstruct or at least hinder decisions in favour of development and investment plans.

6 DISCUSSION

By now, we have looked through the literature and analysed the collected data concerning the three supporting pillar system of sport infrastructure and services, as it was identified for the natural, socio-cultural, and economic environment. In the following pages the related findings are disused by matching the research results with the corresponding literature findings.

6.1 Over the Physical Natural Environment

Form the results of our weather study it was proved that in Finland circumstances are favourable for practicing canoeing. Especially by taking into consideration the fast technological development of clothing and equipment, canoeing activities can be practiced safer and at a higher degree of comfort than ever before. It was noted that there are large differences between regions with regard to the length of the season and weather circumstances, due to the long latitude stretch of the country. In the south and middle part of the country canoeing is possible for over six months in a year in adequate circumstances, and in the north for about four months. The length of the potential season is a considerably long time period for the outdoor sport services to invest in development. It is not so much the climate of the country, but more the actual weather that might limit canoeing activities.

In this regard, the wind has a strong influence on the security of paddling. Indian canoes have a large surface area above water. Inexperienced paddlers can face difficulties in controlling them at even only moderate wind speeds. On open seashores and larger lakes, wind can gain significant power and enlarge waves to the level that canoeing and kayaking becomes dangerous for those without the necessary level of experience and proper equipment. The extent of the effect a certain wind speed has on canoeing depends on many local factors. These are the direction of the wind when compared to the shoreline or other sheltering objects, and a canoe's distance from them. The size of the water body,

the relative direction of wind and water flow, and the structural features of the shore are also influential. A medium strong wind, for example, can cause sharp and large waves on a mid-sized lake with a steep and solid shoreline, whereas in a curvy river valley the same wind might feel like a light breeze. Even a moderate wind blowing against a river flow or sea stream can cause significant waves.

As it was presented in the literature review, the most common precipitation type in the Finnish summer is the short shower. From the weather study it turned out that in nearly half of the cases the daily precipitation was less than four millimetres, which can fall within a short period of time. Outdoor activities during the remainder of the day can be practiced without the rain fall having an influence on the comfort level. Having a suitable number of supporting facilities (i.e. landing places, shelters, fireplaces, etc.) along canoeing routes is safer for paddlers in changeable weather circumstances since they can rely on there being a dry place at the next stop, where if necessary they can take cover until the summer storm ends.

In this research the influence of water temperature on the results was not examined. It is suspected though, that by rethinking the classification of the weather study the number of ideal, good and suitable days would rise notably. What makes for ideal canoeing weather on an autumn day? Many recreational paddlers would say that +5 Celsius air and water, sunshine and no wind is an ideal day for canoeing – and indeed it is.

As a nature-based sport canoeing has features that entice urbanised people. As a utilitarian activity canoeing is one of the oldest human physical activities. In its recreational form canoeing provides perspective and closeness to nature as no other sport can, and it can be practised without impact on the environment. Objective data showed that decision makers reported that demand on waterborne services is larger than the supply. So a question arises: where is the demand? The answer may be buried in the literature. As customers are ready to pay more for quality services they expect to receive personalised services. I assume that the demand at present is lying latent, because it is waiting for quality services. At present the level of services, the quality of the infrastructure and supporting facilities are underdeveloped; they do not match the awaited level and customers decide to stay away and only report that they wish to have the opportunity to do waterborne activities. Not even superior personal service and great quality paddling equipment can balance the non-existence of a toilet for example at stopping places during a whole day canoe tour.

Leisure consumption is not based on rational decisions, but it is rather based on the pursuit for pleasure, where the combinations of social, cultural, architectural and natural environment result in fulfilment or frustration for the customer. The main goals of nature tourism are to visit remote places, see wildlife and find peace and quiet. Business interests, therefore, should be secondary to the preservation of nature values. To reach a sustainable way of development for waterborne activities in Finland, legislative actions should be pre-actively taken now so as to avoid later on more expensive rehabilitation of damaged

areas due to overcrowding. In Finland, canoe tourism is about to start up, which suggests there will be an exponential rise in the number of paddlers in the coming seasons on Finnish waterways.

The utilisation of inland waters for waterborne competitive sport or leisure activities is low. In water restoration projects of the recent past, the interests of canoeing were not considered, since during the planning of a project no substantial canoeing activities were reported in many of the concerned areas. The increasing popularity of canoeing and the technological development has allowed the canoeist to discover previously undiscovered areas. In projects, which are already in place not much can be done. However, for future water restoration projects it is still possible to do a lot.

The different national and regional institutions, which are responsible for the planning and execution of such development projects, follow the requests they receive. Reports, feedback from individuals (local paddlers, tourists), representatives of active and potential future user interest groups (clubs, commercial paddling service providers) are all important for the direction of future development. The Finnish Canoe Federation as the representative of all paddlers in Finland should stand for its basic written values. With regard to recreational paddling this can be fulfilled by actively approaching the concerned authorities and organisations so that paddlers' interests can be heard.

As far as competitive canoeing is concerned it must be admitted that the late spring with it chilly air and icy waters are not ideal for high performance training above the national level. At that level open water training must be started at the latest in the beginning of March. Athletes must have warm muscles and comfortable clothing to do proper training. Though more layers of clothing can be put on to protect against the elements, the downside is that the more that is worn the less comfortable movement is. Furthermore, spring is the precise time when sport technique must me polished after the long winter break. Athletes are not as stable in their kayaks and canoes as in the peak of the season and knowing that the water will be cold – if capsizing occurs – is a psychological barrier for the athletes. By travelling to training camps in warmer climates at this time of the year means that competitive canoeing contributes to international canoe tourism. During the summer, autumn and winter seasons the weather is not a barrier even for international level training. In Finland, nature provides suitable conditions for training up to the national level.

There can be found four race courses for sprint canoeing and two for white water canoeing in Finland. These race courses are not suitable for hosting medium-sized or larger international events, due to the lack of supporting facilities, bad accessibility, or the quality and the parameters of the courses not satisfying international standards. Numerous old and rundown facilities are even ugly to look at. It must be acknowledged that a canoe stadium or race course is both a large physical and financial scale project. In most cases they notably influence the scenery of the surrounding neighbourhood, yet the general use of the water area may not be influenced by it. A sprint race course, for example, can be submerged to the bottom of a lake when not in use. Political

interest and support from the local community is inevitable if such initiatives are to become reality. The social support can be reached through versatile and quality youth activities which would give and accumulate a positive political and public atmosphere that could possibly activate private resources in favour of investments for such facilities. National recommendations for adequate youth and senior competitive canoeing should be identified and promoted by the Federation towards clubs nationwide. These would include not only recommendations about practices but also about facility conditions too.

6.2 Over the Socio-Cultural Environment

In marketing canoeing the socio-cultural capital of the past should be utilised. This includes the history of the sport, its social ties and the social-cultural values. It was found through the literature and research data, that canoeing has strong and deep roots in Finnish culture history. It played a major role in the exploration of the interior of the country and the cultural development of the nation. Notable statesman popularised the sport and contributed to its development. Due to a variety of reasons canoeing is not a commonly accepted waterborne activity in Finland. Its history and contribution to the national cultural capital is not well known even for experts in sport sciences or people involved in the sport. The utilisation of the social capital lays in the hands of contemporary active paddlers and the trustees of the sport. The revitalisation and distribution of the knowledge accumulates in the social status of the sport, and through that the image of the sport and the public attitude towards canoeing changes. By being active in different social events the adult population can be reached at both the local and national level alike. For example, the Federation may be visible at charity events for environmental issues especially if it concerns water, or at outdoor education platforms. By building living contacts with educational institutes the younger generation can be approached.

The media is today the most powerful opinion forming tool for the masses. Publicity can be both an opportunity and a threat, but to disregard it completely is a mistake. Canoeing rarely appears in the Finnish sports media, even on those occasions when being proud of the success of Finnish canoeists would be appropriate. The success of Finnish athletes in international competitions has not been utilised at all. It is also a further task for the leading organisation to build contact and a face-face relationship with selected media channels. In this way regular media coverage from different appearances would ensure that different interest groups could realise their wish to start canoeing. However, I have to remind myself that people interested in nature based sports tend not to seek lots of media exposure. Hence, a careful media strategy needs to be implemented so as not to turn away today's paddlers.

Canoeing in Finland has no welcoming and inviting image in the public mind. It is worth examining the benefits of opening all programmes and operations up for the masses. For example, by organising interesting activities for

occasional recreational paddlers during a competitive event the number of participants would rise, the event would attract wider publicity, which in turn represents more marketing value for potential sponsors and cooperating partners.

It must be emphasised that regular participation in organised canoeing activities should not be linked to competitive participation. Especially, many youngsters are disregarding competitive sport, but they are attracted to organised and guided sport activities, where experiences can be shared with similar aged fellows. The variety of different canoe disciplines certainly provides interesting programmes for all tastes and interests. With a larger number of youth participating in the activities, natural selection naturally takes place, as only the talented and committed participants stay involved over a long period of time. Those, who are competitively oriented would need the proper coaching and ever challenging tasks during courses or training. Achievements of Finnish athletes in the international arena are good way in attracting the competitively minded young to take part. Visiting clubs in different parts of the country may ignite new inspiration. But non-competitive youth should not feel left out; they should be able to participate in a recreational group. By providing versatile programmes linked partly or wholly to canoeing knowledge about the sport will be distributed as a side product of the event. In Finland in wintertime many places hold cultural and social events which need to be reached on skis. Similar programmes could be held in the summertime as well.

Finland is a "white spot" on the map of canoe tourists. Through proactive cooperation with environmental authorities and the Finnish Tourist Board the Federation could act as a means for promoting canoe tourism and ensuring the development of the sector. It is not the aim that the Federation change into becoming a sort of a tourist bureau, but as a governing body it should play a role in the development of canoe tourism, especially taking into consideration that for the majority of the member clubs recreational paddling is the main activity. For tourism the same facilities and infrastructure is needed as for recreational paddling. The main difference can be expected to be the cultural difference of the participants. I suppose, that people travelling long distances to meet the Finnish nature, appreciate it and care for it more than local people. Yet every actor, who organises such activities should promote information about the Every Man's Rights and Duties to customers before departure. In the scenario of organised nature tourism, where masses of people regularly visit the same area maintained landing and overnight places with basic sanitary facilities and waste management are indispensable. In the process the preparation and distribution of proper paddling maps including essential information on water features, like prevailing weather, description and difficulty of rapids, location of landing places and their equipment level, refilling possibilities of drinking water and food should be taken into consideration. The maps should be available in various languages.

Usually, clubs have the expertise and a well located facility for serving the general public. Open clubs would enrich every municipality's palette of sport

services. By opening their doors to the local public, the number of potential participants in recreational canoeing would be much higher. Clubs may develop also a network of services: kayaks and canoes could be rented form one place and returned to another, thus a tour may go from place A to place B. These actions require constant expert personnel at each place to service the public. In cooperation with local authorities and local business partners, preparing local touring routes with maintained landing places and route descriptions, maps and active marketing, and networking with related service providers (accommodation, transportation, catering, other social programmes involving museums, concerts, theatres, etc.) much better tours can be made available for the public. By developing these services to be more customer friendly, more attractive, and more visible the latent potential customer segment can be reached and involved. Programmes and events for designated target groups, such as working places, schools, immigrants, or the disabled, may provide experiences to individuals, who alone would not participate in such a programme due to social pressure. This does not mean that clubs should forget their basic function in sport, but rather establish cooperation with private service providers, local authorities, and other voluntary organisations.

6.3 Over the Economic and Organisational Environment

The Canoe Federation and the canoe clubs are the trustees of the sport. The prevailing management of them are responsible for the direction of development, stagnation or decline in the services at the national and local level. Recent changes in society provide the opportunity for non-profit organisations to turn from being traditional voluntary organisations into service oriented and professionally managed sport service organisations, yet keeping their non-profit status and operation. People are ready to pay for their recreational activities, and are seeking value for their money. Existing demand on canoeing services and the provided supply within the framework of the FCF do not match. The result is that private entrepreneurships are filling the gap on the market of canoeing services. It is not needed for the FCF and the clubs to act as private service providers. There is place and space for such actors, but I do argue that clubs, by meeting the demand, will gain not only a new source of income via customers, but the potential to find new members also. Development is not only a question of gathering more resources but is mainly about the level of utilisation of the existing resources.

6.3.1 Finance

With regard to economic resources, Finnish canoe clubs are short of financial resources and active fundraising is at a low level. It suggests that the management of clubs are not involved in developing services, but rather just maintain traditional operations. During the study it was found that clubs with a profes-

sional attitude and employed workers, active fundraising, event organising and active operation all-year around, succeed in securing financial resources for their activities regardless of the geographical location or size of the municipality where the club operates. A change in attitude must take place at both the national and local level, from waiting for subsidies to looking for new sources of income. The data from the literature showed that only service oriented and active clubs are able to secure necessary financial resources for operation, whereas in canoeing subsidies and membership fees are still contributing the major part of the income.

Sport event with mass participation rarely have a negative balance sheet. The more people attracted to participate or watch, the larger the impact. Besides participation fees a number of licenses can be sold for example to be present in the festival village, to advertisers to advertise on start numbers, along the race course, on brochures, and for the media to cover the event. Furthermore, sport services can be developed for potential customer groups, which must be designed, advertised, and conducted as a product in every aspect.

One rather new and rarely utilised source is the EU level fund applications, which require large-scale cooperation between sectors. The project application process is multistage and administratively heavy. In many cases canoe clubs could be involved in local or regional project applications by finding good collaborating partners from the public and private sector.

6.3.2 Facilities

Canoe sport related facilities are mostly well located near to the centre of the particular municipality and educational institutions, which both play a crucial role in member recruitment. In connection with good location, easy access is an essentially positive feature of most of the canoe club facilities. In contrast, the quality of these facilities and the level of equipment in these facilities is poor or non-existent. Today's recreational sport participant expects a certain level of service on top of the core of the sport activity: warm dressing rooms, showers, toilets, are part of civilised sport participation In neglecting these services customers can easily be turned away. For youth activities and regular sport practice, these services are inevitable. Further services, for example in combination with the clubroom, such as the possibility to buy refreshments or food in a place where like-minded participants can gather after practice, strengthen social bonds to the activity and to the association too.

The development of the infrastructure for canoeing does not meet up-to-date expectations either. For recreational canoeing publicly available rest places and shelters are located along the more frequently used outdoor recreational routes. These facilities are more likely to be found in the remote areas such as in Lapland, or in larger national parks, which are already good as they are. However, the lack of these facilities is a hindrance, especially in urban areas. Furthermore, the existing landing places are designed for motorised boating. For example piers are too high for canoeists or there are hardly any places to set up tents. In this regard clubs at local level and the Federation at national level

should be in active cooperation with public authorities. However changes in circumstances will happen only with time.

6.3.3 Equipment

Clubs usually possess a fairly low number of boats and other equipment for servicing occasional canoe-participants. This means that people, who want to canoe, must own their own equipment. Regarding the price of the equipment and the related other costs, like large storage space, transportation device, and maintenance, the threshold limit can be too high for many people to even try out the activity. By providing a sufficient quality and number of boats for easy access programmes, such as stable but comfortable touring boats for guided events, may entice a wider number of potential user groups.

Purpose designed, proper sized and the proper quality of equipment is needed for enjoyable youth participation in canoeing. In learning canoeing technique it is essential that the used equipment provides the possibility to perform the proper movement. Due to the lack of domestic equipment production for these purposes, canoes, paddles and other equipment must be imported, which becomes expensive mainly due to the transportation costs. Domestic production of equipment and the standardisation of equipment used in youth competitions would provide affordable equipment for clubs for youth activities. The Federation could regulate production by selling licenses for it. Clubs in turn may develop a renting system so that equipment is rented or lent to the user but with a financial responsibility. One major expense in youth sport is the frequent change of equipment, due to the growth of children. In canoeing the equipment represents a major part of the expenses. In this way family budgets would be saved from a major expense item related to children's free time activity.

6.3.4 Personnel

Of the non-economic resources expert, educated, committed and available personnel are missing from the canoeing services at the federation and clubs. Using a voluntary workforce, many clubs are able to provide guidance to beginners, but regular sessions are not offered in most clubs. The Finnish Canoe Federation restarted coach education in 2006 after two decades of inactivity, which may bring about a positive change. It is not only the performance development knowledge of a coach that is important, but his/her pedagogical qualities are of equal importance to the participants. The provided coaching service must secure balanced healthy development of the youth and not only effective performance development. For elite sport individual and non supervised training is less efficient than in groups with expert coaches present. Concerning recreational activities, the guide plays a key role in the final quality of the programme. Sport specific knowledge is necessary for ensuring security in any weather conditions, but group-guiding abilities are probably more important than sport expertise.

The management of clubs works on a voluntary basis and volunteers' educational background is mostly not related to the field of sport management or alike, even though more than half of the clubs have management with a third level education. There is only one club in the country with a full-time employed management. Its financial status, facility and equipment level, programme selection and membership level are far beyond that of other canoe clubs. It can be suspected that with better educated and professionally employed management other clubs could reach similar operational results. This statement is not a criticism of enthusiastic voluntary leaders, but points out that voluntary management has its limits. Marketing, economic, and management skills are needed for leading and organisation. In schools though the 'how-to-do' is not taught, whereas the 'what-to-do' is in the curriculum.

Obviously, the financial resources at the moment set limitations on employing professional staff at club level. However, within the country there is one example of how to ensure the necessary funding for this. So why not ask them how they do it. Their example may not necessarily be adaptable to any other club. But, by disseminating information, better managed clubs can contribute to the rise of those in need. At the Federation level one person could be employed whose sole task is to ensure more financial resources for the federation. By acting on behalf of the federation and presenting the interests of every club and their mass membership the 'weight' of any argument grows.

Participants with different motor skills, different physical backgrounds and with different experience of canoeing make up every canoe tour group. A distinctive feature of canoeing programmes is that the paddler personally controls the boat, unlike in rafting for example, where a professional oarsman is in charge. The action or non-action of any individual paddler influences the behaviour of the kayak or canoe in which he or she is placed. Canoes are small boats, which accommodate rarely more than two-three people. Within the time frame of a canoe tour the opportunity to develop individual skills is unlikely to appear. It is the guide who has to weigh-up the abilities of participants, possibly before embarking or shortly after, so as to make up equally balanced crews. If a canoe crew is completely novice, it is advised that a short break be taken after an hour of paddling, not only to stretch the muscles, but also to 'shake off' nervous tension in the boat and if necessary crew changes can be made.

6.3.5 Operation

In examining canoeing with the RBV-elements at the centre of focus, the following came to mind. In the literature review it was found that canoeing provides a unique way to experience nature, thus it is *rare*. Since experiences in nature are intangible and non returnable, they happen once and there the service is *imperfectly imitable*. These two elements are in the possession of the clubs. The other two elements of the resource based view are disputably present. *Value* is created via the image of the sport, the organisation (the actual club at local level and the federation at national level) and the actual programmes. The equipment in use and the people in contact with the customers are the representation of the pro-

gramme. This is valid regardless of competitive training or recreational activity, or in other words the coach-athlete or guide-customer relationship is in question. Value is not created in one day, surely. It takes a long time to overwrite public imagination of the value of a given service. To build a positive image requires constant work. Whether canoeing is an activity which *can be substituted* or not is related to what degree the value is created around the canoeing service. Referring back to the rarity and limitability of the service, we can say that it is non-substitutable.

Organisational efficiency within the FCF and its member clubs is very weak and canoeing is practiced widely in an un-organised way. The fact that only a small part of all canoe clubs actively participate in structured activities reflects that there is no proper communication between organisational layers. Rights and duties are not clear for members in the system. For clubs it is not clear, why they should – if they should at all - be actively involved in the structured work of the federation, and to members it is not obvious as to why they belong to the federation, and the federation does not know what could be done for the benefit of the members. On the other hand, the FCF is not able to mobilise them due to lacking most of the tools to influence them.

I recommend serious revision in the statues of the FCF. That would include new chapters clearly setting out duties and rights to member clubs. Alongside that the FCF should recognise what benefits it offers to the lower organisational layer and in what way it can be utilised. A number of examples are the advantages of sport insurance, copyright agencies' licenses, and educational schemes. It is also worth considering that apart from passive benefits like the above, member clubs could enjoy active benefits, which are available only if participating in the conducted activities. For example a club's participation – and not the level of success - in the Finnish Championships for youth in all disciplines could lead to rewards, which can be gained only through participation. That can be material – financial, tangible – or immaterial – an educational programme for example.

One suggestion to consider is that if a member club does not take part in any activities governed by the FCF in a particular calendar year its membership should be ceased automatically. The method must be carefully designed so that it encourages presently non-active clubs to become active, rather than resign them forever from FCF membership. A sort of positive discrimination towards them could be applied. One example of this is to support the start up of regular, organised and supervised youth sport activities in clubs where it does not exist. Along with the support a bind of obligatory participation in national level activities could be set. As further piece of encouragement could be a discount price for participation fees or financial support for travel expenses to competitions could be applied for in newly active clubs. It is in the interest of not only the Federation but also the major clubs to have more activity at the national level, thus their involvement in the design of the method would be useful.

The actors in canoe sport in Finland work independently, though there is an umbrella organisation which should really govern the sport in the whole

country. The Finnish Canoe Federation as the central organisation representing canoeing in Finland should act according to this mission. As the highest authority it should play a notable role in all fields where canoeing interests are at stake: policy making, equipment production and development, event and activity organisation and management are examples of this.

From the research findings it appears that the FCF is passive and waits for the delegation of tasks from the lower layer. Though clubs make up the Federation, the leading role must be filled by the FCF. A proactive attitude and action towards the lower organisational layer, mapping the field and an active approach to them would prevent future inconveniences, would reveal unsolved problems, and ensure knowledge when designing future developments. In the Annual General Assembly of the Federation about a dozen clubs participate. These same clubs are those involved in the competitive operation. The other sixty or so clubs which do not participate in the competitive programme do not represent their interests at all at national level. But, why is this so? Those clubs stay completely outside the scope of the FCF. By mobilising this inactive part of the official structure major resources could be activated. First of all even if every club sends just one participant to competitions, the size of the events will be larger in scale. As was earlier discussed, the sporting events should provide interesting and meaningful programmes for recreational participants in order to attract more people. Having more participants in an event means usually a bigger impact on the local economy through spending on overnight stays, restaurants, etc.

On a horizontal organisational level also a proactive attitude is wished for from the Federation. Cooperation with the Finnish Maritime Administration, the Finnish Forest-management Board and Finland's Environment Administration would allow them to be part of the planning and execution of development projects concerning the aquatic nature on the national level. The water areas and their shores are under the control of these organisations where the representation of canoeing interests would bring about a significant and positive impact on accepting the sport and developing its facilities. To achieve this, it is recommended that professional personnel be employed. In the history of Finnish canoeing statesman were active promoters of the sport, and maybe among contemporary paddlers similar people could be found whose expertise and knowledge is not being utilised at present.

Cooperation between the Finnish Canoe Federation and private businesses should be built up. By allowing canoe service enterprises to be members in the organisation, both of the parties would benefit in multiple ways. First, the federation would gain a new income source in the form of membership fees and licenses. Second, it would gain much wider supervision and a controlling influence over canoe services in Finland, which would be of importance especially with regard to safety and the competency of canoe guides. Third, the operational scale of the federation would grow significantly in one step, by involving business interests in the supply side of sport services. Business interests would benefit by becoming part of the network of service providers, through low-

priced educational programmes, taxation rebates, the lowering of expenses of facility rentals from local governments, broader and cheaper operational licenses, and the contra-insurance of programmes. By ensuring professional guides' competency through the FCF scheme, customers could be sure about the level of service they would receive, therefore the branding of canoe services and assessment of services can be reached.

Canoeing is part of the curriculum of PE teacher education in Finland, but the programme is only a short recreational tour. Teachers should be introduced in a versatile way to canoeing, so that the knowledge gained would be ready and waiting when pupils ask questions. For this to change, the FCF must approach the institution in question and provide adequate quality and a competitive price for the education. The forthcoming change in the position of universities, receiving more freedom in gathering resources and adjusting study curriculum, opens up the opportunity to be part of the change. The programme should be considered as an investment for the future, which will come to fruition after a number of years when the graduating teachers begin working in the profession. The higher the knowledge PE teachers possess of canoeing, the larger potential for gaining youth interest. At the moment education is free of charge in Finland, therefore to the lower layer, from the FCF to the clubs, financing of such activities with targeted funds should be encouraged. In this way the service can be assured with no expense to participant pupils.

The existing unsatisfied demand for sport services and the predicted further growth in it makes investments in sport services a sound and prosperous initiative. The clean and spacious nature and the lengthening season ought to be utilised in the international and domestic marketing of the unexploited Finnish waterborne activities. New types of investment settings combining the resources of public, voluntary and private sectors are hoped for. In one example public authorities may donate or over a long term rent a land area for the purpose of waterborne services. The voluntary sector can provide the expertise, social network and voluntary labour in lowering the production price of the services, while private financers could provide the initial investment with a lower business risk and controlled profit return.

Receiving a driving license requires a full theory course and examination, which is then followed by dozens of hours of practical lessons, before beginners are even allowed to drive on the roads alone. In many countries, a similar course to that required to drive a car, is required of people who wish to acquire a license for waterborne vessels. In Finland neither a theory nor practice examination is needed to drive a motorboat. The sad statistics related to accidents in and on water should ring the alarm for a need in change of legislation.

As far as paddling education is concerned the case is not much better. Usually a canoe/kayak course for beginners lasts 3 sessions in Finland, after which, participants receive a certificate asserting their basic skills. In my opinion this programme is insufficient for acquiring the basics of this sport discipline. Out of the three sessions the first is mainly spent on introducing the sport and its equipment. The second session is a long session, and the third is usually

a guided tour in sheltered water. Participants do not acquire the skills for overcoming any challenges the water's current or changes in the weather may place on them.

Only one club provides daily supervised activities. Personnel are not available for occasional paddlers, who need advice for beginning or developing skills. Coaches and expert personnel should be available at any time along with the open structure of the club so that the general public would be encouraged to try out and familiarise themselves with paddling.

6.3.6 Membership

Networking is a key word in today's services. Suppliers of different fields are working together to fulfil goals better, reaching larger potential customer groups and gaining more economic resources. Cooperation with educational institutes, besides bringing a large number of regular paddlers, would raise the safety on water due to the spread of knowledge outside canoeist circles. For schools, canoeing could provide versatility in the PE programme. Membership in canoe clubs is low compared to the estimated number of people interested in canoeing in Finland. Different sources have differing opinions about the number, but it can be stated that the demand is much larger than canoeing services supply in Finland. Competitive sport should not receive the emphasise, yet international examples of canoeing and domestic examples of other sports show that the option of participating in regular supervised sessions at a recreational level generates interest in competitive activities as well.

With the enhancement of youth involvement in canoeing a younger and more active generation will take up the sport. In a broader sense, through youth participation the involvement of parents and thus the networks of business bound to the sport are growing. Youngsters are also more eager to participate in supervised and regular activities, which in the long run help bring a new culture into the sport. To attain this goal, better educated and more coaches, suitable sized and type of equipment, cooperation with schools and better equipped facilities are needed

In recreational paddling the number of members would rise in parallel with the rise of the *value* canoeing represents to the public mind, and along with the benefits this membership would bring. As most of the members in the clubs of the Finnish Canoe Federation are recreational paddlers, and the Federation provides hardly any benefits to them, the low number of membership is not in the least surprising. Two questions need to be answered: Why should one become a member, and why should one be an active member? Again, the Federation as the leading organ should take the active role in finding a way to encourage all member clubs and every member to be involved in the development and the actual operation of the federation.

The event calendar should be filled primarily with local and regional events, where programmes for all ages and levels are provided. These programmes should also be interesting for the audience. Since canoeing itself is not an 'audience-close' sport, supporting programmes must help fill the gap.

Awareness of canoe sport would arise as a side product of attractive events held for the public. For a levelled championship system, where one qualifies at a regional level for the national championships there should be plenty of participants from which to be able to select from. By providing activities to elite, fitness and recreational level participants and designated groups, even in regulated types of boats for easier access, the number of involved participants would increase. It is hoped that the international regulations of the sport would be followed, but the main purpose should be to open the door to attract people to participate. Due to the large distances in Finland to travel there must be a sound reason for making a long journey to an event just to participate. Both obligations and benefits of membership in a club and in the Federation can act as tools to encourage people to do this.

7 CONCLUSIONS

The research assignment hoped to contribute to a better understanding of the important influencing factors on Finnish canoeing infrastructures, services and sport related activities. I detailed the physical, socio-cultural, and organisational environments researched. The research subjects were the canoe clubs of Finland; the trustees of the sport in Finland through the leadership of the Federation. The research covered multidisciplinary issues. Related research data, and their analysis has been presented and interpreted. The research results represent the current situation in canoeing in Finland within the framework of the Finnish Canoe Federation. The aim to examine the discipline from at least three points of view: as a regular sport practice, as a recreational pastime and as part of nature tourism. From the research data further explanatory findings could not be developed. The work is a descriptive study.

7.1 Answers to the Research Questions

7.1.1 Is the natural environment favourable for canoeing activities in Finland?

The answer is yes. Abundant inland waters and sheltered seashore provide plenty of water surfaces to enjoy different levels and types of paddling activities. The quality of the waters is overwhelmingly good and pollution is not a barrier. The climate enables activities on water in three seasons; there is a delayed start in the spring on still water bodies, where ice melts later than on rivers. Also there are considerable differences between the southern and the northern part of the country, due to the north-south stretch of the country. As the weather study proved the paddling season is long enough to make investments in waterborne activities fruitful. The season in the south and middle part of the country lasts for about six months a year and in the north part for about four months.

7.1.2 In what physical settings does canoeing occur?

Canoeing as an outdoor activity takes place in nature. In its essence, canoeing provides a unique way to discover nature. As a recreational activity, however, it requires infrastructure and facility networks for sustainable development for canoe tourism or mass participation in recreational paddling. Designated canoe routes with maintained and properly equipped landing places with support services are needed. Low piers for embarking, disembarking, tent places, fireplaces and shelters, waste management for example were found to be developed. Though there are about a hundred designated canoeing routes in the country they are randomly located and most do not offer the opportunity for renting a canoe or receiving local guidance. Also the landing places do not always fill the requirements of today's water traveller.

As for competitive canoeing, the majority of the clubs enjoy a good location as a base for their activities, but the level of equipment is not satisfactory in most places. Club houses must be upgraded to a basic standard so as to provide satisfactory facilities for enjoyable sporting activity to take place; this is especially the case with regard to the education work that takes place in connection with youth programmes. With regards to the two Olympic disciplines, sprint race courses are in a dilapidated condition. The current circumstances for arranging national level events can be regarded as acceptable at best. Development of all race courses is necessary either by changing race course parameters or by improving support services and facilities around the course. For example, dressing rooms and toilets for participants and spectators as well as information systems are either nonexistent or in a run-down condition. The other Olympic discipline, slalom canoeing, recently made large steps with regard the development of race courses and facilities. Some significant construction sites have been undertaken or finished in recent years. For these facilities, however, the used research data source has no information.

7.1.3 What cultural-historical development phases has canoeing gone through in its history?

Numerous references illustrate that canoeing has strong roots in Finnish culture. Archaeological findings, folklore and art references all refer to a once flourishing canoeing culture in Finland. It is claimed that navigating the inland from the seashore took place with the help of canoes millenniums ago. Even though Chydenius and Ramsay popularised modern canoeing in Finland even earlier than MacGregor had, the Scotsman, through his tours and lectures, is considered as the founder of modern canoe touring not only in Europe buy also in Finland by Finns themselves.

Today canoeing is considered a pastime only of the higher educated, upper middle class. These people who work in offices and live in urban environments seek an alternative to this in their leisure time. Participants in canoeing activities enjoy the simple circumstances related to canoe tourism, yet expectations regarding the infrastructure and its support services are on the rise. As a

competitive sport it is equipment demanding, which needs transport to events. Requirements of racing courses have been increased in the recent past. In sprint racing currents were eliminated long ago, starting gates were implemented and audio and video transmitting devices were integrated. It is hoped that the wind will be made equal for all and that side wash waves will be eliminated on parallel courses sometime in the close future. For slalom racing artificial white water stadia have been built with controlled water flow and movable obstacles so as to adjust the difficulty level of the courses. On the contrary, some low access paddling sports have aimed to attract mass participation with low control over the racing arrangements, except for security measurements.

7.1.4 What are the available and activated resources in the production of canoeing services in Finland?

Different types of resources, their availability and the way of acquiring them was discussed earlier in detail. Here I would like to put emphasis on the available, but at present, not utilised resources.

I consider the moderately hot summer and the abundant and spacious nature as an excellent opportunity for canoe touring developments. Programme packages can be developed in cooperation with public authorities, other voluntary organisations or private businesses with no initial capital investment. For many people canoeing activities are unique, unrepeatable experiences. The various forms of canoeing provide the opportunity for developing a variety of experiences, and thus potential customers are vast. Potential customers of canoeing services are ready to pay for quality services, which would return a good profit on the invested time and expertise. In a very short space of time, however, cooperation with the public administration and private businesses must be set up in order to develop infrastructure and support facilities and service networks for sustainable development.

As canoe clubs typically have a base for their activities in well situated places but with low levels of equipment facilities are often at the centre of political interests of a club. By being proactive towards the public administration and making them aware of the planning of the desired development the public awareness of the sport grows. By bettering youth programmes in the clubs it would be easier to negotiate with and bring on side the public administration, and the utilisation of the facility would be considered as being beneficiary to the community. Further talent selection for competitive purposes can take place during unregulated but supervised programmes. To build up the value of canoeing, especially among the youth, is a long-term process, which is done by each paddler on any occasion when a novice is introduced to the sport or in any social context when canoeing appears. In this sense the leaders of the clubs and the Federation play an essential role in contributing to the image of canoeing in Finland.

At the national level a strong Federation with professional personnel would represent the sport in both directions and with a better outcome. In the member clubs the volunteer based work would be undertaken by professional

personnel, and thus guidelines of the work set by the board of management could be planned and followed with expected results. The same change would result in higher efficiency in fundraising, media appearances and appreciation towards the organisation.

7.2 Limitations

In this multidisciplinary work, the broad settings of qualitative and quantitative data set certain limits for the application of the results. The multi-focused setting on the one hand gave the chance for a broad look into the topic, but on the other hand limited the depth it went into any one area. For the purposes of this dissertation it is justifiable, since this work opens up a new research area.

From the very beginning of the research the author found that in Finland the knowledge and awareness about the role and importance of canoeing as an activity on the open waters was weak. Nevertheless, scientific references were collected and presented as much as was possible. It was decided to present the cultural and historical environment of canoeing in Finland on a broader platform than solely showing the history of organised sport. Furthermore, the socio-cultural significance of canoeing was left at a general level due to the abovementioned reasons.

Finland stretches over 1,300 km in a south-north direction, where numerous distinctive areas can be identified. Waterways differ greatly depending on what sub-climate they are located in and on their size. Data examining the natural environment for canoeing in Finland was collected from three designated measurement points of the Finnish Meteorological Institute, which were chosen to represent three regions of Finland. It must be accepted that these observation points do not fully represent each and every municipality, but Finland on a general level. Moreover, depending on the water bodies in different places the applicability of the results is limited.

The Sport Facility Data Bank of Finland was founded in 1989 and it is in continuous development, as are sports facility constructions and developments. The used data for this work represents the status of the Data Bank at the time of data collection in 2006. The Data Bank is developed with the cooperation of owners and users of sports facilities and sports places. Since the data base is continually growing with the active participation of users of the facilities, the data bank is not complete. Therefore a number of applicable facilities for canoeing were not included in the research data.

Interviewees of qualitative and quantitative data collection represent versatile educational and cultural backgrounds, but all hold key positions in the field of canoe services. Quantitative data were acquired via postal questionnaires. Since interpretation of the written questions was made in each case according to the individual knowledge, socio-cultural, and educational background of the person, it may have had an influence on the objectivity of the query. Though the collected data is purposefully aimed at analytical evaluation

and interpretation, the low number of quantitative data sources does not allow for statistical generalisation.

By taking the operational realm of the Finnish Canoe Federation as the subject of the research, a notable share of the canoe service providers is excluded. Commercial service providers probably have a larger local economic impact and involve more people than canoe clubs. Some of the issues discussed in this thesis might interfere with business interests. Further, specialised canoeing service providers are mostly individual entrepreneurs and micro-businesses. Larger nature tourism companies have canoeing as one branch of their operation. A reliable tool for selecting the concerned companies from the national business directory was not found.

Any statistical interpretation of the data is limited because of the low number of cases involved. Yet the return rate was 47% of approached participants, and they represent over two-thirds of all members of the canoe federation in Finland. It cannot be stated that the manager of a club would represent the opinion of all members, however as in every democratic institution the leaders had been elected by the members, thus the responses were considered as being representative of Finnish canoeing. As far as geographical spread of the clubs is concerned, participating clubs are from all regions and from different sized municipalities, which further strengthens research representativeness of the whole canoeing sphere in Finland.

7.3 Further Research Suggestions

Though the participating clubs in this research represented the majority of active canoe paddlers in Finland, the research did not succeed in involving the majority of the clubs in the country. While the degree of membership is low in those clubs, which did not participate in the research, it would be worth discovering what activities those clubs perform. What are the main interests, visions and missions of those clubs? Why do active service providers, leading organisations and entrepreneurs in this structure not proactively cooperate with each other in order to develop recreational and competitive canoeing facilities and service networks? Why do they not take action with regards to systematic development of the infrastructure, facilities, and programmes?

In the scope of this research it was not possible to unfold exemplary features of management and fundraising practices, details of operational structures and the degree of inventiveness of certain clubs' management in utilising local specialities from the participating clubs. A number of good examples from within Finland and abroad could be presented. What made the success possible in those cases? In what way could these examples be implemented to other clubs in other parts of the country? Similarly, failed or struggling attempts aimed at producing broader and better operation were not examined in this research. What are (were) the obstructions to those initiatives? What possible mistakes were made during the planning and execution of the project?

A comparative research of the Finno-Scandinavia's paddling life could be performed to find out similarities and differences among these countries. Along with the historical, cultural bound between these countries also the prevailing climate is rather similar. However the type of water and local differences could be discovered. That would enlighten us to whether or not canoeing has similar difficulties in the different Nordic countries. What could be learnt from each other in this perspective?

An in-depth research could be performed on the demand side of canoeing services in Finland. What is the image of canoeing in Finland? What kind of latent customer demand exists? What kind of services are customers missing? I have the suspicion, that demand is larger than the supply. How can this potential be utilised and mobilised? Why does a large part of the nation, which lives on land between lakes and rivers, see dangers in water sports and not opportunities?

The weather study would be worth a much more in-depth article itself. The counteraction of different weather factors, such as the air and water temperature, wind, waves, and currents, further the amount of precipitation and its distribution in time notably influences the comfort of outdoor activity. I have had the suspicion, that there is significant difference between scientifically observed weather data and the personally experienced weather quality of the day for outdoor activity, and more precisely for canoeing.

7.4 Closing thoughts

Depending on the psyche of the individual the pressure of competitive sport on youth can be positive or negative. Extensive competitive pressure in school PE classes is blamed for a high drop-out rate from being physically active at an adult age (Feltz & Ewing 1987; Homan 2006). In contrast, competitive sport is credited in developing social skills, self esteem, the feeling of justice and fairness (Bergeron 2007; Cervelló, Escartí & Guzmán 2007). Both opinions are right. Games themselves, which have been played since early childhood include competitive features. Regardless of whether youth or adult sport is in question or not the most important thing should be the developing of skills and the polishing of talents with enthusiasm. Not every sport is for everyone, and not everybody is interested in one sport. Yet, canoeing in its various forms provides the opportunity to develop skills and talents for a wide range of personalities according to one's desires and wishes.

During the timeframe of this research there has been progress in canoeing in Finland that could be claimed to be as a direct or indirect result of this dissertation project and the impact it had on Finnish organised canoeing. These changes would have probably happened sooner or later anyway, but this doctoral research and the debate around it definitely played a catalytic role in the process. Some examples are that the coaching education curriculum was renewed after almost two decades. There have been attempts to provide profes-

sional coaching support for the sprint team as a whole. After years of uncontrolled individual training programmes this forced competitions to follow common guidelines in training and to take part in group training sessions and camps. The common guidelines in training programmes ensure that individual athletes work better together in crew boats, the quality of every training session attains a higher standard and ensures better racing performances from individual athletes and the team as a whole. Active debate has started and the development programme is an ongoing process.

The deficiencies of the thesis came apparent to me as I was approaching the goal. Some of these thoughts are briefly expressed in the last chapter. Yet in this thesis many earlier not examined issues were also discovered and I hope that it contributes to a better future for the development of canoeing infrastructures and services in Finland.

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Appendix

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