

An Investigation of a Highly Successful Team Environment: The Case of the Male French
National Whitewater Slalom Single Canoe and Kayak Team

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Abstract

To date, most of the research on group cohesion has focused on team sports, with little known about how this body of knowledge relates to individual sports. The case of the male French whitewater slalom canoe and kayak team was chosen because of the success of the team at World Championships and Olympic Games. The purpose of the present case study was to investigate how the coaches and athletes of this highly successful team worked together in training and competition within a highly competitive environment. Data were collected through in-depth interviews with six athletes and four coaches. Three themes, each containing numerous sub-themes, emerged from the analysis: (a) the nature of collaboration within the team environment, (b) coach leadership, and (c) the fragility of collaboration. The results of the present study have advanced our understanding of what collaboration within an individual sport team may look like. For a period of time, the leadership skills of the coaches, as well as their technical coaching expertise, and the willingness of the talented and driven athletes to work together, contributed significantly to a collaborative environment for this team. Then a change in the Olympic entry rules, the departure of an influential coach, and the inevitable change in the ages and experiences of the athletes themselves all combined to erode the foundation of that productive and collaborative environment.

Keywords: cohesion, collaboration, coach leadership, competition, whitewater canoe and kayak slalom

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CHAPTER I: INTRODUCTION

A good opponent [is] a rare and treasured thing for any team or player... By forcing you to be as good as you can be, such an opponent stretches the boundaries of your emotional and playing experience... It is why good players and good teams, good enough to stand alone, stand straighter and more vividly with a good opponent. (Dryden, 1983, p. 127).

Winning an Olympic medal is considered by many to be the pinnacle of athletic success for amateur athletes. In recent years, the stakes in amateur competition have risen dramatically and the payoff for winning is increasingly lucrative. Competition has the potential to bring out the very best as well as sometimes the very worst of human nature. From a positive perspective, extraordinary anecdotes of athletes overcoming adversity illustrate the best of competitive sport. For example, Silken Laumann's miraculous comeback to win an Olympic bronze medal at the 1992 Barcelona Olympic Games only ten weeks after a horrific rowing accident illustrates how sport can bring out the best in an individual (CBC, 2006). A rowing shell crashed into Laumann's boat and crushed her leg, breaking bones and cutting into muscle. Her leg injury was so severe that some doctors thought she would never row again. And yet she did, winning a bronze medal only two months later.

In contrast, a sometimes extreme focus on winning at all cost has led to poor behaviour in sport such as doping, cheating, and violence against other athletes. The need for international watchdogs such as the World Anti-Doping Agency (WADA) confirms the prevalence of drug incidents in high performance sport, and yet, problematic behaviour in high performance sport is not limited to doping. A considerable amount of negative conduct lies outside of the jurisdiction and mandate of national and international sport governing bodies, and WADA. Rivalries and

jealousies among athletes, especially teammates, are not uncommon and can become destructive. As a high performance athlete, I have witnessed the harmful effects of negative rivalries far too often. Fortunately, examples of teammates working well together also exist in high performance sport, and the present thesis is a case study of such a team.

For the purpose of the present study, we argue that there are four different types of teams in sport. The first type of team, and the most familiar, can be observed in team sports such as basketball, hockey, and soccer. In this type of team, teammates have a common goal and must work together in pursuit of this goal in order to have a chance at success. In individual sports, there are potentially three other types of teams. In sports such as sprint canoe and kayak and rowing, once the team is selected to compete internationally and in major games, only one competitor from each country is permitted to compete in each event. This is the first type of individual sport team. A second type of individual sport team exists in sports such as swimming, speed skating, alpine skiing, athletics, and whitewater slalom canoeing and kayaking where there are multiple entries per event. This means that athletes who compete internationally will possibly be competing directly against their teammates as well as other athletes. An example of this type of team functioning effectively is the highly successful Canadian speed skating team. For example, two athletes, Susan Auch and Catriona Le May Doan embraced a teamwork philosophy to establish a positive rivalry leading into the 1998 Nagano Olympics (Robertson & Botterill, 2000). The strategy paid off and Le May Doan claimed the Olympic gold medal while teammate and rival, Susan Auch, finished close behind for an Olympic silver medal.

Cycling is an example of a third type of individual sport team where teammates, in a race, work together as a team and yet the athletes are only recognized for their individual results. For example, in the sport of triathlon, at the 2008 Beijing summer Olympic Games, Canadian Colin

Jenkins helped Simon Whitfield to claim the silver medal by allowing Whitfield to draft during the cycling portion of the race.

The focus of the present study is on the second type of individual sport team where competition exists between teammates as well as international opponents. Whitewater slalom canoe and kayak is a sport where up to three athletes per national federation per event are permitted to compete at the World Cup and World Championships. This means that once selected to the national team, whitewater slalom athletes will compete against one another for medals in international competitions and ultimately for nomination to the Olympic team. At the Olympic level, prior to 2008, the top ranked countries were permitted up to three athletes per category in the 1992 Barcelona and 1996 Atlanta Olympic Games, and up to two athletes per category in the 2000 Sydney and the 2004 Athens Olympic Games. For the 2008 Olympic Games, the rule was changed to only allow one athlete entry per category (International Canoe Federation, 2006). Nonetheless, it is becoming more common that teammates in all types of individual sport teams spend extended periods living and training together throughout both the training part of the season and competitive season. What is intriguing is to investigate how such a group of high performance athletes can become a highly functioning team given that some of the athletes are in direct competition with one another.

CHAPTER II: REVIEW OF LITERATURE

The review of literature is divided into three parts. The first part will examine the literature in group cohesion. A great deal of research has been conducted in this area, although the majority has dealt with team sports. The second part of the review of literature looks at the specific concepts of goal achievement and motivational climate and the third part of the review of literature looks at the body of knowledge surrounding the concept of collaboration within a competitive sport setting.

Group Cohesion

In considering the concept of group cohesion, there are numerous and varied definitions in the research literature. Initially, Festinger, Schachter, and Back (1950, 1963) explained that cohesion consisted of the total sum of forces causing group members to remain united. Later, Cartwright (1968) described cohesion as a group “in which the members all work together for a common goal, or one where everyone is ready to take the responsibility for group chores” (p. 70). More recently, Carron, Brawley, and Widmeyer (1998) defined cohesion as “a dynamic process which is reflected in the tendency for a group to stick together and remain united in the pursuit of its instrumental objectives and/or for the satisfaction of member affective needs” (p. 213). In this definition, the authors draw attention to four main characteristics of group cohesion. They view the four characteristics as multidimensional, dynamic, instrumental, and affective. The multidimensional characteristic of cohesion highlights the numerous factors that keep a group united and notes that these factors may differ from group to group. The second characteristic in their definition is that cohesion is dynamic and highlights that a group is in a continuous state of change. The third characteristic, the instrumental dimension, highlights that

sport groups form in order to fulfill a specific task. The final characteristic of group cohesion is an affective dimension. This final dimension highlights that even in highly task-oriented groups, social relationships will often form over time. It is important to note that the definition advanced by Carron et al. in 1998 was an evolution of Carron's (1982) earlier and similar definition that evolved to incorporate the affective dimension.

Carron, Widmeyer, and Brawley (1985) and Carron, Hausenblas, and Eys (2005) developed and refined a conceptual model for cohesion in sport teams in an effort to advance an operational definition as well as to develop an instrument to assess cohesion in sport teams. This model was based on three core assumptions from the literature on group dynamics. The first assumption, based on social cognitive theory research, was that cohesion can be evaluated through the perceptions of both individual and group members (Carron et al., 2005). The second assumption identified the need to differentiate the group from the individual, and the third assumption proposed that both task and social oriented factors of the group and its members influence group cohesion. As a result, the authors incorporated a task and social dimension into their conceptualization of cohesion.

As well, this conceptual model for group cohesion in sports teams consists of four dimensions: individual attractions to the group-task and individual attractions to the group-social, and of group integration-task and group integration-social (Carron et al., 2005). These four dimensions emphasize the importance of considering both group and individual factors, and task and social factors when looking at the cohesiveness of groups and sport teams and form the basis of the Group Environment Questionnaire (GEQ) and the operational measure of group cohesion (Carron, Widmeyer & Brawley, 1985). The individual attractions to the group scales (ATG) assess a member's personal attraction to the group. For example, the questions in the ATG scales

are focused on issues such as: Is the group attractive to me personally? How well do I fit in with the group? Am I happy with the challenges this group provides? The group integration scales (GI) assess the individual's perception of the group as a totality. This scale is concerned with questions such as: Do we stick together socially? Are we unified in what we are working to accomplish? Are we united in how we are trying to attain it? As well, a task orientation represents a general motivation towards accomplishing the group's goals and a social orientation represents a general motivation towards advancing and preserving social relationships within the group. For example, competitive sport teams work together for task reasons and pursue task related activities related to their goals. However, recreational sport groups are less concerned with task related activities and set social goals and stay together primarily for social reasons (Carron & Brawley, 2008) Both the ATG and GI scales measure the aspects that Carron et al. (2005) argue are important in keeping members united in a group.

The framework for the study of sport groups, by Carron et al. (2005) is a linear model comprised of inputs, throughputs, and outputs. The inputs consist of the following four factors: environmental factors, personal factors, leadership factors, and team factors. These four factors are considered by Carron et al. to be correlates of cohesion. The inputs influence the throughputs, which are viewed as consequences of cohesion. The throughputs consist of the group structure (e.g. status, role, leadership), group processes (e.g. goals, interaction, and communication), and group cohesion (ATG task and social, and GI task and social). Finally, the throughputs influence the outputs, which are regarded as the consequences of cohesion. In this conceptual framework, the outputs consist of both the individual group member outcomes (e.g. individual performance and adherence) and team outcomes (e.g. group stability) (Carron et al., 2005). The authors

suggest that these relationships are often interwoven and “it is important to bear in mind the dynamic, circular nature of group dynamics” (p. 242).

A Sport Team

When discussing the concept of group cohesion within the context of sport it is also useful to reflect on what researchers consider to be a team. Although there are many differing definitions of what constitutes a team, the definition offered by Salas, Dickinson, Converse, and Tannenbaum (1992) is used extensively, although it was not specifically intended for sport. The authors suggest that a team consists of at least two people who are working together toward a common goal, has members that have been assigned to specific roles or tasks to perform, and has some level of interdependence among its members. Within the context of sport, Carron et al. (2005) define a team as:

[A] collection of two or more individuals who possess a common identity, have common goals and objectives, share a common fate, exhibit structured patterns of interaction and modes of communication, hold common perceptions about group structure, are personally and instrumentally interdependent, reciprocate interpersonal attraction, and consider themselves to be a group. (p. 13)

While this definition was created from the perspective of a team sport, it merits further discussion for other sport contexts. In numerous cases, athletes competing in individual sports will meet several of the necessary requirements to be considered a team contained within that definition. Certainly, structured patterns of interaction typically exist only in team sports in the form of, for example, offensive and defensive alignments and specific roles on a team (Carron et al., 2005). However, in individual sports, structured patterns of interaction can also be observed in the norms that begin to form in group activities and, in particular during training sessions.

Structured modes of communication are regularly used in both individual and team sports to convey the meaning of specific techniques or strategies. Team members can readily translate this specialized language into something meaningful while a non-team member or an uninitiated observer may not. Roles, norms, and status are examples of group structures that can be observed in both team and individual sports. As well, interpersonal attraction, or friendships, are common elements of most participation in sports and can be observed in both team and individual sports. However, it may sometimes be more difficult to maintain friendships and camaraderie in individual sports teams especially when teammates are in direct competition with each other.

Having noted some of the commonalities in the group cohesion literature with respect to team and individual sports, there are certain aspects of Carron et al.'s (2005) definition of a sport team that become problematic when considering athletes who compete in individual sports. Personal and task interdependence are specifically associated with team sports, where each athlete is dependent on his or her teammates in order to compete and succeed. In contrast, individual sport athletes are not often dependent on each other. They do not share a common fate when it comes to winning and losing and compete independently and sometimes against each other. For example, in individual sports, one athlete may perform exceedingly well while a teammate may finish last.

However, upon deeper reflection, it is possible to see how athletes competing in individual sports may share at least a number of common goals. For example, in whitewater canoeing, Olympic qualification for National Governing Bodies (NGB) is based on national team athletes' performances at the World Championships. However, Olympic qualification is not awarded directly to an athlete but rather to the qualifying athletes' NGB (International Canoe Federation, 2006). In other words, an athlete may successfully qualify an Olympic position at the

World Championships, but the position will be awarded to the athletes' country and not to the specific athlete. Therefore, at a World Championships it is in every teammate's best interest to support one another in an effort to earn a nomination for their nation to the Olympics.

Ultimately, the teams with the greatest depth of talent are at a considerable advantage because the pressure of qualifying an Olympic position does not fall on the shoulders of a sole athlete, as would be the case for countries that lack in depth of high performance athletes. Moreover, in Canada, funding decisions are based, in part, on team performance (Heritage Canada, 2005). These examples illustrate how athletes competing in individual sports can sometimes share some common goals, although as we can see these goals differ from those of team sports.

The majority of group cohesion research has focused on team sports containing more than two members. For example, research conducted in the sport environment has investigated beach volleyball (e.g., Wickwire, Bloom, & Loughhead, 2004), soccer (e.g., Eys, Hardy, Carron, & Beauchamp, 2003), rugby, (e.g., Kozub & Button, 2000; Terry et al., 2000), cricket (e.g., Prapavessis & Carron, 1997), baseball/softball (e.g., Shields, Bredemeier, Gardner, & Bostrom, 1995), and football (e.g., Westre & Weiss, 1991). Unfortunately, very little group cohesion research has been conducted explicitly within the context of individual sports. Perhaps one explanation for this is that most North American varsity athletic programs are largely dominated by team sports and they are easier for researchers to access than other sports in the community.

Cohesion and Team Building

When examining the group cohesion literature it is also useful to discuss the concept of team building which consists of any activity that is aimed at enhancing group cohesion (Yukelson, 1997). The purpose of team building is to enhance team synergy and ultimately increase team performance (Bloom, Stevens, & Wickwire, 2003, p. 129). Yukelson reports that

team building interventions have been used “to help group members learn to cooperate with one another so they can share their skills, knowledge, and resources more effectively” (pp. 73-74). Historically, team building has received little academic attention in the realm of high performance sport, however team building research in the business and industry setting is well established. For example, Neuman, Edwards and Raju (1989) conducted a meta-analysis of 126 studies demonstrating the effectiveness of team building interventions within the business milieu. Consequently, Yukelson (1997) suggested that sports teams can greatly increase team performance by implementing the lessons learned from the group cohesion research that has taken place in the business and industry context. The author’s multifaceted approach for team building consists of seven suggestions for coaches to improve team effectiveness and central to these suggestions are the recognition that the coach must play a pivotal leadership role in the team building process. His suggestions to the coach are to: 1) get to know athletes as unique individuals, 2) develop pride in group memberships and a sense of team unity, 3) develop team goals and team commitment, 4) provide opportunities for goal evaluations, 5) clarify role expectations, 6) conduct periodic team meetings to discuss team matters, and 7) establish a player counsel.

Although these recommendations were intended for a team sport coach, Yukelson (1997) gives additional team building advice that could be useful for all coaches. For example, the author advocates implementing an incentive system that rewards the team rather than the individual. This strategy could be useful in reducing interpersonal jealousies among athletes in individual sports. He also recommends soliciting team assistance in developing a mission statement as a means to bring the team together in pursuit of a mutually agreed upon objective. This process encourages a shared vision and sets the stage for effective teamwork. Finally,

Yukelson explains that social support and peer help can contribute to an effective team climate. Specifically, the author was referring to situations such as veteran athletes helping rookie athletes, sharing technical knowledge with teammates, or providing emotional support for one another. Many of these recommendations could also be useful in building a team perspective in the context of individual sports.

Team Performance and Cohesion

In examining the relationship between team performance and cohesion, the initial findings regarding the cohesion to performance relationship are contradictory and inconclusive (Martens & Peterson, 1971; Carron, 1980; Gill, 1986). Mullen and Cooper (1994) conducted a comprehensive meta-analysis of the cohesion to performance relationship involving 49 studies from various sub-disciplines in psychology. Their conclusion cautiously confirmed the presence of a small cohesion to performance relationship. More recently Carron, Colman, Wheeler, and Stevens (2002) conducted a meta-analysis involving 46 studies investigating the interrelation between team cohesion and performance. Their analysis found an overall moderate to large positive relationship between cohesion and performance. These findings are of particular interest to the proposed study because they provide empirical support to the concept of building a cohesive team in the pursuit of high performance results.

In studies utilizing qualitative research methods, there does appear to be a relationship between cohesion and performance. Gould, Guinan, Greenleaf, Medbery and Peterson (1999) investigated the factors affecting Olympic performance of more and less successful teams. They conducted one-on-one interviews with coaches and focus group interviews with athletes from eight U.S. Olympic teams that competed at the 1996 summer Olympic Games in Atlanta. One of the major themes that distinguished the successful teams from the less successful teams was time

spent training together as a team. Moreover, both the successful and the unsuccessful teams identified team cohesion as being an important factor to achieving peak performance. One athlete on a team that met its performance expectations said: “we had respect for one another and we made each other live up to a higher standard” (p. 387). Furthermore, in their investigation, Gould et al. discovered lack of teammate trust to be a factor that negatively influenced team cohesion.

In another study, Greenleaf, Gould, and Dieffenbach (2001), conducted in-depth interviews with 15 U.S. Olympic athletes from the 1996 summer Olympic Games and the 1998 winter Olympic Games. Six of the athletes mentioned team unity as having a positive influence on their Olympic performance. Furthermore, several individual sport athletes also spoke of the significance of team cohesion. One gold medalist from an individual sport reported, “just to know that I wasn’t out there by myself, I had them and they were there with me too” (p. 171). In contrast, team issues such as a negative team climate, poor interaction with teammates, national governing bodies’ politics, and team policies were cited as factors negatively influencing performance. The findings from both of these studies illustrate the influence of both positive and negative factors potentially affecting cohesion and in turn, affecting athletic performance. Finally a recent study conducted by Gould and Maynard (2009), summarizing the research on psychological preparation for Olympic Games, reported that athletes and coaches from both team and individual sports identified team cohesion and harmony as critical for Olympic success.

Goal Orientation and Motivational Climate

The research literature on achievement goal theory explains that achievement behaviour is related to the personal meaning an individual assigns to the perceived outcome in an achievement setting. Sport, physical education, and classrooms are viewed as achievement settings (Duda & Hall, 2001). Achievement goal theory provides a framework that explains how

athletes evaluate, feel about, and react to themselves, their teammates, and their sport performances (Nicholls, 1984, 1989). The author identified two distinctive achievement goals referred to as task and ego-goals. When endorsing a task-goal, an individual will focus on personal improvement, learning, and mastery of the task. This is recognized as self-referenced evaluation (Ntoumanis & Biddle, 1999). A task-goal orientation will allow athletes to focus on the process of performance and will result in less emphasis on proving one's superiority to others (Duda & Hall, 2001). In contrast, when endorsing an ego-goal orientation, success and failure is based on normative standards and therefore is defined in comparison to others (Ntoumanis & Biddle, 1999). This means that athletes who adopt ego-goal orientations can only validate their competence in relationship to others.

Motivational climate is viewed as the situational goal structure of the environment that is determined by significant others such as coaches, parents and teammates (Duda & Whitehead, 1998). In classrooms, Ames (1992) differentiated between mastery and performance perceptions of motivational climate. Ames used different terminology to refer to conceptually similar constructs as Nicholls' (1984, 1989) task and ego achievement goals. According to Ames, a performance motivational climate is characterized by interpersonal competition, rivalries between teammates, public evaluation, and social comparison. In contrast, a mastery motivational climate directs a learner's attention towards effort, improvement, and helping each other to learn. Of particular interest to the present study, Duda (2001) predicted a relationship between motivational climate and cohesion based on the climate produced by coaches. Previous studies have demonstrated that promoting cooperation between teammates is fundamental in establishing a mastery motivational climate (e.g., Ames, 1992; Newton, Duda, & Yin, 2000). Thus it is likely that an ego-goal orientation and performance motivational climate will be

problematic in fostering an effective team climate because athletes would be focused on beating one another. Generally, quantitative data have revealed that coaches and parents who endorse and create a performance motivational climate encourage the development of ego-orientation in athletes, which in turn, leads to maladaptive behaviors such as loss of motivation, decreased effort and persistence, and avoidance of practice (Ntoumanis & Biddle, 1999).

Collaboration

In looking at the literature on group cohesion, goal motivation, and motivational climate, as well the concept of different kinds of teams, it is clear that effective teamwork may prove to be more challenging for individual sport teams because interpersonal competition can sometimes strain team dynamics. However, Yukelson (1997) has identified that teammates who learn to collaborate and share knowledge can help each other in their quest for peak performance. Cooperation and competition are often viewed as two contrasting concepts. In a competitive individual sport environment, the gains by one individual may diminish the potential for gains by others. However, this may not always be the case. Carron et al. (2005) report that it is possible to observe four differing intra-group and inter-group processes (See Appendix B for an illustration of Intragroup and Intergroup Processes). In the first process, there is cooperation within each group; however, these groups then compete against each other. This process is typical of most team sports. In the second process, there is cooperation within each group, and the groups also cooperate with each other. This is rare in sport but I have observed it in my experience as an athlete. For example, in some training sessions prior to the 2004 Olympics, the Canadian, the Swiss and the British whitewater slalom coaches collaborated to share the labor of split timing and video filming of athletes in order to provide more coaching services to each athlete. As well, Culver, Trudel, and Werthner (2009) documented a midget AAA baseball league where a

visionary sport leader was able to create a cooperative culture throughout the league grounded in the concept of cooperative learning. Specifically, the coaches were encouraged to share their knowledge with players of opposing teams with the common goal of developing all of the league athletes. In the third process, there is competition within each group, and there is also competition between groups. This is characteristic of many individual sports. In the fourth process, there is cooperation within one group but there is competition within another group. Additionally, there is also competition between each group.

In thinking more deeply about the concept of collaboration, Botterill (2005) uses the term positive rivalries to refer to a collaborative approach to training and competition. He explains that intrinsic motivation and a task-goal orientation can help reduce some of the maladaptive behaviours associated with the high performance competitive environment. Furthermore, Botterill highlights the importance of group cohesion, and implementing a “team philosophy”, even with individual sport teams. However, to date, it appears that no empirical research has been conducted on this concept of positive rivalries.

In summary, most group cohesion research has focused on team sports, with little known about how this body of knowledge might be relevant to individual sports. In fact, it is debatable whether some researchers even consider individual sport teams to be “teams” in view of the definition proposed by Carron et al. (2005). Nevertheless, some research has demonstrated the performance benefits associated with creating a highly cohesive team and there is research to suggest that creating a cohesive environment could benefit athletes and coaches within an individual sport setting (e.g. Gould et al., 1999; Greenleaf et al., 2001; Gould & Maynard, 2009). At the very least, it is difficult to imagine that a cohesive team environment would hamper athletic performance, and it is likely that such a cohesive climate would result in effective

teamwork during training camps and competitions. As mentioned earlier in this paper, in whitewater slalom, in terms of qualifying for the Olympics, it is beneficial for teammates to support each other. In addition, research in achievement goal theory and motivational climate illustrate how the athletes' and coaches' goal structure can influence the competitive climate. In light of Botterill's (2005) reflections in the realm of positive rivalries, there is potential for remarkable discoveries in this area.

Conceptual Framework

Maxwell (2005) suggests that a conceptual framework is a "system of concepts, assumptions, expectations, beliefs, and theories that supports and informs your research" (p. 33). He also states that the framework is not found but constructed by the researcher. It is designed to examine existing theories and research that are relevant to the proposed study. Given that there is very little research in the area of cohesion and collaboration within individual sport teams this study is primarily inductive although the work of Carron et al. (2005) on group cohesion and collaboration, Nicholls (1984, 1989) and Ames (1992) on goal orientation and motivational climate, and Yukelson (1997) on team building have been used to inform the research.

Personal Interest

Throughout my experience as a Canadian national team whitewater slalom canoe and kayak athlete, I have observed teams with a very healthy and productive environment, as well as teams that have seemed to suffer from a negative and over-competitive environment. I have seen that often the healthy and productive climate is the one that produces great results. As a result, I have often wondered what really differs in these two types of environments? What do coaches

and athletes do to create an effective team environment? What do they fail to do that leads to a negative team environment? Does it really make a difference in terms of success?

It has been my observation that the French whitewater slalom team, a very successful team in terms of international results, has somehow created an environment where teammates work well together within a highly competitive situation. This team has produced very impressive results at the highest level of international competition in the last decade claiming 25% of all the possible medals at the 2000 and 2004 Olympic Games (Kamber, 2006).

As a three-time Olympian (Sydney 2000, Athens 2004, Beijing 2008) and a veteran of the Canadian national team, I have had the privilege of observing the French team among other teams throughout my athletic career. In addition, I have also been exposed to the French coaching style by four different coaches previously employed by Canoe/Kayak Canada. My curiosity led me to want to explore how the French team coaches managed this environment and how the athletes made sense of the intense competition between teammates. As we have seen in the literature, a negative team climate can result in less than optimal performances, and yet, there is very little research on how athletes in individual sport teams work together. Thus, the purpose of the present study was to investigate the training and competitive environment of a highly successful individual sport team from both the coaches' and the athletes' perspectives. The main research question was: how did the athletes and coaches of the male French national whitewater slalom single canoe and kayak team function to create world class and Olympic success?

CHAPTER III: METHODOLOGY

The epistemological question at the root of all case study research is: what can be learned from this specific case? The strength of case study research lies not in generalizing beyond a particular case but in acquiring a deep understanding of a specific case (Stake, 1995). The present study is grounded in an instrumental case study design (Creswell, 2007; Stake, 1995). Specifically, in an instrumental case study, “the researcher focuses on an issue or concern, and then selects one bounded case to illustrate the issue” (Creswell, 2007, p.74). The case of the French national whitewater slalom team was selected to investigate the nature of their training and competitive environment. According to Stake, the primary criterion for case selection should be to maximize what we can learn. The French national team provided a great opportunity for learning because their program had a large pool of extremely successful athletes and what appeared to be a collaborative training and competitive environment. The researcher had access to this elite group of athletes and coaches because he competed, in the same sport, for the Canadian national team.

Purpose of the Study

In whitewater slalom, as with many other individual sports, athletes are regularly immersed in a highly competitive team environment. As a result, there is always potential for interpersonal rivalries and jealousies to negatively impact the climate of a talented team. As we have seen in the literature, a negative team climate can result in less than optimal performances, and yet, there is very little research on how athletes in individual sport teams might work together. Thus, the purpose of the present study was to investigate the training and competitive environment of the highly successful male French national whitewater slalom single canoe and

kayak team from both the coaches' and the athletes' perspectives. The main research question was: how did the athletes and coaches of the male French national whitewater slalom single canoe and kayak team function to create world and Olympic Games success?

Participants

The participants of this study consisted of six athletes and four coaches of the male French national whitewater slalom single canoe and kayak teams, training and competing in the years between 2000-2007. There were six full-time coaches who worked with the male French national whitewater slalom single canoe and kayak team over the period of 2000 through 2007. Four of these six coaches were interviewed. Over the same time period, there were 14 athletes who represented the male French national whitewater slalom single canoe and kayak teams at the World Championships and Olympic Games. Six of these 14 athletes were interviewed. One of the 14 athletes had retired and become one of the national coaches and therefore was interviewed as a coach. The remaining seven athletes had retired from the national team and were not accessible to the researcher at the time of the interviews.

The athlete participants were selected to participate in the study based on their selection to the 2007 French national team. The first point of contact was made by email with the directeur technique de slalom of the Fédération Française de Canoë et Kayak, to explain the nature of the research and to request access to the French national team program. The directeur technique was asked to forward a recruitment letter to the coaches and athletes. The coaches replied to this recruitment letter by email to inform the researcher of their willingness to participate in this study. All of the athletes who received the recruitment letter replied to the coaches who in turn forwarded their acceptance of participation to the researcher. The researcher scheduled interviews with each participant on site at the 2007 French national championships in Bourg St.

Maurice, France. One of the coaches who was not available at this time was later interviewed over the internet using Skype ©.

Data Collection

In-depth interviews were conducted based on Rubin and Rubin's (2005) responsive interviewing model. Their model relies on an interpretive constructionist philosophy and is also shaped by the practical needs of doing interviews. The authors state that in the responsive interviewing model, the primary goal of the research is to generate depth of understanding rather than breadth. At the heart of the responsive interviewing model is the belief that both the researcher and the participants are human beings and that they form a relationship during the interview.

One semi-structured individual interview was conducted with each respondent (See Appendix C and D). The interview guide for both the coaches and the athletes asked questions about how the team functioned during training and competitions in the time frame of 2000-2007. The coach interview guide included questions about their background (e.g. How long have you been coaching?) and questions about how they managed their team (e.g. Tell me about how you work with your team?). The athlete interview guide included questions about their background as athletes (e.g. How long have you been competing? Tell me about the highlights in your athletic career?) as well as questions about who they trained with (e.g. Can you tell me about one of your best training partners?). All questions and probes were open-ended to facilitate each athlete and coach answering in their own words, with their own insight and thoughts in an unencumbered way (Creswell, 2007). The interviews were conducted in French.

Data Analysis

All interview data were audio recorded using a digital voice recorder and transcribed verbatim, giving a total of 107 single spaced pages. During the transcription process notes were taken to begin to identify potential codes emerging from the data (Braun & Clarke, 2006). The participants' identities were protected through the use of a coding system that replaced each participant's name with a number. Nvivo 7© software, a computer program designed to help organize and code data, was used.

The next phases of analysis used Braun and Clarke's (2006) thematic analysis method, which is "a method of identifying, analyzing, and reporting patterns (themes) within data" (Braun & Clarke, 2006, p.79). The data were coded and sorted into potential themes (e.g. leadership by the coaches). The next phase consisted of reviewing the themes and evaluating whether they seemed to create a coherent pattern without ignoring divergent themes. During this phase the data was re-read again in order to code any additional data within the themes that may have been overlooked. The identified themes were then defined and refined until they were ready to use in the interpretation of the data.

Credibility

The credibility of a study is increased through member checking by participants. Lincoln and Guba (1985) consider this to be "the most critical technique for establishing credibility (p. 314). Stake (1995) has argued that this is an opportunity for the participants to actually play a role in the case study research. At the completion of the interview process and once the interviews were transcribed, they were returned to each of the participants by electronic mail to ensure the authenticity of their commentary and to allow the participants to make changes to their responses. Four of the participants made minor editorial comments to clarify their

responses. In addition, both the coaches and the athletes were interviewed in order to ensure there were at least two distinct perspectives on how this team functioned.

CHAPTER IV: RESULTS

The purpose of the present study was to investigate the environment of a highly successful team of athletes and coaches who train and compete in what is considered an individual sport. The case of the male French whitewater slalom single canoe and kayak team was chosen because of the success of this team at World Championships and Olympic Games between 2000-2007. In-depth interviews were conducted with four national team coaches and six national team athletes between 2007-2008. Demographic information of the four national team coaches is illustrated in Table 1. This table includes the coaches' ages at the time of being interviewed, their experiences and results as athletes, the year they started coaching, the year they began coaching at the national team level, and their international coaching experience. A summary of the six athletes' international performances is provided in Table 2. This table outlines the athletes' results from 2000 through 2008 at European Championships, World Championships, and the Olympic Games. The European Championships, in this sport, were held biennially prior to 2004. After 2004 the European Championships have been held annually. The World Championships occur annually except in the year of the Olympic Games. The 2001 World Championships, scheduled to be held on the Ocoee River in Tennessee, were cancelled following the September 11th tragedy in New York City.

The results are divided into three sections based on the three main themes developed from the analysis of the interviews with the coaches and athletes. Each main theme also contains numerous sub-themes. The three main themes are: collaboration within the competitive climate, effective coach leadership and fragility of collaboration. Quotes from the coach and athlete participant interviews are incorporated into the results to illustrate each of the themes and sub-themes. Each coach quote will be identified by "C1", "C2", etc., and each athlete quote will

be identified by “A1”, “A2” etc. The purpose of this identification is to provide confidentiality for the participants and to enable the reader to link the demographic information to specific coach or athlete quotes.

Table 1: Overview of Coach Demographics

Coach	Age at time of interview	Event and best result as an athlete	Started coaching	French national team coach	Coaching experience with other national team
C1	38	Kayak; 2nd in Olympic Games	1997	1997-2004	No
C2	33	Kayak; 23 in Olympic Games, 5th in World Championships	2004	2004-	No
C3	40	Kayak; Did not compete in World Championships or Olympics	1998	2000-	Canadian national team, 1998-2000
C4	38	Single Canoe; 16th in World Championships	1997	2004-	U.S. national team, 2000-2004

Table 2: Overview of Athletes' International Performances

Athlete	Event	2000		2001	2002	2003		2004		2005		2006		2007		2008	
		EC	OG	WC	WC	EC	WC	EC	OG	WC	EC	WC	EC	WC	EC	EC	OG
A1	Single Canoe	1 st	1 st	**	38 th	2 nd	2 nd	*	1 st	2 nd	35 th	1 st	1 st	2 nd	24 th	*	9 th
A2	Single Canoe	*	*	**	*	*	*	*	14 th	*	*	*	*	32 nd	13 th	*	*
A3	Single Canoe	*	*	**	*	*	*	*	*	20 th	31 st	5 th	24 th	9 th	2 nd	*	*
A4	Kayak	*	*	**	1 st	*	1 st	*	3 rd	2 nd	20 th	5 th	6 th	*	*	*	2 nd
A5	Kayak	*	*	**	24 th	*	37 th	*	1 st	5 th	13 th	*	*	*	*	8 th	*
A6	Kayak	*	*	**	*	*	5 th	1 st	*	8 th	38 th	1 st	5 th	33 rd	10 th	*	*

Legend

EC = European Championships

WC = World Championships

OG = Olympic Games

* Athlete did not compete in competition

** 2001 World Championships were cancelled following the September 11, 2001 tragedy.

The Case: The Men's French National Slalom Canoe and Kayak Team

The case of the present study, the men's French national slalom canoe and kayak team, has been extremely successful, winning numerous World Championships and Olympic Games medals. One of the three canoe athletes interviewed earned two Olympic gold medals, in the 2000 and 2004 Olympic Games. One of the kayak athletes earned an Olympic gold medal in 2004 Olympic Games, and another of the kayak athletes earned bronze and silver medals in the 2004 and 2008 Olympic Games. All four of the coaches had international experience as athletes on the French national team and two of the coaches had competed at the Olympic Games, with one of the coaches earning a silver medal at the 1992 Olympic Games.

At the time of the study, the team consisted of three distinct categories for the male competitors. The three categories were single kayak, single canoe, and double canoe. In the 2000-2004 time period, one coach was responsible for each category throughout the four year Olympic cycle. This is considered a conventional coaching structure and is widely used among many nations. In this timeframe, there were three national training centres located in the cities of Toulouse, Rennes, and Besançon where national team coaches worked with the national team athletes on a daily basis. During this time period, because of the French national team's performance internationally, they were able to qualify two entries in both the kayak and canoe single events for the 2004 Olympic Games.

From 2004 through 2008 the structure of the team changed, one of the coaches from the 2000-2004 time period stopped coaching at the international level, and a cross-disciplinary coaching structure was implemented. The change was made to provide athletes with more flexibility to work with diverse coaches and to open up access to all the coaches' competencies. The cross-disciplinary structure meant that there were two coaches responsible for the elite team

and two coaches responsible for the remaining team when the team attended international competitions. Athletes who achieved a top eight result at the World Championships or a top three result at the European Championships were nominated to the elite team. In this time period there were four multidisciplinary national training centres situated in the cities of Rennes, Paris, Nancy and Toulouse where the coaches, in their daily coaching, focused on the development of athletes under 23 years of age (U23), as well as the elite athletes. The multidisciplinary national training centres encompassed sprint, wildwater, and slalom racing programs while three additional elite training centres focused exclusively on one discipline. For example, the slalom elite training centre, situated in Pau, employed two coaches who worked closely with the elite athletes on a daily basis. During training camps and competitions the coaches from the U23 training centres and the elite training centre collaborated to run training sessions and to prepare the athletes for international competitions.

Although not a requirement, three of the six athletes in this study resided and trained at the elite training centre in Pau, and one athlete resided and trained at the regional multidisciplinary training centre in Nancy. However, all six of the athletes typically spent anywhere from 100-150 days together in training camps or at competitions throughout the year. It is important to note that the Olympic qualification rules changed in this time period to only allow one entry per category per nation. This certainly changed the nature of the team environment, as the possibility to make the French Olympic team became much more difficult.

Four of the six athletes who participated in this study came from paddling families. One athlete's parent was a former World Champion, and the sibling of another athlete was a former Olympic medalist. As a result of this paddling family phenomenon each of these four athletes started paddling at a very young age. One athlete stated that he had been paddling for as long as

he could remember. He noted, “mon père a été compétiteur déjà donc je peux dire que ça fait 27 ans” (A5). A second consequence of growing up in a paddling family was that the athletes received considerable support from family members. One of the athletes spoke of the benefits of learning from his sibling: “J’ai envie de dire c’est surtout le fait d’avoir pu le regarder s’entraîner, d’avoir pu naviguer avec lui qui m’a permis de progresser vite.” (A1) Another of the athletes reported that his father was his first coach: “C’est mon papa qui a été mon premier entraîneur.” (A3)

In summary, this case consisted of a group of athletes and coaches who formed a national team that was rich in sporting experience and significant Olympic success. With such a team in mind, we turn to the three main themes that were developed from the analysis of the interviews, which focused on how a collaborative environment was created among such a group of highly competitive athletes.

Collaboration within the Team Environment

La collaboration, c’est tout l’enjeu du métier d’un entraîneur. C’est très difficile! Mais je pense que c’est important! (C1)

The first theme that developed from analysis of the coach and athlete interviews was how a sense of collaboration was created within this team despite the fact that the athletes, at least within their respective category of canoe or kayak, competed against each other in competition. To more deeply understand this theme, six sub-themes were created, comprised of depth of the French team, managing competition within the training environment, rival competitors training together, kayak and canoe athletes training together, depth of resources, and a positive environment. Each of these sub-themes illustrates how a culture of collaboration was created.

Depth of the French team

The presence of several very talented athletes living, training and competing together led to a culture of excellence where each of the athletes held a great deal of respect for one another and their uncompromising drive to be the best in the world. One athlete reported the following:

Je pense que ce qui va bien et ce qui permet quand même d'avoir des bons résultats, c'est des athlètes qui sont très motivés. Je ne sais pas s'il y a, ailleurs dans le monde, des gens comme Cyril, Martin, et Thomas, des gens qui donnent vraiment tout pour réussir, et qui ont cette capacité de dire "ok, on vit uniquement pour gagner." (A5)

A second athlete echoed the existence of many world-class paddlers in France and the depth of competition. He explained how he saw it as a strength of their program:

Ce qui va bien, c'est qu'il y a beaucoup de très bons athlètes. C'est toujours super intéressant de regarder les autres. En canoë ou dans les autres catégories, les regarder naviguer ou les écouter parler. Moi j'étais en chambre avec Martin la semaine dernière. C'est toujours bien quand tu entends parler comment ils abordent les compétitions, comment ils s'entraînent, tout ça. Ça, c'est super intéressant! (A3)

Another athlete felt that the French program was successful because of the depth of the French national team. He illustrated how well the system was working by giving the example of when he failed to perform at the 2007 European Championships his teammate was able to step up and place second:

Moi je pense que ce qui est important, enfin ce qui marche bien dans l'équipe de France c'est qu'il y a plusieurs bateaux qui sont compétitifs, et je pense que ce qui ne serait pas bon, c'est qu'il n'y ait plus qu'un athlète dans une catégorie qui soit fort. Parce que là, du coup, tout le système français serait un peu bancal. Aujourd'hui la force du système, c'est qu'il y a

plusieurs athlètes qui peuvent être bons en même temps et quand il y un qui est pas bon, les autres sont bons. Et c'est ça qui est important. Je pense que le système français n'est pas fait pour un athlète. Et je crois qu'aujourd'hui ça marche bien parce que quand je me plante au Championnat d'Europe, François se classe deuxième. (A1)

One of the coaches also spoke of the benefits of having multiple elite level athletes in the men's kayak field in France. He noted that the level of competition was so tight that the coaches didn't need to fuel the competitive fire of the athletes:

Sur n'importe quelle course tu as de la concurrence. Tu es kayak homme, tu es champion du monde comme Martin, par exemple, tu fais une course national, tu est un peu en dessous, tu n'est pas premier. Tu es même des fois pas dans les dix premier, donc il y a déjà beaucoup de concurrence quoi que tu fasses. (C2)

Competition within the training environment

In this sub-theme, each of the four coaches spoke of the competitive relationships that existed between athletes who trained together in training camps and how they understood that competition. One coach noted, "tout de suite il y avait une grosse concurrence entre eux pour être le leader." (C1) The coaches felt that this competitive rivalry was in fact a crucial component of the success of the team but emphasized that it needed to remain positive to contribute to the collaboration among members of the team as well as to the competitive results:

Oui il, y a de la concurrence. C'est ça qui permet qu'il y ait des résultats. Je crois que c'est un gros facteur qui permet d'avoir des résultats, la concurrence. Alors tant qu'elle est saine, ça progresse et quand elle est malsaine, ça ne progresse pas. (C3)

Another coach explained that there was no need for the coaches to create a competitive environment because it was always present: “Déjà je pense qu’il faut avoir de la concurrence, c’est important. En France, aujourd’hui, tu vois le nombre de athlètes qu’il y a. Il y a beaucoup de concurrence, quoi que tu fasses.” (C2)

Four of the athletes also commented on the importance of this competitive atmosphere that existed within the training environment and how it forced them to reflect and to continue to strive to get better. As one athlete noted:

C’est-à-dire que quand moi, qui ai gagné deux fois les Jeux Olympiques, je me fais battre par les autres français, je n’aime pas ça. Mais d’un autre côté, le fait de ne pas aimer ça, ça m’oblige à me poser des questions à me bouger pour m’améliorer. Et je pense que c’est bien qu’il y ait cette jalousie; s’il n’y avait pas du tout de jalousie, il y aurait un confort. Et le confort, je pense que c’est dangereux. C’est agréable, mais c’est dangereux pour la performance. (A1)

Another athlete in the kayak category also spoke of how the competition pushed him to elevate his game and to perform at a very high level:

Pour la performance, je préfère naviguer avec les kayakistes. Je pense que si on a été bons les années d’avant, c’est qu’on a été un groupe de kayak qui naviguait souvent, tout le temps ensemble, et voilà, c’est à chaque fois qu’on est confronté aux autres, nos concurrents directs, qu’on élève son niveau de performance. Donc, c’est un peu dans l’inconfort de tous les jours qu’on arrive à être performant. (A6)

Rival competitors training together

Another sub-theme that arose was the importance of rival competitors in the same category training together. The athletes on this team were in direct competition with another and were competing for spots on the national team and for medals at international competitions. The national team coaches were responsible for supervising and preparing these world-class athletes. One coach explained how the athletes' willingness to participate in the national team program while training with their rivals led to the team's success at major international competitions:

Concrètement, chez les kayaks homme, il y a eu une génération de trois jeunes pagayeurs qui avaient vraiment ces besoins et cette envie de se retrouver et d'avoir une forte confrontation. Donc cette confrontation était bien présente lors de la dernière Olympiade, largement exploitée pour en arriver aux résultats de la catégorie qu'on a obtenus en 2004. Avec un champion du monde, un champion Olympique et un champion d'Europe, et trois athlètes français différents dans la catégorie kayak homme. (C2)

A second coach noted how the athletes understood the importance of working together:

Il se trouve que les élites sont tous à un très haut niveau de performance. Donc sans se taper dans le dos, sans être les meilleurs amis du monde, ils participent quand même au programme ensemble, ils adhèrent au programme qu'on propose de sorte que, dans le fonctionnement general, il y a une collaboration qui s'installe entre eux. (C4)

All six of the athletes echoed the importance of training with their rival competitors. One canoeist stated "je pense que c'est très important quand même de s'entraîner avec ses concurrents. Parce que le jour de la course, tu ne rigoles pas si un concurrent te bat." (A3) Another athlete reported that one of his fiercest rivals was one of his best training partners.

Il était un de mes meilleurs partenaires d'entraînement parce qu'il s'entraînait beaucoup, beaucoup, beaucoup. Et moi, ça me motivait de me dire "il s'entraîne beaucoup, il faut que j'arrive à le suivre à l'entraînement, même si je suis fatigué, et il faut que j'arrive à faire comme lui". Tout ça m'a aidé à aimer l'entraînement, à aimer me surpasser et à ne rien lâcher, à toujours être vraiment très résistant physiquement et dans ma tête. Et pour ça, il était très bien. (A4)

When asked directly about how they collaborated with rival competitors within training sessions, the athletes reported that they did not often give each other direct advice but the most important aspect of their collaboration was that they were able to observe each other and to model what their training partners did well. One athlete commented:

Oui, j'ai envie de dire que le fait de naviguer ensemble, c'est un moyen finalement de progresser. Enfin, je sais que j'ai bénéficié de cela quand j'étais jeune. Je n'ai jamais reçu de conseils directs quand je suis arrivé dans l'équipe de France, de mes concurrents. Je n'ai jamais eu de conseils directs tels que "ce stop, il faut le faire comme ça". Mais j'avais la possibilité de regarder comment ils le faisaient et je pense que c'est ça aujourd'hui qui est le mieux, parce qu'on est aussi adversaires. Par conséquent l'important c'est de viser à dépasser les autres mais c'est aussi de réaliser qu'on a besoin des autres pour progresser.

(A1)

Another athlete responded:

Je les aide parce que je les pousse dans leurs retranchements, et c'est réciproque. Ils m'aident parce qu'ils font, à un certain moment, un super chrono, ce qui fait que je suis énervé et que j'ai envie d'aller faire un encore meilleur chrono. Mais directement non, je ne

vais pas aller leur dire, “tiens, ici tu n’as pas fait un super passage tu feras mieux de faire comme ça”. (A6)

The athletes valued the presence of competition within their training sessions and recognized that they needed each other in their mutual pursuit of excellence. Even in 2000 when two athletes who were brothers knew that the last available spot on the French Olympic team would come down to a race between the two of them, one of the two athletes reflected back and said: “Toutes les semaines, on faisait quelques séances pour quand même entretenir une émulation et nous permettre à tous les deux de progresser.” (A1)

Kayak and canoe athletes training together

A fourth sub-theme under the theme of collaboration was how the canoe and kayak categories trained together at various times, and how this training environment enabled a free flowing exchange of technical information between athletes who were not in direct competition with another but nevertheless striving to win at the world level. This training phenomenon was facilitated considerably following the introduction of the cross-disciplinary coaching structure adapted in 2004 and it opened up new opportunities for interdisciplinary training partnerships and collaboration. The athletes did report a difference between training with direct competitors and training with athletes who were not in the same category, but all stressed the value of interdisciplinary learning. Four of the athletes reported that there was more room for open discussions on specific technical and tactical choices when they were not rival competitors, and this was a prime reason that the interdisciplinary training sessions were useful. For example, one athlete explained that he learned a lot while training with a paddler that he was not in direct competition with and that they shared a lot of technical advice with one another.

J'apprenais des choses de lui, et puis lui, il en apprenait de moi, on échangeait. Avec lui on parlait beaucoup de technique et je trouve que c'est très intéressant. Je pense qu'on a toujours à s'inspirer des autres catégories. Je sais que les kayakistes, ces derniers temps, se sont beaucoup inspirés des céistes et maintenant que les kayakistes vont très vite, je pense qu'on doit s'inspirer d'eux, de la façon avec laquelle ils arrivent à toujours pagayer vite et à aller très vite dans les portes. En dehors de l'équipe de France je m'entraîne plus souvent avec les kayakistes que des céistes. (A3)

Another athlete mirrored those sentiments:

C'est plus facile quand on navigue avec Cyril, parce qu'on n'est pas dans la même catégorie. Et on a la même façon d'analyser et de fonctionner. C'est super facile d'échanger et de dire "tiens, à cette endroit-là, tu aurais plutôt dû faire ça". On a une analyse assez bonne entre nous. (A5)

Another kayak athlete explained that he felt more comfortable sharing technical advice with the male canoe and the female kayak athletes because they were not his direct competitors:

Je partage avec les céistes aussi parce que j'aime beaucoup la manière dont ils naviguent. Je m'identifie plus aux céistes aujourd'hui qu'aux kayakistes, tu vois, et l'idée pour moi, c'est de partager avec eux mes sensations, parce que ce ne sont pas des concurrents directs et c'est aussi d'aider un petit peu les filles à trouver des trucs sur l'eau, des petits clés qu'elles n'arrivent pas à avoir toutes seules. (A4)

The same athlete went on to explain how the kayak and canoe athletes often observed one another to help analyze their performances: "Cyril regarde ce qu'on fait et on regarde ce qu'il fait. On essaye de comprendre pourquoi s'il y a des endroits où il passe mieux que nous, et lui pareil" (A4).

Depth of resources

The depth of financial and human resources of the French team has been, to date, the envy of most teams on the international circuit. Two of the coaches and three of athletes attributed a large part of their success to the magnitude of their support system. A coach explained how their clubs, club coaches, and volunteers contribute to a successful program:

Pour moi, la première raison vient de la formation des athlètes à la base. C'est le travail fourni par les clubs. Avec les entraîneurs de club, les bénévoles de club. C'est déjà la première structure où les champions sont formés. Et ce sont des bonnes structures qui sont historiquement vivantes, c'est-à-dire qu'il y a énormément de clubs où ils se passent des choses. (C4)

One of the athletes reiterated the importance of the national team's support:

Tout est bien organisé autour de nous au niveau financier, au niveau matériel, au niveau humain avec l'équipe de France qui nous soutient en permanence. Je pense que ça c'est quelque chose qui va très bien en France. Il y a énormément de stages qui sont organisés, il y a énormément d'argent qui est investi pour permettre aux athlètes de faire des performances. Donc ça, c'est exceptionnel! Quand je vois les autres nations, je me dis que c'est normal qu'il y ait des résultats comme ça en France. Ça ne peut pas être autrement. (A5)

A second athlete spoke of the magnitude of the French program and reflected on how the depth of its resources helped to reassure and instill confidence within the team:

Je pense que ce qui nous aide c'est les moyens financiers, humains, et matériels, c'est une grosse structure. Donc, dans un sens, ça nous rassure, parce qu'on a tout ça avec nous, ça nous fait du bien, ça nous rassure, ça met en confiance. (A4)

Another athlete reflected on how the support from the French program minimized distractions and enabled him to focus on performing:

On est une équipe qui a pas mal d'argent par rapport aux autres, donc on bénéficie de vidéos, on est toujours dans des hébergements très agréables, on a toujours beaucoup de monde qui nous accompagnent, pour nous filmer, pour nous faire à manger sur les championnats du monde. Ça c'est super, on est presque comme des rois. On ne paye rien du tout, donc ça nous permet d'être à l'aise. Ça ce n'est pas toute la performance, mais en tout cas, ça nous enlève des soucis, c'est sûr. (A3)

Positive environment

The seventh and final sub-theme under the theme of collaboration was the presence of a positive team environment. Given the depth of competition and the density of medal contenders in the same categories within the French team there was certainly room for conflict yet four of the six athletes spoke at length about the presence of a positive climate: “On essaye quand même de se bouger et d'avancer ensemble, on ne fait pas de petits coups malsains” (A2). The same athlete recounted a noteworthy anecdote of how a veteran rival athlete who failed to make the French team congratulated him for making the team following their Olympic selection races in 2004:

Le plus gros moment, c'est quand j'ai été sélectionné pour la Coupe du Monde à Athens en 2004 pour aller faire le quota Olympique, où là c'était vraiment celui qui gagnait qui passait. C'est moi qui gagne, et la première personne qui est venue me voir, c'est Hervé pour me féliciter et que lui, il était derrière, donc c'est vrai que j'ai trouvé cela très bien de sa part. (A2)

A second athlete noted: “On a quand même une bonne ambiance entre nous. On ne se fait pas la guerre pendant les competitions” (A3). A third athlete spoke of how they were each able to maintain a healthy perspective of competition: “Je pense qu’on a réussi à comprendre que la competition, ce n’est pas toute la vie et que le jour où ça s’arrête, c’est dommage si jamais on a été en conflit avec quelqu’un” (A4).

Coach Leadership

Oui, c’est sûr que l’entraîneur avait réussi à faire monter la mayonnaise, comme on dit. À faire prendre la mayonnaise, à ce que chacun ait besoin de l’autre pour être le meilleur. (A6)

The second theme developed from the analysis of the coach and athlete interviews was that of coach leadership. It was clear from both the coach and athlete interviews that the coaches displayed excellent leadership skills, spending a significant amount of time reflecting on crucial aspects of the athletes’ individual and team development, and creating an effective and collaborative environment even though the athletes were in direct competition with each other. There were numerous ways the coaches accomplished this, and they are elaborated on under the seven sub-themes of team workshop and communication training, equity and confidentiality, effective coach management skills, managing jealousy, managing conflict, individualizing training within the team environment, and understanding of the competitive environment. Each of these sub-themes illustrates the nuances that each coach brought to establishing and maintaining an effective environment.

Team workshop and communication training

In 2002, in preparation for the 2004 Olympic Games, one of the French kayak coaches organized a two-day team workshop, led by an expert in communications, with the objective of

establishing effective communication within the team and developing better relationships among the three kayak athletes. He felt strongly that creating an environment where the three athletes worked together, at least for some portion of training, would enable all three athletes to excel at the world level. During the two day workshop, the athletes and coaches learned how to interact in a respectful manner despite their competitive situation and how to manage conflict when it arose. The coach explained:

On a fait des exercices, on a beaucoup discuté sur la confrontation, la concurrence, la dynamique des groupes et en faisant des jeux de rôles. Et à partir de là, avec le consultant, j'ai établi des règles de fonctionnement, des règles de conduite, pour préserver un climat d'entraînement sain. La volonté n'était pas qu'ils soient copains, puisque c'était impossible, mais tout au moins de préserver des règles toutes simples mais qui étaient importantes pour moi, pour nous garantir un bon espace à chacun et faire en sorte qu'il n'y en ait pas un qui veuille écraser l'autre, autrement que sur l'eau. Où là, sur l'eau, tout était permis, mais pas en dehors de l'eau. (C1)

This coach elaborated on one of the role play exercises that took place during the workshop:

Les jeux de rôles, c'était savoir dire non, en évitant de blesser, ou de se bloquer dans des situations reliées à l'entraînement. Par exemple, il y a un qui a une bouteille d'eau, tandis que l'autre a oublié la sienne, et veut boire dans la bouteille du premier. Mais l'autre n'a pas envie de lui prêter sa bouteille à cause des virus, ou à cause de quoi que ce soit. Donc, comment dire non sans froisser, dans des situations de prêt de matériel. C'était vraiment orienté sur du concret. (C1)

The previous quote illustrates how the role playing exercises led to helping the athletes understand and actually practice expressing their thoughts in a constructive manner. The three athletes confirmed the benefits of the workshop. For example, one of the athletes said:

Je pense que notre entraîneur nous a beaucoup aidé. Il nous a fait faire des formations en communication et en management de groupe. Il a appris beaucoup, avec des gens qui donnent des cours dans les entreprises et tout ça. C'était très particulier à notre catégorie parce qu'on était trois bateaux très forts avec des caractères complètement différents et il fallait arriver à trouver le juste milieu, et donc maintenant c'est parfait. (A4)

A second athlete elaborated:

On a fait un super exercice au début du stage où on devait classer des choses par ordre d'importance pour survivre dans le désert. D'abord on avait fait l'exercice chacun de notre côté et après, on l'a refait en groupe, et on a eu une super note tous ensemble. Ça nous prouvait qu'il valait mieux travailler ensemble que chacun dans notre sens. Et par conséquent, ça nous a vraiment appris à travailler ensemble. (A5)

The third athlete reflected on how the workshop helped them to understand the importance of maintaining a professional relationship with their rival training partners:

Par exemple, il nous a fait faire un mini-stage avec un coach d'entreprise où on a tous pris conscience qu'il fallait qu'on bosse ensemble d'une manière professionnelle. Pour regarder ce temps de naviguer ensemble, de ne pas se servir de l'ironie et juste des relations professionnelles. (A6)

Equity and confidentiality

The second sub-theme that surfaced from the interviews was the coaches' use of rules to maintain athlete equity and confidentiality. The coaches spoke about how they implemented

clear team rules to guide athlete behavior and how they felt that it was a crucial component to preserving a healthy and collaborative training environment within such a competitive climate.

As one coach said:

J'orientais mon discours pour éviter d'être dans la camaraderie. C'était vraiment orienté sur le côté entraînement professionnel où il y avait des relations professionnelles qui devaient être saines et qui devaient être constructives pour que tout le monde respecte les règles du jeu. S'il n'y avait pas le respect des règles du jeu il y avait toujours un petit recadrage individuel et puis une explication calme. (C1)

Interestingly, all four coaches spoke of the importance of ensuring an equitable and fair coaching environment and yet each of the coaches spoke slightly differently about what they meant by being fair and equitable. One coach spoke of the importance of not favouring athletes, in order to maintain positive relationships among all the athletes on the team:

Équité! Je pense que le point clef pour moi et ces athlètes, c'est d'avoir un fonctionnement qui soit très équitable. Donc pas de favoritisme envers l'un ou l'autre, de façon à conserver une bonne ambiance de travail entre eux et moi, mais surtout entre eux. Donc ça, c'est un premier point. (C4)

A second coach agreed with the concept of equity in the coaching environment but reported that in reality his job was to provide each of the athletes with what they needed. He did this by determining the individual needs of each athlete through consultation with each athlete.

Specifically he said:

J'ai été très vigilant pour faire quelque chose en terme de temps consacré à chacun. En fait je souhaitais répondre aux besoins particuliers de chacun, qui était déterminés à l'avance. En conséquence, mes réponses aux besoins étaient différentes, et le temps consacré à chacun

était différent mais c'était lié à leurs besoins qui étaient définis en collaboration avec eux. Et c'était entendu au départ de sorte que je pouvais très bien passer beaucoup plus de temps à la vidéo avec Eric qu'avec Thomas ou Martin. Et ça ce n'était pas un problème parce que Thomas il avait ce dont il avait besoin, et Eric avait aussi ce dont avait besoin. Par la suite, je pouvais passer beaucoup plus de temps à discuter avec Thomas de son bateau et moins avec Eric. Donc du coup, il n'y avait pas un équilibrage du temps, mais je pouvais vraiment faire en sorte que chacun puisse avoir ce dont il avait besoin pour progresser. (C1)

A third coach echoed the importance of being egalitarian but from his perspective, clarified that the time spent with each athlete was not always the same, because each athlete's needs were different. He felt it was the coach's responsibility to make the athletes understand that different amounts of time spent with athletes was not indicative of special treatment:

Il faut toujours rester égalitaire. Par exemple, peut-être, je n'ai pas besoin de passer beaucoup de temps avec un athlète mais avec un autre athlète il faut peut-être passer plus de temps. Le temps, il faut leur faire rendre compte que le temps en soi n'est pas une source d'intérêt supérieur. (C3)

Finally the fourth coach spoke of the importance of giving the athletes what they needed but he ended by saying that he is not egalitarian:

Quand tu es entraîneur élite, ton but est d'essayer d'apporter à l'athlète ce dont il a besoin, ça peut être du temps, ça peut être des moyens financiers, ça peut être n'importe quoi, peu importe, mais pour s'entraîner je ne vais pas faire un footing avec un athlète s'il a besoin de discuter ou passer du temps. Pour moi, ce que je refuse, c'est de faire la même chose avec tout le monde. Il y a des coachs qui disent le contraire, qu'il faut faire avec tout le monde la

même chose. Moi, je ne suis pas là-dedans, mais c'est vrai que ça peut provoquer des conflits plus que quelqu'un qui est égalitaire. Moi je ne suis pas égalitaire. (C2)

In addition to equity and a sense of fairness, coach-athlete confidentiality was an important team rule developed by the coaches. Given that the national coaches worked both individually and collectively with rival competitors the concept of athlete-coach confidentiality was a crucial component of their effectiveness as leader-coaches of the team. As an example, one of the coaches emphasized the importance of not sharing one athlete's racing strategies with another athlete:

Je commence avec celui qui est le moins bien classé et je termine avec celui qui est le mieux classé, en respectant leurs secrets, c'est-à-dire que les informations qu'un athlète va me donner sur son projet de navigation, soit sa stratégie de figure, inversion, directe, ce sont des informations que je conserve pour moi, que je ne transmets pas aux autres. (C4)

Another coach echoed this practice: "Oui, c'est chacun ses objectifs, là-dessus je ne partage pas quoi, c'est comme pour les options de courses, je n'en parle pas" (C2).

An interesting revelation that emerged from the discussion of coach-athlete confidentiality was the coaches' comments on regularly needing to reflect on and decide what information they would share and what information they wouldn't share. For example one coach said:

Alors, ce qui a été défini à la base, c'est que je ne divulgue pas les choix stratégiques de chacun, sauf s'ils étaient d'accord. En général, je n'en avais pas besoin, donc ce qui était clair et affiché, c'était que tout ce qui était dit et discuté dans les entretiens individuels, à la vidéo, n'était pas divulgué aux autres. C'était une règle appliquée. Et ensuite, c'est moi qui étais décideur et je décidais ce que je pouvais apporter au groupe. Obligatoirement, il y avait

des choses qui ressortaient de l'un dont je me servais pour les autres. Mais pour moi c'est tout l'intérêt du groupe qui comptait, mais ce n'était pas discuter à chaque fois, et c'était moi qui était maître du jeu sur ce plan là, et c'était pas discutable. En sachant qu'à la base, tout ce qui était vraiment privé ou qui pouvait être stratégique je le divulguais pas. (C1)

The athletes were aware of this rule and trusted the coaches not to share specific and personal tactical information or racing strategies which might help their teammates. For example, one of the athletes explained:

Il y a une part des informations qui sont confidentielles, c'est-à-dire que l'entraîneur, je pense, ne révèle pas. C'est-à-dire que si, lors d'une compétition, je décide de faire une marche avant, ou une marche arrière dans une porte, l'entraîneur ne va pas le dire aux autres. En revanche, une fois que la course est passée, là l'entraîneur va commenter: "ton copain en équipe de France a fait cela et il a été plus vite" ou alors "il n'a pas été plus vite". Là, oui, l'entraîneur me dit ce qu'ont fait les autres et c'est ça qui est le plus intéressant. (A1)

Effective coach management skills

It became clear from the interviews that the coaches possessed highly effective management, organizational, and decision-making skills. Examples such as rooming assignments, allocating certain athletes to rental vehicles, as well as clear communication skills, surfaced from the interviews. One athlete reported that the coaches always decided upon the rooming assignments when the team was travelling. "Ce sont les entraîneurs qui décident, ce ne sont pas les athlètes qui décident" (A3). The following quote illustrates the importance the coaches placed on maintaining a team approach even before the biggest competition of the year. Two teammates who were competing against one another at the 2004 Olympics were assigned to

share a room in the Olympic village in the training period prior to the competition. The coach felt strongly that it was part of maintaining that collaborative environment:

Même aux Jeux Olympiques, ils ont habité dans la même chambre durant une partie de la préparation: je ne le souhaitais pas jusqu' à la fin, mais ils ont fait chambre commune, une partie, au village Olympique. Ça c'est passé, alors que deux ans auparavant c'était inconcevable. (C1)

Another example of effective coach management is how the coaches were able to clearly communicate the purpose of each training session to the athletes. Some training sessions were intended to be competitive, while other training sessions had technique as a primary objective. These latter sessions were usually conducted individually. One coach explained:

C'est vrai que c'est un sport individuel, donc ce sont aussi des adversaires, donc bien signer, une fois que les objectifs sont bien définis dans la planification et dans le fonctionnement quotidien, les séances où on a la confrontation. Et là l'objectif c'est comme en course, c'est d'être meilleur que les autres, mais c'est une confrontation saine organisée entre les Français. (C3)

Managing jealousy

In this sub-theme two of the coaches spoke of how jealousy had the potential to have a negative impact on maintaining the collaborative team environment and how they used various strategies to minimize its impact. They felt that the concept of equity and jealousy were very closely related. Both coaches noted that athletes were often jealous of the coaching services other athletes were receiving. One coach identified that jealousy often arose from a lack of communication and a failure to explain the rationale behind decisions. He also added that sometimes his decisions were made on his own, with no discussion with the athletes and

sometimes he would have extensive discussions with the athletes. This coach also made an important association between jealousy and the athletes' perception of the amount of energy and time he spent with each athlete. As we saw under the theme of equity and confidentiality, these two coaches felt it was important to give each athlete what they needed in order to reduce the potential of jealousy between athletes. As one of the coaches said:

La jalousie, pour moi c'est un manque d'anticipation et d'explication. Et donc ça prend beaucoup d'explications sur ce qui va être fait, ce qui est programmé, pourquoi, et les raisons pour lesquelles les décisions sont prises par l'entraîneur. Et avec des fois la possibilité de discuter et des fois non. Pour moi, c'est le sens relationnel qui est le plus important et qui est relié à bien anticiper, bien sentir les problèmes qui peuvent arriver et ne pas les laisser mûrir et finalement éclater. Si on les prend à la source, si on sent qu'il y a des petites tensions dès le départ, très vite ça, ça peut être atténué. Et puis après, la jalousie c'est quand même orientée sur l'équilibre des forces et de l'énergie déployée auprès de chacun.

(C1)

The other coach spoke of the importance of reminding the athletes of their performance objectives to help them understand that they did not need to be jealous of what the other athletes are getting from a coach:

Comment je gère les jalousies entre les athlètes? Je les ramène toujours à l'objectif. On est là, c'est quoi ton objectif, qu'est-ce que tu veux faire? Et une fois que tu as fais ça, tu arrives aux besoins de chacun. Et puis après les athletes se rendent compte qu'ils n'ont pas forcément besoin de ce qu'a l'autre. (C2)

The athletes' perspective on jealousy is also important to consider. Five of the six athletes spoke of it and interestingly one athlete shared the coaches' perspective that athletes were jealous

of the time and energy the coaches invested in other athletes. “Il trouvait que Cyril passait trop de temps avec l’entraîneur, et que l’entraîneur accordait trop de temps à Cyril par rapport à lui.”

(A3) Another athlete spoke of how he used jealousy as a source of motivation: “Je pense que la jalousie est la frustration, elle permet de se motiver” (A1).

One athlete spoke of how, at one point in time, he was jealous of a teammate’s results but as he matured he learned how to manage those emotions:

Moi personnellement, je pense avoir été un petit peu jaloux des résultats assez fulgurants de Thomas et de Eric. Jaloux parce que j’étais jeune, et puis je me ne rendais pas compte que la performance, c’est moi qui la faisais. A partir du moment où je me suis rendu compte que la performance, c’est moi qui la faisais, que l’autre soit premier ou devant moi ça n’avait plus d’importance. (A6)

Managing conflict

The fourth sub-theme under coach leadership that developed from the analysis of the interviews was how the coaches managed conflict. All four of the coaches spoke of dealing with conflicts between athletes but they also reported that, for the most part, the conflicts were usually minor and were easily resolved with meetings and open communication. One of the more common conflicts was related to timing and scheduling issues:

Je n’ai pas affronté de gros conflits. C’étaient des petits déraillements par rapport à des retards ou à des horaires de séances non respectés. Donc c’étaient des broutilles mais qui dégénèrent vite, elles étaient liées aussi à des séances prévues et finalement qui n’étaient pas réalisées par un ou deux athlètes, mais on ne peut pas parler de conflits. C’étaient des déraillements, et j’ai pas de souvenir de conflits majeurs. (C1)

One coach spoke of the importance of not taking sides during an athlete conflict. “Donc quand il y a des conflits je resserre les gents sur les règles de fonctionnement et ensuite je ne prends pas parti moi” (C4). Sometimes the coaches would also moderate meetings to help athletes solve a problem and sometimes the athletes would be able to solve a conflict independently.

Nevertheless, one coach explained how he tried to remind unwilling athletes of the importance of working together in times of conflict but that in the end, as coaches, they could not force the athletes to get along:

On essaye de leur rappeler que c’est de leur intérêt. Et puis après, à part ça, même si on oblige, on ne peut pas faire bouger quelqu’un à fond. On peut dire qu’on progresse ensemble, mais si la personne ne se livre pas à fond, notre rôle c’est plutôt de toujours remettre en perspective pourquoi on fait ça, ne pas en faire une obligation stricte, parce que même si on le tente, ça ne marche pas. (C3)

Individualizing training within the team environment

The sixth sub-theme, individualizing training, is closely related to the earlier sub-theme of managing jealousy. Each of the coaches of this team spoke of the importance of maintaining an individual coaching relationship with each of their athletes in order to preserve a sense of trust. For example, one coach spoke of how he always conducted video analysis of training and competitions on an individual basis with each athlete: “C’est toujours individuel, pratiquement 90% individuel. Je me sers beaucoup des séances de vidéo pour aussi aborder d’autres points. Je voulais préserver la confidentialité et puis le côté singulier et individuel” (C1). The same coach explained how prior to 2004 he was able to convince the kayak athletes to train together through a careful balancing of the individual and the group needs: “C’est moi qui ai eu la volonté de faire

en sorte qu'ils travaillent ensemble, en ménageant quand même beaucoup de temps où ils étaient tout seuls. Parce que ça me semblait important!" (C1).

A second coach echoed the importance of maintaining an individual aspect to coaching within a team environment and added the importance of communicating what is individual coaching and what is group coaching: "Il faut organiser le temps collectif et individuel aussi. On ne peut pas faire tout collectivement parce que ça serait trop compliqué à gérer. Donc, il faut bien mettre en place sur le programme ce qui est collectif et individuel" (C3). A third coach echoed these sentiments and spoke of the importance the athletes placed on their individual needs:

Ils gardent toujours à l'esprit la préparation individuelle, les besoins individuels. Ce qui les motive le plus, au fond, ce sont leurs besoins individuels, mais ils réussissent quand même dans le groupe à développer et à trouver des solutions individuelles, donc ils utilisent le groupe. (C4)

One of the athletes reflected how he felt each athlete received individual attention despite training within the team environment:

On a été bons là-dessus parce que jusqu'au bout on a navigué ensemble et il y a eu beaucoup d'émulation. Sans qu'il n'y ait, à aucun moment, quelqu'un qui ne se retrouve pas dans le groupe. Tout le monde a pu trouver ce qu'il venait chercher. (A6)

Understanding of the competitive environment

The final sub-theme under coach leadership was an awareness, on the part of the coaches, concerning the amount of competition that was optimal within the training environment. The coaches understood the potential for burnout as a result of the day-to-day rivalry between the athletes. One of the coaches said:

En kayak homme, tu as dix bateaux sur les piges de sélection française, et dix bateaux qui peuvent se sélectionner. Et si toute l'année tu es toujours en concurrence, c'est trop. Je prends le cas de Cyril par exemple, qui a fait les piges Olympiques en 1996, 2000, 2004, 2008. Ça fait quand même quatre fois qu'il fait partie des sélections Olympiques, donc si toute l'année tu lui mets des petits boules qui collent au train, au moment où arrivent les grandes échéances, il n'aura plus d'énergie. (C2)

This same coach felt that burnout among the team's best athletes was likely one of the factors that contributed to the disintegration of the men's kayak training environment following the 2004 Olympics: "C'est-à-dire qu'en fait il y avait aussi un peu d'usure dans ce groupe-là, de toujours être ensemble à se confronter, je pense qu'ils en avaient un peu marre" (C2).

As well a number of the athletes also understood the importance of managing the nature of competition and the potential for burnout. For example, one of the athletes who had a brother on the national team spoke about how they were careful not to allow competition to damage their relationship. This athlete went on to win an Olympic gold medal and his brother, a previous Olympic medallist in 1996, didn't qualify for either the 2000 and 2004 Olympic team:

C'est vrai que notamment à partir de 1999, donc un an avant les Jeux Olympiques de 2000, je pense qu'on a pris un peu de distance parce que c'était une situation particulière: on était frère et on s'entendait bien. On ne voulait pas que la compétition rouille nos rapports et donc, naturellement, on a pris un peu de distance. On a décidé de préparer les courses françaises un petit peu séparés. De pas dormir dans la même chambre la veille d'une compétition pour être sûrs qu'il n'y ait jamais de tension entre nous. Mais le reste de l'année, on s'entraînait quand même souvent ensemble parce qu'on habitait tous les deux à Pau pour quand même entretenir une émulation et nous permettre à tous les deux de

progresser. Et je pense que c'était la bonne décision parce que finalement on a réussi tous les deux à avoir une belle carrière et surtout à ne jamais se disputer ni d'avoir des soucis. (A1)

Fragility of Collaboration

Quand il n'y a qu'une place aux Jeux Olympiques, les athlètes savent que ce sont des adversaires, les autres. Donc c'est là où le rôle du entraîneur est super important, c'est très dur à maintenir l'esprit de collaboration. (C3)

The third theme that developed from the analysis of the coach and athlete interviews was the fragility of that collaborative environment. As this theme shows, while the climate of collaboration was strong for a period of time, it did not take too much for it to erode. To better understand this theme, it is divided into five sub-themes of Olympic rule changes, changes in age and experience of the athletes, coaching changes, athletes training outside of the French national team structure, and competition among coaches.

Olympic rule changes

An important factor that contributed to the shift away from a collaborative culture within this team was the change in Olympic entry rules. In both the 2000 and 2004 Olympic Games, the best nations were able to qualify two entries per discipline. However, the International Olympic Committee changed the rule for the 2008 Olympic Games to allow only one athlete per category per nation in an attempt to increase global participation. Several coaches and athletes spoke of how this rule was a factor that contributed to the collapse of the collaborative environment, because it simply became much harder to collaborate with only one Olympic spot available per category. As one coach said:

Il y a une chose très importante que je n'ai pas dite c'est que j'ai réussi à faire ça pour Athènes parce qu'on a eu la chance d'avoir deux bateaux sélectionnés en kayak homme. Et c'est pour ça que j'ai réussi, à partir de deux bateaux ça, fait une équipe, donc j'ai réussi à "vendre" ça. Mais dans une configuration Olympique avec un seul bateau par catégorie, là, pour moi, c'est extrêmement compliqué. Et je ne saurais pas bien comment arriver à vendre l'affaire lors d'une dernière année Olympique avec des compétitions qui sélectionneraient un seul athlète. Et ça c'est important à souligner quand même, la notion d'équipe et la notion de quota Olympique étaient quand même assez déterminant. (C1)

As the interviews for this study were conducted during the 2007 season, and the Olympic rule change had just been implemented, four of the six athletes spoke of how the change in rules was affecting the team climate in the training leading up to the 2008 Olympic year. For example one athlete said:

L'année prochaine c'est 2008, c'est les Jeux Olympiques de Beijing il y aura qu'une place et c'est sûr que en France nous sommes plusieurs à pouvoir prétendre à aller aux Jeux Olympiques, à faire un bon résultat aux Jeux Olympiques. Et quand il y a qu'une place c'est claire que l'ambiance est un peu différente, s'il y avait trois places ça serait beaucoup plus détendu. (A3)

Another athlete stated that "maintenant comme il y a qu'une place au Jeux Olympiques, tu vois, on travaille plus individuellement. Et je crois que la meilleure façon de pouvoir s'exprimer sur l'eau c'est d'être dans son schema" (A4).

Changes in age and experience of athletes

Another aspect that the national coaches had to take into consideration in order to create an environment of excellence and collaboration was the differing ages of the athletes and the

various levels of national and international experience. As these two aspects changed, so did the coaches' ability to maintain that sense of collaboration in the team as a whole. Two of the coaches spoke about the necessity of modifying the structure of the training environment as the athletes become older and more experienced. One of the coaches explained that what had worked well with the men's kayak team from 2000-2004 did not work as well as the athletes became older, more experienced, and decorated at the world and Olympic level:

Ce que j'ai fait avec les athlètes de la catégorie kayak homme, alors qu'ils avaient vingt ans, je n'aurais pas pu le faire s'ils avaient eu 24 ans ou 25 ans. Et j'aurais pris les choses différemment. C'est pour ça que je m'y prends différemment maintenant avec Cyril. Parce qu'il a besoin de la dynamique du groupe mais avec des athlètes avec lesquels il n'est pas en compétition directe. (C1)

As well, after great success at the 2004 Olympic Games, with one gold medalist in the single canoe category, and gold and bronze medalists in the men's kayak category, two of the coaches left the national program and the new coaches struggled to keep intact the same kind of collaborative training climate. The maturation and success of the three Olympic medalists and the departure of the coach who was instrumental in fostering that productive collaboration resulted in the end of the collaborative environment, at least as it had existed between 2000-2004.

One coach hypothesized that the change to a cross-disciplinary training group approach, once athletes had reached a maturity point in their careers, rather than the traditional disciplinary training group environment, was perhaps a necessary change. "Je pense que passé un certain niveau d'expérience, le groupe reste toujours important mais il faut le construire de façon différente. Je pense qu'il ne faut plus construire le groupe de manière par catégorie" (C1).

One of the coaches, in speaking of the importance of the age and experience of the athletes, cautioned that while younger athletes might thrive in a highly competitive environment, older athletes might experience burnout and fatigue if competition in training was overused:

En fonction de l'évolution de ta carrière tu as plus ou moins besoin de concurrence. Pour un athlète qui a une longue expérience, je pense qu'il en a besoin de la concurrence, mais peut-être moins souvent parce qu'au quotidien c'est usant. Alors que pour les athlètes très jeunes cette concurrence-là elle est super positive, parce que ça les dynamise tous les jours. Alors qu'au bout d'un certain nombre d'années ça amène plutôt des doutes et puis de l'usure et puis, pour les meilleurs athlètes, ils peuvent être usés au moment d'arriver sur les courses internationales. (C2)

Interestingly, the phenomenon of young rival athletes collaborating within the training environment, similar to what the team looked like between 2000-2004, began repeating itself in late 2007 with the emergence of a new generation of young talented athletes who worked well together. One coach reported:

Cette année au pôle de Toulouse, on avait quatre jeunes de moins de 23 ans kayak homme, qui n'ont pas eu besoin de trop direction pour collaborer; il suffisait de leur dire que, "devant les vieux sont très forts et si vous voulez vous améliorer il va falloir collaborer sinon vous n'y arriverez pas individuellement". Ça c'est fait tout seul, puisque les séances qui n'étaient pas encadrées, ils les faisaient souvent ensemble. (C3)

A second coach also spoke of these athletes and noted that they collaborated effectively during training sessions: "chez les jeunes athlètes, c'est trois très bons copains qui s'entraînent beaucoup ensemble et je pense qu'ils s'aident à progresser" (C2). It is interesting to note that two

of the athletes in this training group went on to earn gold and silver medals at World Championships which took place after the conclusion of this study.

Coaching changes

Three of the coaches spoke extensively about how changes within the national organization, such as the departure of veteran coaches and arrival of new coaches, along with a change in coaching roles, led to the disintegration of the collaborative team environment following the team's success at the 2004 Olympic Games. As one coach said: "L'arrivée de nouveaux entraîneurs et d'une nouvelle structure a fait pas mal de brassage pour arriver, en fait, à un fonctionnement de la catégorie kayak homme, au niveau élite, qui a complètement éclaté" (C2). As was discussed previously, in the case of the men's French national slalom canoe and kayak team, changes were made to the structure of the national team program. In 2004, the team switched to a cross-disciplinary coaching structure. These changes gave the athletes more flexibility to work with different coaches and they could go back and forth between coaches depending on their training needs. One coach commented: "Si ça leur va pas, ils peuvent aller voir un autre entraîneur" (C3). A second coach explained how the coaching changes coupled with ageing and more experienced athletes made it difficult to maintain the collaborative training environment they had worked so hard to build in the 2000-2004 period. He said:

Suite à 2004, il y a eu la volonté de conserver l'esprit de collaboration par d'autres entraîneurs mais je pense que c'était plus bon. C'est-à-dire que les athlètes avaient passé l'expérience, ils étaient passés à autre chose. (C1)

Athletes training outside of the French national team structure

A fourth sub-theme under the fragility of collaboration was that three of the six athletes actively chose to conduct a portion of their training either alone or outside of the national team training program for periods of time. For example, one of the coaches spoke of how one athlete moved to Paris to pursue his academic studies while another athlete had always maintained a level of individual training that made it challenging to maintain the training cohesiveness of the group:

Ils sont tous partis un peu dans leurs directions. Eric, il est parti sur Paris pour ses études. Martin, il est resté sur Pau. Thomas, il a toujours eu un fonctionnement très autonome. Et puis il y avait moins de volonté de se retrouver et plus de volonté de fonctionner plus autonome. (C2)

A number of the athletes spoke about their underlying desire to sometimes train alone. This illustrates the difficulty in trying to maintain a collaborative training environment in individual sport for any length of time. For example one of the athletes spoke of how he often liked to train alone so that he could focus on his own personal objectives:

Ce qu'il faut savoir c'est que quand j'étais sur Toulouse, il y avait beaucoup de kayak hommes, donc beaucoup de concurrence mais j'aimais aussi beaucoup m'entraîner tout seul, parce que j'allais à mon rythme, je cherchais des sensations et de la précision sur l'eau. Et quand tu es tout le temps en concurrence, c'est très très dur d'être concentré sur ce que tu dois faire. (A4)

Another aspect of this sub-theme was how some athletes choose to train with athletes from outside of France rather than training with their teammates. There was one example of an athlete from the French national team who was training with athletes from other nations and it is

worth noting because of the detrimental impact it had on the French team's training environment.

One of the athletes commented on the consequences of this action:

C'est un peu ce qu'on a déjà vu dans la catégorie kayak homme, des athlètes qui sont un peu partis du groupe. Tout de suite c'est beaucoup plus difficile après, pour les kayaks hommes, d'être forts parce que le système n'est pas fait pour ça, le système français est fait pour que les athlètes soient ensemble, pas forcément pour qu'ils soient copains, mais pour qu'ils soient adversaires et qu'ils s'entraînent ensemble. (A1)

Competition among coaches

The fifth and final sub-theme under fragility of competition that arose from the interviews was the notion of competition among coaches. Two of the athletes in this study spoke of how a few of the coaches were competitive with one another and were actively seeking selection to the coaching staff for an Olympic Games. For example one athlete stated that, "Il y a des entraîneurs qui n'aiment pas trop les autres entraîneurs. En plus il n'y a que deux entraîneurs qui vont aller aux Jeux Olympiques, donc c'est peut-être aussi une compétition entre eux" (A3). The second athlete commented: "Certains, pas tous, mais certains entraîneurs cherchent déjà à écraser d'autres entraîneurs pour gagner plus de notoriété. Je trouve que dès que ça fonctionne mal entre les entraîneurs, ça fonctionne moins bien entre les athlètes" (A5). None of the coaches spoke of competition among the coaches.

CHAPTER IV: DISCUSSION AND CONCLUSION

In the review of literature, it was noted that the vast majority of the research on group cohesion pertains almost exclusively to team sports, such as volleyball, soccer, rugby, cricket, baseball, and football. There has been very little research, to date, exploring group cohesion within the context of sports of an individual nature, such as athletics or swimming. The purpose of the present study was to investigate the environment of a highly successful individual sport team. The case chosen to explore this phenomenon was that of the French male national whitewater slalom canoe and kayak team. Specifically, the main research question was: how did the athletes and coaches of the French male national whitewater slalom canoe and kayak team function to create world-class results? For the purpose of this study, Carron et al.'s (2005) framework of group cohesion, Nicholls' (1984, 1989) and Ames' (1992) work in goal orientation and motivational climate, and Yukelson's (1997) work in team building, have been used to inform the research.

The French male national whitewater slalom canoe and kayak team was comprised of a number of talented athletes with an impressive record of excellent international results. The six athletes who were interviewed for this study spoke of the respect they had for each other as athletes, and of their own personal drive to be the best in the world. Both the athletes and the coaches in the study recognized the strength and depth of their program, spoke of how fortunate they were to be part of this group of both talented and determined athletes, and acknowledged how the financial resources provided to the team, and national training centres contributed to a productive training and competitive environment.

A considerable amount of research has investigated effective coach behaviors, athlete-coach relationships, and the leadership qualities of great coaches, such as the research of

Bloom and Salmela (2000), Jones, Armour, and Potrac (2004), Jowett and Cockerill (2003), and Vallée and Bloom (2005) to name but a few. These studies have found that coaches who develop effective relationships with their athletes and create a successful team, display an ability to lead effectively, develop trust, individualize athlete training, and have a clear vision for how the team or group of athletes should function. It is perhaps not surprising therefore, that one of the major findings from this study indicated that it was the leadership of the coaches that created a collaborative and productive training environment for these talented athletes, which in turn produced excellent international results. The four coaches of this team recognized that, if a number of athletes were to have a chance to be successful at the international level of slalom canoeing and kayaking, they needed to find a way for the athletes to work together, to learn from each other about skills and tactics, and to push each other in training sessions. The coaches emphasized that they knew it was not possible for rival teammates to be best friends, so their goal was not to force them to do so, but rather to create and maintain an environment where all the athletes could strive for excellence and benefit from the strengths of the individual members of the team. Certainly one of the major strengths of this team was the depth of world-class athletes. The coaches understood that, and the athletes themselves knew that when they posted the fastest time in training it meant that they were capable of being one of the best in the world.

When asked how this collaborative environment was achieved, the coaches offered a variety of answers. One coach responded: “C’est moi qui ai eu la volonté de faire en sorte qu’ils travaillent ensemble, en ménageant quand même beaucoup de temps où ils étaient tout seuls. Parce que ça me semblait important!” As we see in this quote, the coaches understood the necessity of ensuring a balance between group and individualized training. They knew that because the sport of slalom canoe kayak was an individual sport, overuse of the competitive

training climate would become detrimental. They were very aware that each of their elite athletes required individual attention and knew that it was this attention that built the trust necessary, between coach and athlete, for great performances. One coach responded: “Ils gardent toujours à l’esprit la préparation individuelle, les besoins individuels. Ce qui les motivent le plus, au fond, ce sont leurs besoins individuelles.” The understanding of this complex combination of group and individualized support is congruent with other literature on the practices of good coaches (Becker, 2009; Rhind & Jowett, 2010). Becker (2009) explored the coaching practices of great coaches and found one on one communication to be an integral aspect of good coaching and making athletes feel comfortable within the training environment. Rhind and Jowett (2010) used the term support, within their conceptual model of coach-athlete relationship maintenance, to refer to this individualized attention.

The coaches also knew how to structure particular training sessions in relationship to the specific objectives for a particular athlete, or the group. For example, if the coach wanted the athletes to focus on refining a specific skill they would sometimes choose to run an individual training session or run the session with athletes from a different category to reduce the level of competition. The athletes spoke of the value of this type of training session and also reported that they frequently shared training tips with their training partners from a different category. This finding supports research by Ames (1992) and Newton, Duda and Yin (2000) that has suggested that a mastery motivational climate is essential to the development of cooperation between teammates. However, the coaches in this study would also plan competitive training sessions with rival athletes when they wanted the focus to be on simulating competition. It appears that when this team was most collaborative, in the period leading into the 2004 Olympic Games, the

coaches had struck the right balance between competition-focused and task-focused training sessions.

The coaches also set some very clear rules for the athletes that ensured equity and confidentiality in order to maintain a healthy training environment. Throughout the interviews, the coaches spoke of treating each athlete with a sense of fairness and respect regardless of whether they were world champions or new members of the team. For example, the coaches did not share other athletes' individual race strategies during competitions, and the competition course walk to discuss race strategies was determined by chronological order based on start times of each athlete's race runs, not on who was the better athlete. The athletes commented that this was an important behaviour on the part of the coaches and indicated such actions established a strong sense of respect and trust.

Both Durand-Bush and Salmela (2002) and Greenleaf et al. (2001) reported that jealousy, negative team climate, and poor interaction between teammates were significant sources of tension among athletes and contributed to poor performance results at Olympic Games. The coaches in this study knew the importance of encouraging effective communication among the athletes so the inevitable conflicts and jealousies were managed quickly. As one of the coaches said he always reminded the athletes of their larger purpose when faced with conflicts and jealousies, which was working toward being the best in the world: "Je les ramène toujours à l'objectif. On est là, c'est quoi ton objectif, qu'est-ce que tu veux faire?" (C2)

One of the coaches felt so strongly about communication being a key to fostering collaboration that he brought in an outside expert to help the athletes communicate and work together effectively. This workshop set the groundwork for a collaborative training environment where rival athletes learned to settle differences in a professional manner. Becker (2009) also

noted that creating rules of behavior for athletes allows coaches to successfully maintain a structured team environment where athletes became accountable to themselves and to the team. Yukelson (1997) stated that coaches should play a vital role in establishing open and honest communication processes as they were a core component to successful team building. Moreover, Yukelson also stated that sport teams could increase team performance by implementing lessons learned from group cohesion research that has taken place in the business milieu. It is interesting to note that the communications and team building workshop was facilitated by a communications and business management expert.

In terms of Carron et al.'s (2005) correlates of cohesion, one of his key dimensions influencing group cohesion is leadership, and the results of this study certainly support that component. While Carron and colleagues saw the interrelationship between leaders, athletes and group performance as complex, they state that leaders are most effective when their actions are focused on the task. Certainly the vision and actions of the coach leaders of this slalom team were always on the task of working toward being the best in the world. Other researchers (Kozub, 1993; Westre & Weiss, 1991) found that a decision making style that provides for greater athlete input was associated with greater team cohesion and the coaches of this team were critical to the development of such a productive training and competitive environment. Their comments and thoughts throughout their interviews demonstrated a clear understanding of what was required in leading this group of high performance athletes, and their conflict management and leadership styles were centered on the athletes, involving them in a number of key decisions when appropriate. Indeed, for an extended period of time, the coaches succeeded in creating this effective environment, and as a result, this was a group of athletes who earned one quarter of all

the possible medals in whitewater slalom canoe and kayak at the 2000 and 2004 Olympic Games (Kamber, 2006).

A second key finding that emerged from the analysis of the interviews was how the athletes themselves understood, accepted, and contributed to the collaborative environment that was led by the coaches. This group of high performing athletes trained together and learned from one another through dialogue and observation during training sessions, spending between 100-150 days per year together in various training camps and in competitions. Throughout the interviews, the athletes demonstrated an understanding of the benefits to training with world-class rival competitors and they saw this as a strength of the team. As one athlete said: “J’ai envie de dire que le fait de naviguer ensemble, c’est un moyen de progresser. Je sais que j’ai bénéficié de cela quand j’étais jeune. J’avais la possibilité de regarder comment ils le faisaient et je pense que c’est ça aujourd’hui qui est le mieux.” (A1)

In addition, many of the athletes on the team were actively involved with equipment design and there were some cases where rival athletes worked together in the design process. For example, one of the athletes reported that he helped a rival teammate with refining his boat design prior to the World Championships. The rival teammate went on to become World Champion that same year.

The athletes also reported the benefits of training with athletes from other categories. Specifically, the kayak athletes spoke of the benefits of training with the canoes and vice versa, where they shared specific technical and tactical information when training with athletes with whom they were not in direct competition. This finding offers some support to Botterill’s (2005) suspicion that a task-goal orientated training environment may go a long way towards building positive rivalries in individual sports. The athletes in the present study indicated they felt less

threatened when training with athletes from another category and consequently were more successful at directing their attention to their technical objectives rather than on beating their teammates. It is worth noting that while the athletes spoke of the benefits of training with athletes with whom they were not in direct competition, they also reported that too much of this type of training might lead to a ‘too comfortable’ training environment that may not augment performance.

Another finding of this study with respect to the athletes’ understanding of and contribution towards the collaborative environment was that four of the athletes in this study came from very successful paddling families. A similar family history, as well as a desire, on the part of each of the athletes, to strive to be the best in the world may have also contributed to the cohesiveness of this individual sport team. Carron et al.’s (2005) framework utilizes personal factors as a second correlate of group cohesion. In relation to this study, the relevant personal factors are “similarity in demographic attributes of individual members” and “shared perceptions,” which included a similarity in attitudes, beliefs, and motives (pp. 245-246).

The collaborative team environment, that was created and maintained between 2000-2007, began to unravel in 2007. A number of significant changes, both internal and external to the team, which took place between the 2005 and 2007 time period, challenged the cohesiveness and collaborative nature of their training and competitive environment. The change in Olympic eligibility, moving from two entries per category for the top nations to only being allowed one athlete per category was a significant modification to the competitive setting. As a result, the athletes became very aware that the better their training partners became the less chance they might have to make the Olympic team. This drastically affected the coaches’ ability to persuade the athletes to work in collaboration.

As we saw in the review of literature, Carron et al. (2005) states that in team sports, in order to perform at a high level, athletes must be united in the pursuit of a common team objective. In contrast, individual sport athletes do not often share a common goal. However, in this case study, the French athletes were, for a time, able to share a common goal, in that there were two entries possible per category in the 2004 Olympic Games and qualification of those entries was done by nation. As was explained previously, Olympic qualification for whitewater canoeing is based on athletes' performances at the World Championships. However, Olympic qualification is not awarded directly to the athlete but rather to the qualifying athletes' national team (International Canoe Federation, 2006). This means that an athlete may successfully qualify an Olympic position at the World Championships, but the position will be awarded to the athletes' country and not to the specific athlete. Therefore, at the 2007 World Championships it was in every teammate's best interest to support one another in an effort to earn Olympic nominations for their team. However, as soon as the French national team had earned its Olympic nominations in each category, it was no longer possible for the athletes to share this common goal, given the Olympic rule change to only one entry per category. One of the coaches who had worked with the French Olympic team in 2004 made the following comment regarding the situation in 2008: "Mais dans une configuration Olympique avec un seul bateau par catégorie, c'est extrêmement compliqué. Et je ne saurais pas bien comment arriver à vendre l'affaire lors d'une dernière année Olympique avec des compétitions qui sélectionneraient un seul athlète." (C1)

Surprisingly, a very similar situation occurred in U.S. swimming (Naber, 2006). In 1976, U.S. Olympic swimming coach, Jim "Doc" Councilman, challenged his team to a collective goal of bringing back more medals than any other country. In doing so, the coach created an

environment where the athletes in an individual sport shared a mutual goal. However, the U.S. swimmers did so well at that 1976 Olympics that the international sport governing body decided to limit each country to only two competitors per swimming event in future Olympic Games. So we have a similar example of two different individual sports, years apart, creating collaborative environments for a period of time, but unable to maintain that environment due to Olympic rule changes. In the present case study that singular change drastically reduced the coaches' ability to maintain the collaborative environment.

Another major change that contributed to the demise of collaboration was in the athletes themselves. They had evolved personally and athletically from a group of young and inexperienced athletes to world leaders in their respective categories. In 2007, at the time of the interviews, the team was comprised of seasoned veterans, many of whom had earned medals at one or more European Championships, World Championships, and Olympic Games. The coaches commented that this depth of experience and success negatively impacted the athletes' willingness to collaborate with their rival training partners. In one case, an athlete felt he no longer needed the group, for others it was a need to be at home for longer periods of time while pursuing a university education, and for yet another it was an unwillingness to continue to share their expertise. As well, a few athletes began to seek training partnerships outside of the French national team structure, which could be linked to the concept of mastery versus performance goal oriented climates. It is possible that after considerable international success a number of the best athletes wanted to seek high quality training partners outside of the team so that they could focus on skill mastery rather than always having to beat their rival teammates. To some extent, this finding is analogous to when the athletes spoke of the benefits of training with teammates in

different categories. In both situations the athletes benefited from a mastery-oriented training climate; however, in this case some athletes went outside the team for that training environment.

In considering Carron's framework for examining sports groups, team success is a correlate of cohesion. Carron et al. (2005) wrote: "traditionally, one of the most heavily debated issues associated with the study of cohesion has been its relationship to team success" (p. 256). One conclusion that could be made from the present study is that the athletes' individual successes following the 2004 Olympics, at least in part, lead to the collapse of the collaborative environment.

At the same time, it is important to note that, at the time of the interviews, two of the key veteran coaches, following the team's success at the 2004 Olympic Games, left the team. The departure of these two coaches also contributed to the demise of the collaborative environment. Certainly, Culver et al. (2009) found that when a key leader leaves a program it is often difficult to maintain the same level of collaboration. A second reason this departure is important to note is that, in the course of the interview, one of these coaches spoke about his new responsibilities with the under 23 athletes and how he was beginning to re-create a collaborative and productive training environment with these younger and less experienced athletes. This would appear to support one of the coaches' statements that it is easier to create a collaborative environment among rival competitors when athletes are less experienced while more mature and successful athletes appear to benefit from spending more time training with athletes with whom they are not in direct competition. There is certainly a need for more research on this topic.

In summary, the effective leadership skills of the coaches, as well as their technical coaching expertise, and the willingness of the talented and driven athletes to work together contributed to a collaborative team environment for this team. Then a change in the Olympic

entry rule, the departure of an influential coach, and a change in the athletes themselves all combined to erode the foundations of a productive and collaborative training and competitive environment. This movement illustrates the dynamic nature of creating and maintaining a collaborative environment for high performance athletes in a competitive, individual sport environment.

Conclusion

The purpose of the present study was to investigate how the coaches and athletes of the male French national whitewater slalom canoe and kayak team worked together in training and competition within a highly competitive environment. Three themes, each containing numerous sub-themes, emerged from the analysis. The first theme, the nature of collaboration within the team environment, describes the sense of collaboration that was created within this team despite the fact that the athletes, at least within their respective category of canoe or kayak, competed against each other in competition. The second theme, coach leadership, catalogs how the coaches displayed excellent leadership skills and managed their athletes' individual needs while building a collaborative team environment. The third theme, fragility of collaboration, reveals the dynamic aspect of cohesiveness and how a few changes can lead to the collapse of a carefully crafted collaborative environment.

In this case study, coach leadership played a significant role in creating a collaborative environment within a highly competitive individual sport team. The coaches spoke of equity and confidentiality as a means to maintain a sense of trust among athletes. A team workshop on effective communication enabled athletes to learn how to communicate with each other in a professional and productive manner. Secondly, the athletes, at least for a period of time, were very much a part of this process, willing to work together in their pursuit of high performance

results. Rival competitors trained together and learned from each other, and some athletes even reported that their best training partners were in fact their rival competitors. And yet this collaboration did not last forever, as a combination of external and internal factors conspired to erode the foundations of a productive and collaborative training and competitive environment.

In terms of future research, there are a number of recommendations that can be made. First, the participants in this study were male and it would be worthwhile to explore how collaboration might be fostered in a female individual sport team. Second, the athletes and coaches in this study spoke extensively about learning from video footage. This is not a surprising finding but there is certainly a need for more research into how high performance athletes and coaches learn and debrief using video of training runs and competitions. Third, the athletes in this study did not always live in a centralized location and it would be useful to investigate the ideal amount of time that athletes in individual sports should spend training together. Fourth, the coaches in this study, at least for a significant period of time, seemed to strike the correct balance between individualized training within the group environment. Future research should try to determine what that ‘balance’ should look like and how it might change throughout an athlete’s career. Finally, four of the six athlete participants came from families with a competitive paddling background and it would be worthwhile to investigate further how this influences athletes’ success in sport.

Limitations

The present study was not without limitations. The first limitation is the retrospective nature of the interviews. The athletes and coaches may not have accurately recalled all the events of the eight year time period. A second limitation is that the athletes were only interviewed once, partially due to the geographical restrictions associated with the cost of international travel

combined with a hectic world-wide training and competitive schedule. A second interview might have increased the depth of reflection about past events and actions. A third limitation from this study is that the present case study only involved one sport team and thus the findings should not be generalized in the conventional sense. By definition, case studies can make no claims to be typical, however it is suggested that this case helps us better understand how to build collaboration within an individual sport team.

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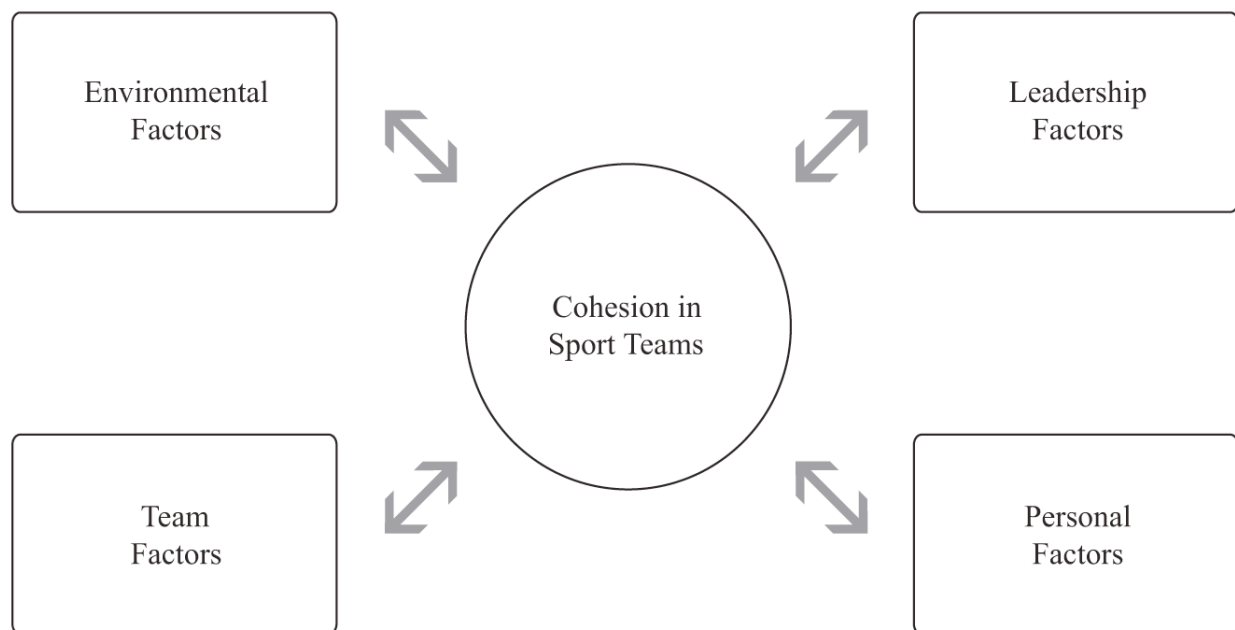
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APPENDIX A

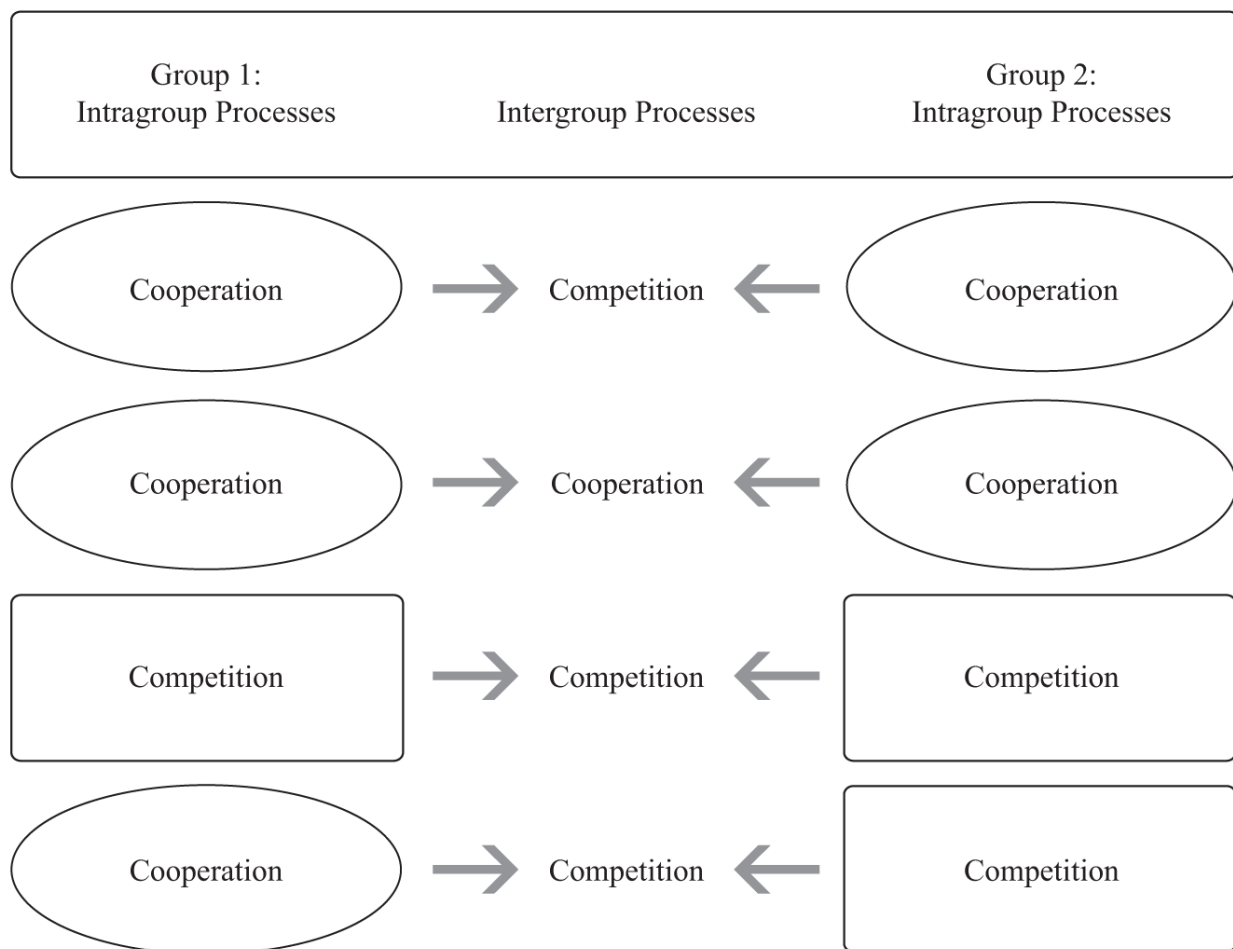
A General Framework for Examining the Correlates of Cohesion in Sport Groups



(Carron, Hausenblas & Eys, 2005, p. 242)

APPENDIX B

Intragroup and Intergroup Processes



(Carron, Hausenblas, & Eys, 2005, p. 280)

APPENDIX C

Coach Interview Guide

Background Questions

1. How long have you been coaching canoeing and kayaking?
2. How many years have you been employed as a French national team coach?
3. What is the average number of weeks per year the French team athletes spend competing or training in a group environment?

Main Questions

4. Tell me about how your team works/functions?
 - How do you manage your athletes as a team, when they compete against each other?
 - Is it different during the competitive season versus the off-season?
 - Do your athletes work together to help each other improve? Probe for specific examples.
 - What conflicts have you faced?
 - What do you do when athletes do not work well together?
5. Can you tell me about one of the best athlete partnerships?
 - What role did you play in facilitating this? Probe for specific examples.
 - What works, what does not?
 - How do you manage jealousies, conflict?

Closure

6. Is there anything else that you would like to add or is there something that you feel I should have asked you?

APPENDIX D

Athlete Interview Guide

Background Questions

1. How long have you been involved in competitive canoeing and kayaking?
2. How many years have you been a member of the French national team?
3. Tell me about your highlights in your athletic career?
4. Who are your main training partners?

Main Questions

5. Tell me about how your team functions/works?
 - Can you describe to me how you work with your teammates during the competitive season, during the off-season?
 - Do you help your teammates to improve?
 - Do you provide technical guidance to a teammate?
 - Do you have any conflict/rivalries with your teammates? How do you deal with it? Does your coach help?
 - Describe to me how you react when a teammate beats you in training or competition?
 - What do you do when you don't work well with a teammate?
 - Can you describe one of your best training partnerships?
6. Does the team always work well together?
 - What goes wrong?
 - What goes right?
 - How do you manage jealousies with teammates?
 - How do you manage conflict with teammates?

Closure

7. Is there anything else that you would like to add or is there something that you feel I should have asked you about?