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AGGRESSION IN ELITE WOMEN'S ICE HOCKEY

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ABSTRACT

The purpose of this study was to examine elite women's ice hockey, with particular emphasis on various aspects of aggression associated with the sport. A qualitative research methodology was employed. Participants included 4 coaches and 15 hockey players, from three elite levels of women's hockey. Each coach was interviewed using an in-depth open-ended format. Each athlete participated in a focus group interview. Commonalities emerged from the coach and athlete data, which resulted in the creation of three higher-order themes that were called 1) state of women's hockey, 2) coach and athlete issues, and 3) aggression in women's hockey. The data focused on the lives of those involved with the sport (coaches and athletes) and topics that were unique to women's ice hockey, including aggression. These results advance information concerning women's sport, coaching, and aggression in elite female athletics.

RÉSUMÉ

Le but de cette étude était d'examiner le hockey élite chez les femmes, avec une emphase particulière sur les aspects associés à l'agression dans ce sport. Quatre entraîneurs et 15 joueurs de trois niveaux élités différents ont participé à l'étude. Chaque entraîneur a été interviewé en profondeur avec l'aide de questions ouvertes, tandis que les athlètes ont participé à une session de groupe. Plusieurs éléments communs ont émergé des données collectionnées, suivant lesquelles trois catégories ont été créées, soit 1) l'état du hockey féminin, 2) les exigences du sport chez les entraîneurs et les athlètes, et 3) l'agressivité dans le hockey féminin. La collection de données portait sur la vie des entraîneurs et athlètes impliqués dans le sport, ainsi que sur des sujets uniques concernant le hockey féminin, dont l'agression dans le sport. Les résultats de cette recherche offrent de l'information concernant le sport féminin, la fonction et le travail des entraîneurs, ainsi que l'agression chez les athlètes élités féminins.

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CHAPTER 1

INTRODUCTION

The game of ice hockey is a large part of North American culture and involves people of all ages and socio-economic backgrounds. Players, coaches, referees, officials, parents, sponsors, and many others are deeply interested in the continuance in popularity of the sport. Hockey is an important part of many youngsters' extra-curricular activities. For some, their lives actually revolve around the season and all that encompasses it. But along with all the fun and healthy competition comes a rising amount of violence associated with the sport. In particular, two reports (McMurtry, 1974; Néron, 1977) have documented the causes and severity of violence in ice hockey.

Following a particularly violent hockey game between Hamilton and Bramalea in the Ontario Hockey League, the Minister of Community and Social Services appointed Roy McMurtry to investigate hockey violence in Ontario. In this particular game, played in April 1974, 189 penalty minutes were assessed. Injuries were received by five of the players and one team official as a direct result of the fighting and brawling. Seven hundred and fifty fans became violent and by the end of the second period many of them were out of control (McMurtry, 1974). At one time, 14 police officers were present at the arena (McMurtry, 1974).

After completing his investigation, McMurtry (1974) outlined seven causes of violence in amateur hockey. These consisted of: the influence of professional hockey (National Hockey League); an unacceptable rule structure; a lack of an appropriate definition of the purpose and objectives of amateur hockey including a model and rule structure; inconsistent referees; inadequate coaching behaviours; lack of respect of players for rules and officials; and finally, undue pressure from parents, coaches, and fans

to win at all costs. McMurtry also proposed some recommendations to help decrease hockey violence, including a definition of the objectives and purpose of amateur hockey; an established procedure whereby coaches are held responsible for the conduct of their players; expanded referee's programs and certification clinics; and efforts made to educate fans and parents as to the purpose and objectives of amateur hockey. It is interesting to note that no follow up investigation regarding McMurtry's recommendations was ever carried out.

The Quebec Hockey Association and many of its parents also wanted answers as to why there was an alarming amount of violence in amateur hockey in their province. It was decided that too many children were getting hurt and a report was requested. In response to the public's request, Gilles Néron (1977) presented the "Rapport final du Comité d'étude sur la violence au hockey amateur au Québec". Following discussions with individuals involved with minor hockey, including coaches and referees, it became clear that more had to be done to counter all of the violence that goes unpunished in the hockey system. Néron revealed that coaches welcomed violent behaviour by players in order to win and appreciated the players that were a part of it. Néron also outlined other contributing factors, including the spectator's love of violence, the coach's inability to control some of their players, unqualified referees, coaches acting out and setting a poor example for the young players, and the media's portrayal of the violent nature of NHL hockey.

In addition to these inquiries, research interests have reflected this increased exposure of violence and aggression in men's ice hockey. Topics of examination have included the causes (Gaumond, Trudel, & Gilbert, 2000; Loughhead & Leith, 2001; Trudel, Dionne, & Dany, 1992; Trudel, Guertin, Bernard, Boileau, & Marcotte, 1991;

Vaz, 1972, 1976, 1982), explanations of (Morra & Smith, 1996; Nash & Lerner, 1981; Russell, 1979; Silva, 1981, 1982; Smith, 1975, 1979; Smith, Stuart, Colbenson, & Kronebusch, 2000; Weinstein, Smith, & Wiesenthal, 1995; Widmeyer & Birch, 1979), and potential ramifications of violence (Bloom & Smith, 1996) in this sport.

Information about violence among females in contact sports is scarce (Coakley, 1998). Smith (1983) reviewed research on this topic and concluded that women's participation in contact sports was steadily increasing, and that women in those sports did engage in aggressive behaviours. However, the anecdotal evidence was not detailed enough to allow the author to conclude whether aggression among female athletes was increasing over time, nor was he able to describe the fundamental dynamics of the aggression (Smith, 1983).

With each successive Olympic Games, the athletic opportunities for women have increased, resulting in over three thousand women participating in the 1992 Olympic Games (LeUnes & Nation, 1996). Increased opportunity, the fallout produced by the women's movement, the recent fitness boom, and the presence of female role models have all contributed to sport involvement on the part of women (LeUnes & Nation, 1996). Government legislation demanding equal treatment for women in public programs and increased media coverage of women's sports in North America has also boosted women's involvement in sport (Coakley, 1998). Along with this widespread increase in sport participation, women have shown a growing interest in contact sports.

The success of the Canadian Women's National Hockey Team has also created increased interest in women's hockey in our country. The National Team has won championships in 1990, 1992, 1994, 1997, 1999, 2000 and 2001. Although women's hockey has been around for more than a hundred years, only now is it beginning to

flourish (Williams, 1995). Unprecedented numbers of women across our nation have begun participating in the sport. In the last five years alone, women's participation has risen 200% and there are more than 25, 000 women now participating. In Ontario alone, 700 teams in leagues outside of schools exist, an impressive increase since 1981 when fewer than 200 teams existed.

Due to the increased interest and participation in women's hockey, researchers have begun examining women's involvement in the sport (e.g., Boyd, Trudel, & Donohue, 1997; Fabrizio-Pelak, 2002; Seaborn, Trudel, & Gilbert, 1998; Theberge, 1995a, 1995b, 1997; Williams, 1995). However, there remain many opportunities for further research (Boyd et al., 1997). It is interesting to note that with the large focus on aggression and violence in men's hockey, this topic has not been empirically examined in women's hockey.

Purpose of the Study

The purpose of this study was to examine elite women's ice hockey, with particular emphasis on various aspects of aggression associated with the sport. Female athletes between the ages of 17 to 35 and coaches between the ages of 30 and 50 participated in order to provide information regarding the state of elite women's ice hockey. Using a qualitative methodology, elite coaches and athletes were interviewed to gather data on the topic.

Significance of the Study

The results of the current study help develop a greater understanding of the state of women's ice hockey. This study advances information concerning women's sport, coaching, and aggression in elite female athletics. In addition, this research augments the relatively small amount of literature in women's ice hockey to date.

Definition of Terms

For the purpose of the present study, the following terms have been defined:

Aggression has been defined as any overt verbal or physical acts that are either intended to psychologically or physically injure another living organism (Silva, 1980).

The term hostile aggression is used if the behaviour is performed solely for the purpose of harming an individual and is used as an end rather than a means.

In contrast, instrumental aggression is when an intentionally harmful behaviour is used as a means to an end (Widmeyer, Dorsch, Bray, & McGuire, 2002). The primary reinforcement is a tangible reward, such as praise or victory (Husman & Silva, 1984).

Violence has been defined as a “physical assault based on the total disregard for the well-being of self and others, or the intent to injure another person or destroy property” (Coakley, 1998, p. 180). Violent behaviour refers to acts of extreme physical aggression (Widmeyer, et al., 2002).

Qualitative research seeks to understand the meaning of experiences of the participants in a specific setting and how the components mesh to form a whole (Thomas & Nelson, 2001).

Qualitative interviewing is based in conversation (Kvale, 1996), with an emphasis on the researcher asking questions and listening, and respondents answering (Rubin & Rubin, 1995).

A focus group is a research technique that interviews a small group of people on a specific topic. The group is usually homogeneous, such as a group of students, an athletic team, or a group of teachers (Thomas & Nelson, 2001).

The highest performance level of elite women's ice hockey is the National Olympic Team. This team is assembled for the Olympics and the World Championships. The next

highest level at which a female may participate is the National Women's Hockey League (NWHL). The eight teams in this league consist mostly of the same group of individuals who, in non-world championship and Olympic years, play for the National Team. These players are divided equally amongst the eight teams whose rosters are then rounded out with aspiring young athletes many of whom have graduated from the North American university ranks. One level beneath this league is the Canadian and United States college systems. Many of these top Canadian teams are comparable in talent to the top Division I teams in the United States. Below the University system is the Quebec Cegep league and the Ontario Community Programs, which consist mostly of high school students. These leagues attract players from high school and community minor hockey programs.

Delimitations

For the purpose of the following study, the following delimitations were identified:

1. The coaching participants must be the head coach of a competitive women's ice hockey team.
2. The hockey teams will be from the province of Quebec.
3. The athletic subjects will be limited to female hockey players.

Limitations

For the purpose of this study, the following limitations were identified:

1. It will be assumed that each subject will respond truthfully to the interview and focus group questions.
2. It will be assumed that each subject will recall past events as accurately as possible.
3. It will be assumed that the subjects will be able to provide an accurate description of the state of elite women's ice hockey.

CHAPTER 2

LITERATURE REVIEW

This chapter will consist of five sections. First, the definitions of aggression and violence will be presented. Following this, a section will be devoted to the theoretical basis of aggression and violence: Instinct Theory, Biological/Physiological Theories, the Frustration-Aggression Hypothesis, and Social Learning Theory. The third component of this chapter will explore the causes of aggression and violence in ice hockey. Gender differences in aggression and violence will be the focus of the fourth section. Finally, women in sport will be addressed with particular emphasis on women's aggression and violence in contact sports and women in ice hockey.

Definitions of Aggression and Violence

There are thousands of scholarly articles about violence and aggression and they can be found in journals representing academic disciplines from anatomy to zoology (Smith, 1983). Hundreds of books on the subject exist and have been written in the last few decades. Dozens of theories of violence and aggression also exist, including genetic theories, frustration theories, learning theories, and ecological theories. With such a large amount of information available, it is not surprising that these terms have been defined differently in many of the sources. This section will begin with a definition of aggression, followed by a short discussion of two of the dimensions of aggression. Following this, a definition of violence will be provided.

Social scientists have defined the term aggression as overt verbal or physical acts that are either intended to psychologically or physically injure another living organism (Silva, 1980). There are two types of aggression known in the sport context: hostile (or reactive aggression) and instrumental aggression. The term hostile aggression is used if the

behaviour is performed solely for the purpose of harming an individual, such as when a frustrated hockey player slashes an opponent with his or her stick (Husman & Silva, 1984). This type of behaviour is an end, rather than a means (Widmeyer, Dorsch, Bray, & McGuire, 2002). In contrast, instrumental aggression is when an intentionally harmful behaviour is used as a means to an end (Widmeyer, et al., 2002). An example of this would include putting a vicious hit on a star player to eliminate him or her from a game. The primary reinforcement in this instance is a tangible reward, such as praise or victory (Husman & Silva, 1984). Another term that is sometimes confused with aggressive behaviour is assertive behaviour. This is expressed with no intent to harm another person. Many forceful actions in the sport context are within the rules and usually are not intended to injure an opponent, such as a body check in hockey or a tackle in football (Widmeyer et al., 2002). This behaviour often includes the use of elevated verbal or physical force and is often confused with truly aggressive behaviour (Widmeyer et al., 2002). Silva called this forceful yet acceptable behaviour “proactive assertion.” This forceful behaviour is task oriented and is in line with the rules of the game; however, it does not include intent to injure (Widmeyer et al., 2002).

There are four dimensions of aggression, three of which are related to this study. These include provoked versus unprovoked, physical versus verbal, and adaptive versus maladaptive (Le Unes & Nation, 1996). Provoked actions are those that are generated by the actions of an opponent. An example of this would include someone claiming they were fighting because the other player had hit him/her first. Unprovoked actions are random and are less likely to affect the sport world (Le Unes & Nation, 1996). Physical aggression results in physical contact between players, whereas verbal aggression includes spoken words or statements aimed at perhaps disabling or frustrating the

opponent. Adaptive aggression includes actions that are just a part of the game. In some sports, athletes cannot function without establishing the fact that he or she will not be pushed around (Le Unes & Nation, 1996). However, blatant slashing in hockey or fistfights during a basketball game have no adaptive value and are considered maladaptive.

As mentioned, the terms aggression and violence may be easily confused. Violence may be defined as a “physical assault based on total disregard for the well-being of self and others, or the intent to injure another person or destroy property” (Coakley, 1998, p. 180). Violent behaviour refers to acts of extreme physical aggression (Widmeyer et al., 2002).

Smith (1983) proposed another definition of violence. According to this author, violence was physically assaultive behaviour that was designed to, and did, injure another person or persons physically. In an attempt to define sports violence, Smith proposed a sports violence typology. This typology consisted of two relatively legitimate types of violence (brutal body contact and borderline violence) and two relatively illegitimate types of sports violence (quasi-criminal violence and criminal violence). Brutal body contact consisted of actions that conform to the official rules of the sport, were legal under the law of the land and were more or less accepted (Smith, 1983). Borderline violence violated the official rules of the sport and the law of the land, but was widely accepted (Smith, 1983). Quasi-criminal violence violated the official rules of the sport, the law of the land, and most informal player norms and was usually not accepted by others (Smith, 1983). Criminal violence violated the official rules of the sport, the law of the land, players' informal norms, and was not accepted by others (Smith, 1983).

Theories of Aggression and Violence

Researchers have been consumed with discovering the cause of human aggression for many years. Four prominent research areas have included instinct theory, biological/physiological theories, the frustration aggression theory, and social learning theory. A general theoretical explanation of these classical aggression and violence theories might help explain the actions of aggressive players.

Instinct Theory

Freud (1925) proposed that instincts were the innate behavioural tendencies that caused people to act in certain ways. Ardrey (1966) and Lorenz (1966) expanded this theory by stating that humans were like any other animal in their need to aggress. According to Lorenz, aggression was an instinctive behaviour that occurred because it enabled the survival of our species. Ardrey discussed the issue of driving away intruders from one's territory. This phenomenon can be witnessed primarily in animals (Le Unes & Nation, 1996). In spite of this early research, instinct theories receive little support today (Widmeyer & McGuire, 1996). One explanation is that humans have the ability to reason and control their actions (Widmeyer & McGuire, 1996).

Biological/Physiological Theories

Several biological/physiological studies have examined aggressive tendencies and common genetic make-up (twins), sex chromosome abnormalities, and hormonal influences. One way to illustrate that behaviour is biologically based, has been to show that individuals with a similar genetic make-up have similar behavioural tendencies (Baron & Richardson, 1994).

For example, twins should share more heritable characteristics than should cousins. The results of most studies in the area have found that there is relatively little evidence of

heritability of behaviours (Carmelli, Rosenman, & Swan, 1988; Carmelli, Swan & Rosenman, 1990; Mednick, Brennan, & Kandel, 1988). In their text, Baron and Richardson (1994) mentioned that other researchers (e.g., Ghodsian-Carpey & Baker, 1987; Rushton, 1988; Rushton, Fulker, Neale, Nias, & Eysenck, 1986) have shown that genes are more important than shared environment in explaining aggressive behaviour. Evidently, the issue has not been resolved.

In addition, sex chromosome abnormalities have been indicated as a potential influence of aggressive behaviour. Although there is indirect evidence of a relationship between aggression and sex chromosomes (e.g., consistent sex differences in aggression, high levels of criminal behaviour), there is relatively little evidence that sex chromosomes play a causal role in the development of behaviour (Baron & Richardson, 1994).

Frustration-Aggression Hypothesis

It has been hypothesized that a frustrating situation may cause an individual to become aggressive. Frustration may be defined as “the blocking of achievement of a significant goal” (Pargman, 1998, p. 160). Dollard, Doob, Miller, Mowrer, and Sears (1939) proposed that all aggression was due to frustration and that frustration always led to aggression. This view has long been abandoned due to its oversimplification - it did not consider any other possible influences (Widmeyer & McGuire, 1993). Miller (1941) modified that concept by stating research had demonstrated that frustration does not always lead to aggression. After many years of research on this subject, the frustration-aggression hypothesis was changed again, this time by Berkowitz (1969). It was proposed that frustration only elevates one’s predisposition toward aggression, rather than directly leading to it. In spite of this advancement in understanding, some scholars were unwilling to accept the theory because it implied that an inborn mechanism was the cause

of the frustration-anger link (Widmeyer & McGuire, 1993). Furthermore, some scholars believed that the theory explained the hostile (or “reactive”) aggression that occurred (Widmeyer & McGuire, 1993).

Social Learning Theory

The social learning approach identified reinforced external factors as causes of aggressive behaviour. It was thought that an individual learned to aggress or not to aggress (Pargman, 1998). Aggression was an acquired behavioural pattern and not a drive or something that was directly attributed to a personality trait (Pargman, 1998). Bandura (1973) broadened understanding of this theory by proposing that social learning may also happen by watching another person’s behaviours. In addition, by observing others and then repeating (modeling) their actions aggressive tendencies may be brought about or repressed (Bandura, 1973). In sum, knowing the background of general aggression and violence theories is a suitable starting point for the examination of the theories that have been applied to boys’ and men’s ice hockey.

Causes of Aggression and Violence in Men’s Ice Hockey

Many investigations have examined the causes (Loughead & Leith, 2001; Trudel, Dionne, & Dany, 1992; Trudel, Guertin, Bernard, Boileau & Marcotte, 1991; Vaz, 1972, 1976, 1982), reasons (Morra & Smith, 1996; Nash & Lerner, 1981; Russell, 1979; Silva, 1981, 1982; Smith, 1975, 1979; Smith, Stuart, Colbenson & Kronebusch, 2000; Weinstein, Smith & Wiesensthal, 1995; Widmeyer & Birch, 1979) and potential ramifications of violence (Bloom & Smith, 1996) in men’s ice hockey. These studies were based upon theories of aggression and violence and can be related to social learning theory. The main causes of aggression and violence in ice hockey can be grouped into

three categories: frustrating situations, attack from others and selected social learning factors.

Frustrating Situations

This major theoretical viewpoint has been referred to as the frustration hypothesis. Feeling frustrated is a feeling of helplessness that occurs internally the more a person's goal is prevented (Widmeyer, Bray, Dorsch, & McGuire, 2002). Several investigations have been concerned with the competitive frustration-aggression link in sport (e.g., Brice, 1990; Leith, 1977; McGuire, 1990; Nelson, Gelfand, & Hartman, 1969; Sherif & Sherif, 1953).

One source of frustration that has been examined was losing late in a game. McGuire (1990) compared aggression during the first 10 minutes, the middle 20 minutes, and the final 10 minutes of 840 NHL games. Some interesting trends were found. Losing teams were not more aggressive than winning teams; teams losing at home were not more aggressive than teams losing on the road; teams were not more aggressive when they were losing late in a contest than when losing in the middle or early stages in the contest; and finally, teams losing by three or more goals were more aggressive than those losing by fewer number of goals (McGuire, 1990). However, there was no conclusive evidence that suggested that the frustration-aggression model could be applied with confidence in professional ice hockey. This is most likely because of the number and variety of possible competing explanations for the results. Other possible explanations could be that the situations identified were not that frustrating to professional hockey players, or that the conditions were frustrating but the players had learned to control their reactions to such frustrations (McGuire, 1990). In this particular study, the best predictors of

aggression were years in the NHL, not wearing a facemask, and playing background. The non-predictors were game location and elapsed time (McGuire, 1990).

In a related study, Brice (1990) sought to establish what aspects of ice hockey were most frustrating to the players. A model was created that proposed that being dissatisfied led to feeling frustrated which led to anger, which in turn increased the likelihood of the individual wanting to aggress (Brice, 1990). To test the model, the researchers developed a questionnaire to determine the extent, antecedents, and consequences of the desire to injure, the desire to intimidate, anger, and frustration that occurs in ice hockey. Subjects were 78 male university hockey players from four Ontario University teams and the questionnaire was administered at the end of a practice early in the season. Players identified bad calls by the referees (15 %), poor play of teammates (12%), and “not getting the breaks” (12%) as sources of frustration. The greatest source of frustration (48%) was the player’s own poor play (Brice, 1990).

Attack from Others

The terms retaliation and revenge are often used in the world of sport (Widmeyer, et al., 2002). In his book Violence in Sport (1983), the late Michael Smith outlined a “violence precipitates violence hypothesis”. Although he discussed occurrences in basketball, football, soccer, and ice hockey, these investigations were conducted on crowd and not on player or team violence (Widmeyer et al., 2002). However, several studies to date have examined athletes and the effects of retaliation or attack from others (e.g., Brice, 1990, Corner & Widmeyer, 1983; Harrel, 1980; Regnier, Boileau, Marcotte, Desharnais, & Larouche, 1989; Sanszole, 1995; Zillman, Johnson, & Day, 1974).

Attack from another person has been cited as a foremost cause of aggression in ice hockey (Widmeyer & McGuire, 1993). Of importance, Brice (1990) and Regnier,

Boileau, Marcotte, Desharnais, and Larouche (1989) examined retaliation in men's ice hockey. Brice asked hockey players open-ended questions as to why they wanted to injure an opposing player. Of the 78 university hockey players questioned, 83% indicated that it was because the opposing player had either injured or attempted to injure them or a teammate. Perhaps hockey players felt that any type of contact by an opposing player, even if it was an attack on a teammate was significant.

Regnier, Boileau, Marcotte, Desharnais, and Larouche (1989) compared the amount of unnecessary body checking in a Quebec Pee Wee League. This study attempted to answer the following question: Assuming the 12 to 14 year old players would not be able to correctly perform a body check, would they resort to other means of stopping their opponents such as elbowing, high-sticking and boarding? In an effort to answer this question, the researchers examined penalty records of Pee Wee Leagues and tournaments that allowed body checking and those leagues and tournaments that banned it. A total of 521 game records from those four contexts were studied. The researchers assumed that the frequency of penalties reflected approximately the frequency of the behaviours they were penalizing. The penalties were divided into two separate categories. One set consisted of "norm violation" penalties, also called "instrumental penalties" such as tripping, holding, and interference. The second category consisted of "hostile aggression" penalties such as charging, cross checking, and roughing. The number of instrumental penalties did not seem to be affected by the involvement of body checking. It was determined that regular season games and tournament games played with body checking had significantly more hostile aggression penalties than games played without body checking. When body checking was permitted, a noticeable increase in penalties

occurred, especially in those of an aggressive nature, which were more likely to injure the opponent.

Selected Social Learning Factors

The social learning theory explained that people aggressed because they learned it was profitable. People have learned this by being directly rewarded for certain behaviours or watching others be rewarded for similar actions. Some investigations of this theory in ice hockey have consisted of asking athletes about reinforcement of others, perceived success of aggressing, watching others aggress and examining particular roles that players have in a team environment (e.g., Morra & Smith, 1996; Nash & Lerner, 1981; Russell, 1979, 1981; Smith, 1975, 1979; Trudel, 1991, 1992; Weinstein, Smith, Stuart, Colbenson, & Kronebusch, 2000; Weinstein, Smith, & Wiesenthal, 1995; Vaz, 1982). This section will include studies that examined reinforcement of others (Smith, 1975) reinforcement of the coach (Loughead & Leith, 2001; Trudel, Guertin, Bernard, Boileau, and Marcotte, 1991; Vaz, 1972) perceived success (McMurtry, 1979; Silva, 1983; Smith, 1975; Vaz, 1979) the effects of observing others (Nash & Lerner, 1981; Russell, 1979), and role theory (McGuire, 1990; Katorji & Cahoon, 1992) in men's ice hockey.

Smith (1975) proposed the legitimization of violence theory, which held that violence in any sport, whether legal or illegal, has always had a certain level of acceptance in our society. Qualities such as righteousness, goodness, and justifiability have been associated with this aggressiveness and have been encouraged by our society (Smith, 1975). If an individual witnessed an assault in an alley and an assault during an ice hockey game the individual would claim that they were both very different situations. The assault during the game of hockey would be seen as simply "part of the game". This legitimization of

violence may have been seen as a reinforcer to the aggressor especially if those legitimizing it were people the player deemed significant.

Smith (1975) examined a group of male hockey players from the Toronto area. Interviews were conducted with players and coaches. Smith found that the players' perceptions of approval were based on who was observing the act (i.e. parents, coaches, teammates or spectators). The players viewed their mothers as being less approving (67%) than their fathers (96%) of hard but legal body checking. Players tended to see their teammates as strongly encouraging of body checking and a little less in favour of reciprocating a fight. Teammates (55%) were seen as disapproving or strongly disapproving (11%) of violent acts such as boarding and crosschecking. The results for approval of coaches were similar to those of teammates. Results also indicated that it was more important to the players and the coaches to win hockey games by staying out of the penalty box and concentrating on scoring goals. Players and coaches saw pointless stops in play as detrimental to winning games. Players saw their non-playing peers as very eager to witness violence in any form. These observations were supported in follow up studies (Russell, 1981; Smith, 1979; Theberge, 1997; Weinstein, Smith, & Wiesenthal, 1995). Reinforcement of aggressive and violent behaviours by teammates, peers and parents seem to influence the actions of hockey players. However, it may be argued that the most influential reinforcer in a young athlete's life is his or her coach.

Role of the Coach

There are two bodies of research that examined exclusively the role of the coach and the influence the coach had on the athletes (Trudel, Guertin, Bernard, Boileau, and Marcotte, 1991, Vaz. 1972). Interestingly, these two bodies of research presented differing conclusions. These differing results may be attributed to the fact that although

they were examining the influences of the coach, the subjects were from different levels of hockey. Trudel, Guertin, Bernard, Boileau, and Marcotte (1991) conducted a study concerning the behaviour of hockey coaches as reinforcers. The purpose of their study was to discover if, during games, the behaviour of ice hockey coaches ($n=11$) at the bantam level encouraged players to use roughness and to infringe upon the rules of the game. The investigators viewed 27 games using a split-screen technique making it possible to analyze the behaviours of the coaches and the players simultaneously. Analysis of the tapes revealed that the coaches often exhorted their players to put more intensity into their physical contacts (legal body checking), but more often they encouraged them to control themselves and avoid penalties. In general, they found that the coaches showed very little behaviour that encouraged violent actions from the players (Trudel, et al., 1991). However, Vaz (1972) studied young male Canadian hockey players in the All-Star and Junior leagues and discovered something different.

Vaz (1972) found that physically aggressive play was encouraged (by coaches) and that fighting techniques were taught. These results were also supported by Smith (1988), who claimed that young hockey players believed that by acting aggressively they were exuding a strong character and were satisfying their coach's expectations of them. Similar results were found in a study conducted by Loughhead and Leith (2001). The general purpose of the study was to examine the perceptions of the prevalence of aggression and aggressive behaviour held by minor hockey coaches and players. Male hockey players at the Atom (i.e., 10 to 11 yrs.), Pee wee (i.e., 12 to 13 yrs.), and Bantam (i.e., 14 to 15 yrs.) levels and their coaches completed a modified version of the Bredemeier Athletic Aggression Inventory-Short Form (BAAGI-S). It was found that these coaches endorsed instrumental aggression more than hostile aggression. It was

interesting to note, however, that regardless of the level of play, players' views were unrelated to coaches' views on aggression. Other researchers, including Coakley (1994), have attributed the learning of violent behaviours in sport to the socialization process. Coakley believed that these types of behaviours often received social approval by the people who were most important in the athletes' lives.

Another form of reinforcement is the effect of past successes the athlete has had. Perceived past success with aggression has been shown to affect a player's present levels of aggression in hockey (Widmeyer & McGuire, 1993). Silva (1983) conducted a study in which 203 male and female athletes and non-athletes were shown a series of eight slides. Seven of these slides clearly depicted rule-violating behaviour. The subjects rated the unacceptability-acceptability of the behaviour shown on each slide on a scale of 1 to 4 (totally unacceptable-totally acceptable). Results showed that an in-sport socialization process was taking place that encouraged rule-violating behaviour. This perceived legitimacy was to a large extent more pronounced for males than for females (Silva, 1983). Silva concluded that it was possible that in order to enhance continuation in organized sport, male athletes, especially those in collision sports, had to learn and obey expectancies for normative rule-violating behaviour. This finding that males learned and obeyed expectancies of rule-violating behaviour was similar to what McMurtry (1979), (Smith, 1975), and Vaz (1979) reported in their research.

In addition to perceived past success, choosing an appropriate role model has been shown to affect the behaviours of young ice hockey players. Russell (1979) and Houston (1986) found that young athletes chose hockey role models that played similar positions to them. Specifically, Houston compared 36 aggressive and 38 non-aggressive female ringette players and obtained similar results. The variables that significantly predicted

aggression were, in order of importance: physical size, perceived previous success by aggressing, perceived encouragement to aggress, length of involvement in ringette, and praise for having aggressed. This indicated that athletes were affected by watching others aggress. This result was compounded if the model was similar to the observer or the observer respected the model.

The implications of role models was also the focus of the study conducted by Nash and Lerner (1981) who examined the effect of violent role models on young hockey players' level of aggression. Subjects were Peewee hockey players (ages 11 to 13) and the subjects were observed over a seven-month period by the senior author. Using a participant observation approach, researchers recorded comments they overheard. Comments made by the young boys on the bench while waiting their turn revealed that kids drew similarities between themselves and the pros in a conscious manner (Nash & Lerner, 1981). Results demonstrated even with adult supervision (which was designed to minimize violence) youngsters were still able to play out the aggressive behaviours of their role models. This could lead to the conclusion that the more aggressive the role model, the more aggressive the young athlete will be. For these youths, hockey was an arena within which a ritual aggressive display could be internalized. These players were learning about situational violence: learning a time, a place, and different forms of aggression (Nash & Lerner, 1981).

The behaviours athletes exhibit may also have been influenced by the role they play on a particular sports team. Role theory (Biddle, 1979) proposes individuals engage in particular behaviours because they are satisfying their role prescriptions (Widmeyer, Bray, Dorsch, & McGuire, 2002). Roles in sport teams are created and integrated to make effective offensive and defensive systems (Widmeyer et al., 2002). Individual

players are not only trained to perform a specific role, but are also recruited onto a team to fill a needed role on the basis of their strengths and abilities (Widmeyer, et al., 2002). In ice hockey, roles have included goal scorer, grinders (hard workers), and “policemen” (enforcers) among others. The policemen on a team have learned that their role is to protect their fellow teammates and to hurt the opposition if necessary (Widmeyer & McGuire, 1993). McGuire (1990) compared the four forwards on each NHL team with the highest scoring points to the four forwards on each NHL team with the fewest scoring points. The forwards with fewer points scored had significantly more major penalties and more instigator penalties. This would lead one to believe that there is a connection between aggressive acts and goals scored.

In another study related to the roles athletes play, Katorji and Cahoon (1992) found that the highest point scorers (for goals and assists) received only 11% of the aggressive penalties in Junior B hockey, whereas those players who received 72% of the penalties were among the lowest on the team in scoring. Although it cannot be concluded without question, it seems as if these two teams adopted different roles for their goal scorers (Widmeyer & McGuire, 1993). Along with different roles found on a men’s hockey team, there are also more obvious role differences, those between men and women.

Gender Differences in Aggression

Historically, researchers have examined the differences in aggression expressed by males and females, including why males demonstrate higher levels of physical aggression (Baron & Richardson, 1994). One view, supported by many sociobiologists was that the differences were held in one’s genetic make-up (Baron & Richardson, 1994). This has been demonstrated in the past where aggressive behaviour has helped males pass on their genes to the next generation (Baron & Richardson, 1994). It is argued that aggression

helped ancestors defeat rivals in the quest for mates, and so increased the likelihood that they could pass on their own genes to future offspring (Baron & Richardson, 1994). As a result of these pressures, males now possess stronger inclinations toward physical aggression and also demonstrate physiological adaptations and mechanisms related to this behaviour (Baron & Richardson, 1994). In this section, the levels of aggression between males and females in sport are examined by discussing the work of Duda, Olsen, and Templin (1991), as well as Lenzi, Bianco, Milazzo, Placidi, and Castrogiovanni (1997). Van Goozen, Frijda, and Van de Poll's (1994) research on the levels of hormones in males and females follow. The goal is to explain whether there are built-in differences in males and females to show anger, create hostile attitudes, and engage in openly harm-causing actions (Geen & Donnerstein, 1983).

Attempting to answer this question, Lenzi, Bianco, Milazzo, Placidi, and Castrogiovanni (1997) compared aggression between males and females in sport. A group of 33 male athletes, 43 female athletes and 488 non-athletes representative of the general Italian population were selected. The sports practiced by the group of women were volleyball, light athletics, heavy athletics, callisthetics, and swimming. The sports practiced by the group of men were soccer, light athletics, judo, basketball, and swimming. Comparisons were made among the three groups based on their factor scores and total scores on the Italian version of the Buss and Durkee Questionnaire. Comparison of the sample of female athletes and the general female population indicated that there was increased aggressiveness amongst the female athletes. These athletes had higher mean scores on Direct Aggression, Resentment, and Suspiciousness, and a lower mean score for Irritability (Lenzi et al., 1997). A comparison of the male and female athletes revealed a greater mean score on Indirect Aggression amongst males and greater mean

scores on Irritability, Verbal Aggression and Feeling of Guilt among females. Males and females expressed their aggressive tendencies in different ways. Perhaps this was related to what was appropriate for males and females to express in our society. Males were encouraged to express anger or frustration outwardly by means of physicality, whereas females were encouraged to express it in more “feminine” ways, such as discussing their feelings with friends or keeping their irritability to themselves.

Duda, Olsen, and Templin (1991) also sought to determine the differences in aggression between male and female athletes, but instead used a subject sample that consisted only of athletes. The study involved high school basketball players, 56 males and 67 females. The players were asked to complete a three-part questionnaire assessing a) individual differences in goal orientation, (b) approval of unsportsmanlike play/cheating, strategic play, and sportsmanship behaviours, and (c) subjective ratings of the legitimacy of intentionally injurious behaviours. All measures were basketball specific. Gender differences were evident in the results. Males were more likely to endorse unsportsmanlike play/cheating, cheating, strategic play, and intentionally injurious acts (except for the permanent disabling of an opponent). Females approved of sportsmanlike play more than the males. These results were consistent with previous research (Allison, 1982; Bredemeier, 1985; Silva, 1983) which indicated that male and female high school athletes tended to have differing ideas of what constitutes “fair play” or legitimate behaviour in sport.

The level of testosterone in men could also be a reason for differing levels of aggression in males and females. This was the focus of Van Goozen, Frijda, and Van de Poll’s (1994) study. Van Goozen et al. claimed that if one wanted to know more about female aggression, research on sex differences was the only source of information. Their

experiment consisted of two parts. The first involved anger and aggression in female athletes. The participants were a group of females who took part in aggressive sports like kickboxing, wrestling, and rugby. The second group consisted of non-aggressive female athletes engaged in recreational swimming. Vocal intensity, autonomous arousal, aggressive behaviour, and subjective recording of anger and anger proneness were measured. There were no differences recorded on any of the measures between the two groups of females. Therefore, it was concluded that aggressive sportswomen do not get more angered as indicated by the intensity of autonomic arousal and of voice (Van Goozen et al., 1994).

The second half of the study was designed to examine the effects of androgen treatment on aggression in females. The biological explanation for the increased amount of male aggression had been linked to the male sex hormone testosterone (an androgen). Animal studies showed a link between androgens and aggression. Ehlers, Rickler, and Hovey (1980) studied this relationship in humans. Females who displayed more aggressive behaviour had significantly higher levels of testosterone than those who were low in aggressive tendencies. The subjects consisted of 22 female-to-male transsexuals (hereafter FM), with a mean age of 25.7 years. It was reported that all subjects were in good physical health and were having normal menstrual cycles. All of the subjects were administered testosterone esters, which was consistent with the treatment given to men with testosterone deficiencies (Van Goozen et al., 1994). A battery of tests on aggression and anger proneness were administered individually to the subjects on each testing occasion. It was found that there was no increase in aggressiveness due to the rise in testosterone level. Subjects stated when asked that there was no increase in the number of aggressive behaviours recently. Van Goozen and colleagues reasoned that the results

were due to the relaxed and more at ease the women felt. This was attributed to the greater acceptance by their social environment since the start of the androgen treatment. However, the results of the anger proneness index had differing results. After the commencement of the treatments anger proneness had increased significantly. In other words, if one were to ask the subject to imagine being in a negative situation, the subject exhibited more angry, assertive, and aggressive tendencies. It was concluded that sex traits, hormones and genes do play a role in the level and intensity of aggressiveness among individuals. In particular, the greater the number of “male” traits, hormones, and genes an individual exhibited, the more aggressive he or she would be. This tendency would clearly be seen in athletic competition and therefore an exploration of women and their positions in sport is warranted.

Women in Sport

Women took part in a few activities in Ancient Greece, but were forbidden to participate in Olympic events and even faced the death penalty for attempting to watch men participate (Le Unes & Nation, 1996). In spite of this, women found an outlet for their athletic energies: the Heraen Games, named in honour of Hera the wife of Zeus (Le Unes & Nation, 1996). Similar to the Olympics, these games were held every four years and consisted of races for unmarried girls (Mouratidis, 1984). It was not until 1896, with the founding of the modern Olympic Games that women were allowed to participate in sport (Le Unes & Nation, 1996). With each successive Olympic Games, the athletic opportunities for women have slowly expanded (Le Unes & Nation, 1996). For example, at the 2000 Olympic Games in Australia, 120 of the 300 (40%) events were women's events. A total of 4,254 women participated in the games compared to 11,116 men

(www.sportnet.com.au/activeaustralia/national/targeted/women/topic_women_olympics, 2001).

Frank Deford noted in a 1996 Newsweek magazine article that since the early 1970's, the single most dramatic change in the world of sport had been the increased participation of girls and women (Coakley, 1998). This increase has occurred in many countries around the world, especially those with reasonably strong post-industrial economies. Despite the resistance in some countries, girls and women everywhere now participate in a wide array of school, community, and club programs that did not exist twenty-five years ago (Coakley, 1998).

New opportunities, government legislation demanding equal treatment for women in public programs, the women's movement, the health and fitness movement, and increased media coverage of women in sport are all major reasons for the increased participation of women in athletics in North America and around the world (Coakley, 1998). Increased opportunity, the recent fitness boom and the presence of strong female role models have all served as additional forces in the enrichment of sport participation on the part of females (Le Unes & Nation, 1996). There have also been a large number of females participating in contact sports, namely ice hockey. One of the most dramatic developments in Canadian sport in recent years has been the growth and achievements of women's hockey (Theberge, 1995b).

Women's Aggression in Sports

Information on violence among females in sport is scarce. Women's ice hockey programs have changed greatly in the last twenty-five years. They have become more competitive, are more likely to include an emphasis on power and performance, and the stakes related to winning have increased (Coakley, 1998). To date, researchers have

learned that as female athletes achieved higher levels of competition and became increasingly immersed in the social world of elite sports, they became more accepting of rule violations and aggressive behaviours (Coakley, 1998).

As women compete at more competitive levels, they have seemed to become like men in the manner they embrace the sport ethic and use it to frame their self-definitions as athletes (Coakley, 1998). Similar to men, women are now willing to take risks, make sacrifices, pay the price, and keep playing in spite of pain or injury. However, unlike men, women do not connect toughness, physicality, and aggression to their gender identities (Coakley, 1998).

Women in Ice Hockey

Women's ice hockey is one of the fastest developing sports in Canada (Boyd, Trudel, & Donohue, 1997; Seaborn, Trudel, & Gilbert, 1998; Theberge, 1995a, 1995b, 1997; Williams, 1995). The number of players is increasing rapidly. The enrollment in women's ice hockey has increased over 600% (from 8,146 to 51,105 participants) between 1990 and 2000 (Canadian hockey, 2002). In men's hockey, a 23% increase in registration was seen during the same time (Boyd et al., 1997). It is speculated that the inclusion of women's ice hockey in the 1998 Olympics games helped the sport continue to grow for young women in Canada and around the world. At the elite level, the success of the Canadian Women's team attests to the development of the sport in Canada.

In women's hockey, body checking is not permitted. This led Beaulieu (1994/95) to conclude that there was a greater emphasis on the technical skills such as skating, manoeuvring and stick handling. Although there has been a rapid increase of players in women's hockey and an increasing amount of media coverage, there has been little research in the area of women's hockey and even less on aggression in women's hockey.

To date, the research has examined perceptions of learning opportunities in youth hockey (Boyd, Trudel, & Donohue, 1997), physicality and the production of gender (Theberge, 1997), instructional content provided to players (Seaborn, Trudel, & Gilbert, 1998), and the level of aggression exhibited by female field hockey players (Kerr & Kelly, 1982).

Boyd, Trudel and Donohue (1997) examined learning opportunities in youth women's hockey, using focus group sessions with youth ice hockey players, their coaches and parents. The participants were youth and adults (N=70) involved with competitive Pee Wee and Bantam teams in the Ottawa District Women's Hockey Association (ODWHA). The players were encouraged to talk about their perceptions of motives for participating in the sport, and how they perceived the learning opportunities during games and practices. Coaches and parents were encouraged to talk about what they thought motivated young women to play hockey and how they thought the players perceived the learning opportunities during practices and games (Boyd et al., 1997).

Six categories emerged from their analysis: initial involvement, continued participation, perceptions of likes and dislikes, coaching influences, parental influences, and finally women's participation in hockey. All participants in the study emphasized two factors influencing young girls' initial involvement in the sport: a) family and friend influence and b) not completely satisfied with ringette, figure skating, or boys' hockey. The likes and dislikes of the players were organized into practice and competition contexts. The main difference between the two contexts was that the players wanted practice to be fun, social and educational, but not overly serious. The players thought of competition as more serious and a place where achieving success was more important.

In addition, feedback and instruction from the coaches improved the learning opportunities the athletes had for skill development. The participants in the study

highlighted instruction, positive feedback, and corrective feedback from coaches as significant factors influencing enjoyment, fun, and confidence (Boyd et al., 1997). The subjects also stated that players disliked negative feedback from their coaches.

Kerr and Kelly (1982) examined the relationship between playing ability and the level of aggression exhibited by female field hockey players. Field hockey is a positional sport played by women in which a stick is carried and the goal of the game is to put the ball in the opponents net. Many of the rules and strategies are similar to ice hockey, but the game is played on a grass field and not an ice surface. The subjects were members of three female field hockey teams ($n=33$) who were competing on a regular basis in league and cup hockey in Northern Ireland. The three teams were representative of three differing levels of competition. For example, the team playing at the highest level finished the season as winners of the league and included two international players and several inter-provincial players (Kerr & Kelly, 1982). The third team played mostly on the basis of enjoyment and not for recognition. The Cattell 16 PF personality inventory and the Buss and Durkee Hostility Inventory were administered to each team as a group. The Catell Inventory was administered prior to a routine training session and the Buss and Durkee was administered following the session (Kerr & Kelly, 1982).

A trend emerged after the levels of aggression were compared. The players who played at the top level were more aggressive than those who played at the lower levels. In addition, there were important differences in aggression among the attacking players in the three teams. These differences were consistent with the level at which their team was playing. This trend was not as evident among the defensive players (Kerr & Kelly, 1982). Coakley (1998) summarized the literature on women and aggression in sport and reported similar results. It was determined that as women compete at higher levels, they became

similar to men in the way they embraced the sport ethic and used it to frame their self-definitions as athletes. Although these players had different scores on the inventories, it was unclear whether they exhibited more actual physical aggression. In addition, one cannot assume that paper and pencil tests translate into actual behaviour during competition.

CHAPTER 3

METHODOLOGY

This chapter will explain the participants, the data collection techniques, including a description of interview and focus group techniques, the data analysis procedures for both techniques and the methods of obtaining trustworthiness. These qualitative procedures are similar to those used recently in other sport psychology studies, such as interviews (Bloom & Salmela, 2000; Bloom, Durand-Bush, Schinke, & Salmela, 1998; Côté, Salmela, Trudel, Baria, & Russell, 1995; Udry, Gould, Bridges, & Beck, 1997) and focus groups (Boyd, Trudel, & Donohue, 1997; Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999, Noblet & Gifford, 2002).

Participants

The participants in this study were elite women's ice hockey coaches and players. Four elite women's ice hockey coaches from three different levels of hockey in Quebec participated in separate interviews. The coaches were contacted through personal contacts and asked to participate in an interview. Coaches were selected to participate based on their reputations, their number of years of coaching experience, and their deep involvement in women's ice hockey. The levels of hockey examined were the National Women's Hockey League, Canadian Interuniversity Sport (CIS) (two coaches) and CEGEP (part of the Quebec Students Sports Federation). The interviews and focus groups followed the same order, highest playing level to lowest playing level. Each coach participated in an open-ended, semi-structured interview for a period of one to one and a half hours. Each interview took place in the province of Quebec at a mutually convenient location.

The researcher and each coach identified five prospective players from each of their teams and invited them to participate in a focus group (group interview) session. It was believed that the coaches would be able to identify the most suitable athletes to participate in relation to the criteria outlined below. Research has shown that only using penalty minutes may be misleading when selecting the most aggressive players (Sheldon & Aimar, 2001). It was possible that some aggressive acts went unnoticed; as well, referees may have been biased due to crowd loyalties, previous aggression or the score of the game (Sheldon & Aimar, 2001). Another reason for allowing the coach to choose the players was that he or she was knowledgeable about the athletes and would be able to select those that would have felt comfortable speaking in a group setting. The player criteria included two players on each team who demonstrated a high amount of aggression while playing hockey, one player that demonstrated an average amount of aggression and two players that demonstrated a small amount of aggression.

The three levels of hockey were selected because they represented the top levels of women's hockey, with the exception of the Olympic team. These three levels also represented a range of playing ability and ages. There were 8 teams in the National Women's Hockey League, and the players' ranged in age from 17 to 35. There were 17 teams in the CIS league where the players' ranged in age from 17 to 22. Finally, there were 8 teams in the CEGEP league where the players were between the ages of 17 and 22.

Data Collection Techniques

Martens (1987) was one of the first sport psychology researchers to advocate the use of qualitative research methods. Although it took time to develop, qualitative research in sport psychology became an accepted form of inquiry (Sparkes, 1998).

Qualitative data collection techniques were selected in order to develop a picture of the current state of women's ice hockey. Qualitative methodology seeks to understand the meaning of experiences of the participants in a specific setting and how the components mesh to form a whole (Thomas & Nelson, 2001). Flick (1988) noted that qualitative research was inherently multi-method in focus. The two methods used in this study were interviews and focus groups. "The use of multiple methods (or triangulation) reflects an attempt to secure an in-depth understanding of the phenomenon in question" (Denzin & Lincoln, 2000, p.5).

Interview Technique

Atkinson and Silverman (1993) noted the use of interviews to collect information was so widespread that they claimed that we now live in an "interview society". Maslow (1966) observed that the best way to learn what people were like was to get them to tell us about themselves. Qualitative researchers were realizing that interviews were not neutral tools to gather data but an active interaction between two or more people (Fontana & Frey, 2000; Warren, 2001). This method of qualitative research allowed the researcher to gather rich and descriptive information from the women's ice hockey coaches. A cultural interview was conducted. Cultural interviews focus on the norms, values, understandings, and taken-for-granted rules of behaviour of a group (Rubin & Rubin, 1995). Each interview session followed the same format outlined in the interview guide (Appendix E) and adhered to the suggestions outlined by Rubin and Rubin (1995). Some of these suggestions included building rapport, listening carefully, asking probe and follow up questions, and using conversational repairs.

Creating a comfortable environment and building rapport with the interviewee was important (Thomas & Nelson, 2001). The interview began with light conversation and

was about matters that the interviewee knew about (Rubin & Rubin, 1995). The researcher put the subject at ease and set the tone of the interview by discussing the interviewee's personal experiences early in the interview. At this time, the researcher also explained the importance of confidentiality and emphasized the fact that there were no right or wrong answers. Furthermore, the subject was informed that the interview would be audio recorded and that full verbatim transcript would be sent back to him or her for approval and editing before any analysis would take place. The researcher encouraged the subject to be honest and open throughout the interview, as well as to provide (in depth) answers. One way of showing understanding of the factual content was to ask follow up questions and project positive body language (Rubin & Rubin, 1995).

The interview consisted of three types of questions: main questions, probes and follow up questions (Rubin & Rubin, 1995). Main questions covered the general topic and served to encourage the subject into conversation (Rubin & Rubin, 1995). Probe questions served primarily to help indicate the level of depth the interviewer wanted (Rubin & Rubin, 1995). They also encouraged the speaker to finish up the answer currently being given. The third function was to demonstrate that the interviewer was paying attention (Rubin & Rubin, 1995). For example, the interviewer may have asked: "You mentioned that athletes were more aggressive in some games; could you tell me more about this?" Follow up questions were used to pursue themes, elaborate answers, and explored things that were said by the participant (Rubin & Rubin, 1995).

Another interview technique used was conversational repair (Rubin & Rubin, 1995). The interviewer asked the subject to repeat the sentence or the researcher in fact repeated what the researcher thought the subject had said to eliminate any misunderstandings

(Schegloff, 1992). This helped to eliminate any confusion and encouraged understanding between the subject and the researcher. In addition to these techniques, a debriefing session took place at the end of the interview which allowed for clarification on the part of the participant.

Focus Group Technique

Focus group sessions were the other data collection method used in this study. Morgan and Krueger (1998) noted that government agencies, non-profit organizations, and academic researchers were all discovering the value of focus groups. Recently, sport psychologists (Boyd, Trudel, & Donohue, 1997; Gould, Guinan, Greenleaf, Medbery, & Peterson, 1999, Noblet & Gifford, 2002) successfully employed this methodology. Three separate focus group sessions were conducted in the current study and each lasted approximately one and a half hours. One focus group session per team with five athletes in each session took place. The focus group session followed the questions outlined in the focus group question guide (Appendix F). Focus groups were group discussions led by a moderator, monitored by an assistant moderator and recorded by a videographer. The assistant moderator took notes and watched for body language of the participants.

Morgan and Krueger (1998) noted that focus groups were especially useful for exploration and discovery. Focus groups explored complex influences by encouraging subjects to investigate ways they were similar to and different from each other (Morgan & Krueger, 1998). Interactions among participants in focus group sessions often involved an effort to understand each other. Participants were curious to know how other people reacted to certain situations that they shared and they gave insight to their opinions, feelings and thoughts on a topic. It was for this reason that focus group sessions provided

researchers with a wealth of knowledge about people's behaviours and their reasons for behaving in certain ways (Morgan 2001; Morgan & Krueger, 1998).

A semi-structured approach was employed due to the exploratory nature of this study. This approach, similar to the open-ended interview, allowed the moderator to explore the topic in a way that generated new insights (Morgan, 2001; Morgan & Krueger, 1998). The moderator encouraged the participants to share their thoughts, feelings, and experiences, while watching for body language, gestures and tone of voice (Fontana & Frey, 2000; Madriz, 2000; Morgan & Krueger, 1998). The wording of the questions were direct, forthright, comfortable, simple and said in a conversational manner (Morgan & Krueger, 1998). During the session, the moderator facilitated the discussion and probed and asked follow-up questions. An example of this was to ask: "What else have people experienced in this area?" or "Who else has some thoughts on this?" (Morgan & Krueger, 1998).

The use of open-ended questions in the focus group allowed respondents to decide where they want the conversation to go. The researcher did not imply the answers and the respondent was encouraged to answer based on the subjects' specific situation (Fontana & Frey, 2000; Morgan & Krueger, 1998). An example of this was: "How did you become involved in women's ice hockey?"

The moderator gave a brief summary at the conclusion of the focus group session. The participants were invited to elaborate or confirm their answers. Following this, the research team had a debriefing session to compare notes. Some questions that were raised were: What were the most important themes or ideas that were discussed? Were there any unexpected or anticipated findings? (Morgan & Krueger, 1998).

Data Analysis

Two different methods of data analysis were implemented in this study, one for the individual interviews and the other for the focus groups. Both sets of data were analyzed inductively, with a slight variation between the two processes. This section will explain the techniques used to analyze the data.

Interviews

The objective of the interview analysis was to create an organized system of categories. Categories emerged from the unstructured data of the coaches' interviews. The analysis was inductive in that the categories were created from the data of the interviews. Before the coding process began, the text was divided into meaningful pieces of information called "meaning units" (Tesch, 1990). Meaning units were sections of raw data that concerned one topic.

The first part of the analysis consisted of giving the meaning units a "tag". A tag was a descriptive name for the meaning unit. The second step consisted of comparing meaning units and grouping them into distinct higher-order categories called "properties" (Côté et al., 1993). Properties were named according to the common features their meaning units shared (Côté et al., 1995).

The third part of the analysis involved a higher-level of interpretation. This consisted of comparing properties and organizing them into higher order categories. For example, the properties "rules and officiating" and "connection with men's ice hockey" were combined to create one larger category termed "state of women's ice hockey". This step was similar to the previous one, except it was carried out at a higher, more abstract level of analysis (Côté, Salmela, & Russell, 1995). The data was analyzed until theoretical saturation was reached (Côté, Salmela, & Russell, 1995).

Focus Groups

All focus group interviews were transcribed verbatim and entered into a computer program. Like interviews, the focus group analysis was also done inductively, although it consisted of one level of analysis. The initial coding was done by dividing the text from each focus group session into chunks that conveyed a specific meaning to the researcher. These chunks of data were given labels, called codes. The research team chose the names of the codes as being logically related to the data they represented. Following this, the initial codes were regrouped into larger categories. The categories were revised during the analysis process until the researcher and assistants achieved a secure coding system. Having two researchers and an assistant check the results separately helped ensure validity (Boyd, Trudel & Donohue, 1997).

Trustworthiness

How can an investigator persuade his or her audiences (including themselves) that the findings of the research were worth paying attention to and worth taking account of? Lincoln and Guba (1985) noted that establishing trustworthiness was an essential component of qualitative research. This study used a number of methods to increase the probability that credible findings were produced. These included persistent observation, member checks, peer review, prolonged engagement, triangulation, the use of the NUD*IST 4.0 software system, two pilot interviews and one pilot focus group (Côté, Salmela, & Russell, 1995; Lincoln & Guba, 1985; Maxwell, 1996; Sparkes, 1998).

Lincoln and Guba (1985) discussed persistent observation. The purpose was to identify those characteristics and elements in the environment that were the most relevant to the topic being pursued and the ability to focus on them in detail. This was accomplished in three ways. Regularly attending games, reading books and research

articles concerned with women's ice hockey, and acquiring, reading and learning the rules and regulations of each of the three levels of women's ice hockey satisfied persistent observation.

Member checks were used to enhance trustworthiness (Rubin & Rubin, 1995). A member check was an opportunity for the subjects to verify the researchers' understanding of the information they provided and was the most crucial technique for establishing credibility. A full verbatim transcript of the interview was mailed to each participant so that they had the opportunity to clarify ambiguous information or alter statements (Lincoln & Guba, 1985). This procedure had a number of purposes, including providing an opportunity for the researcher to clarify the participant's intentions as well as an opportunity for the participant to volunteer any further information. In addition, it allowed the participant to give an assessment of the overall adequacy of the information provided. Furthermore, this process provided the researcher an opportunity to summarize the data, which was the first step of data analysis (Lincoln & Guba, 1985).

Peer review was another form of data verification used in this study. Peer review was conducted for both the interview and focus group data. This process took place independently of the principal researcher. For the interview data, a peer examined 25% of the meaning units created from the data and assigned tags previously established by the researcher. The peer matched each meaning unit with the tag that she felt was the most appropriate. This procedure continued when the properties and categories were created. Any discrepancies were discussed until a common understanding was reached. For the focus group data, a similar process occurred; a peer examined all of the codes assigned by the principal researcher and assigned them to the chunks provided to them. Following

this, the peer grouped the coded data into categories. This process continued until a common understanding was reached.

Prolonged engagement was the investment of sufficient time to learn the culture and build the trust of its occupants (Lincoln & Guba, 1985). To achieve this, the researcher immersed herself in the culture by attending women's ice hockey games played in Montreal by two intercollegiate teams. The researcher also discussed ideas, strategies, and tactics of the sport with two other women's ice hockey coaches.

Triangulation was used to improve the credibility of the findings of the study. Triangulation was used to support findings by demonstrating that independent measures of it agreed with or, at least, did not contradict it (Miles & Huberman, 1994). Experts noted that there were five types of triangulation: data source (person, times or places), method (observation, interview documents), researcher (investigator A, B, etc.), theory, and data type, which included qualitative text, recordings, and quantitative methods (Denzin, 1978; Miles & Huberman, 1994). In the present study, four types of triangulation were implemented: data source, method, researcher, and data type. First, different sources were used to collect the interview data (coaches from three different levels as well as players from three different levels of women's hockey). Second, two different methods were employed (semi-structured interviews and focus group sessions). Third, two research assistants helped the principal researcher with coding and peer review. Fourth, qualitative text and audio and video recordings were available for data type triangulation purposes.

The QSR NUD*IST Vivo (NVivo) 4.0 software was also used in this study. This package was specifically created for qualitative research and helped the researcher conduct the coding and analysis of the data. This program had tools for recording and

connecting ideas in many ways, and for searching and exploring the patterns of data and ideas (Richards, 1999). This computer program allowed the researcher to produce a computerized index system through which all meaning units were easily retrieved.

Two pilot interviews and one pilot focus group were carried out before any of the data collection began. The researcher conducted pilot interviews with two former women's ice hockey coaches. An expert in qualitative research methodology and interviewing was present and provided feedback. Feedback included an analysis of the researcher's interviewing ability and adherence to the guidelines outlined by Rubin and Rubin (1995) and Thomas and Nelson (2001). One mock focus group session also took place before actual data collection began. A focus group session involving real ice hockey players was conducted, followed by feedback by an expert in the field. Feedback was centered on the researcher's ability to moderate the group and follow the guidelines outlined by Morgan and Krueger (1998).

CHAPTER 4

RESULTS

This chapter examines the results of the qualitative analysis of this study. In particular, it presents a detailed explanation of the elite women's ice hockey coaches' and athletes' perspectives on the state of elite women's ice hockey. The nature of the data section provides a general discussion of the data as a whole and how the data was analyzed. Following this, each of the three categories from the coach's interviews (coach and athlete characteristics, state of women's ice hockey and aggressive techniques) are explored with a detailed description of each property contained in each category. Following this, the nine categories (athletic career, athlete's social issues and roles, rules and officiating, practicing skills, comparison with men's hockey, body checking and contact, verbal aggression, physical aggression, reflective experiences in women's hockey) that emerged from the athlete focus groups are presented.

Nature of the Data - Coaches

A total of 242 meaning units (MU) emerged from the analysis of elite coaches. A total of 46 tags inductively emerged from these 242 MU. Table 1 (Appendix G) demonstrates the frequency of the tags for each of the four ice hockey coaches labelled as coach one, two, three, or four (C1, C2, C3, C4). The frequency of the meaning units under each of the tags differed from one coach to another (from 0 to 11). In addition, the number of meaning units for each interview varied for each coach (from 51 to 91). As a result of the open-ended nature of the interview, the frequency of the MU for each interview (51 to 91) or for each coach (0 to 11) varied. For example, a tag such as "coach teaching skills" or "violent acts" may have been discussed to a greater extent with one coach more than with another. This is not to say that one coach was more knowledgeable

than another or one was better a coach than another. Furthermore, a tag such as “start of coaching career” (which included 10 MU) was more of an introductory topic while “comparing men’s and women’s hockey” (which included 29 MU) was discussed more frequently due to the nature of the interview guide questions. Inductive analyses were performed for grouping the 46 tags into 11 properties (Appendix H) and in grouping the 11 properties into three higher-order categories (Table 3). Tabular representations of the results are provided at the end of the coach and athlete sections. The properties and the subsequent categories were represented in all four of the women’s ice hockey coaches’ interviews.

The next section describes the analysis process by explaining each of the three higher order categories. Each of the three categories are described, including the properties that emerged. Representative examples of MU are provided for each of the categories. Due to the large number of meaning units in the data, only a portion of the citations are used to demonstrate the general findings of each category. It may be assumed that the information presented was representative of all three levels of ice hockey unless otherwise specified.

Coach and Athlete Characteristics

This category referred to issues that pertained to social and psychological roles and responsibilities of the coach or athlete. It described the social issues and planning responsibilities of the coach. The psychological attributes of the athlete were also included in this category along with the social issues facing athletes. A total of 69 meaning units or 29% of the data emerged from this category. An explanation of the coach and athlete characteristics category will now be presented by discussing each of the four properties with supporting citations. The citations have been categorized as C1, C2,

C3, and C4 to represent the coach who provided the quote.

Coaches' Social Issues

This involves issues surrounding social aspects of the coaches' role with the team. Topics such as the way the coaches' handled themselves and their team with their own issues and the teams' issues were included here. The tags included in this property were coach composure, coach taking over a team, issues with parents, coach-athlete-relationship, team rewards, and start of coaching career. The manner in which the four coaches started their coaching careers was different.

I started coaching my first year that I played at [Cegep] in the place where I grew up. They had a very small girls hockey program. I think that they had four teams. I can not remember but I coached "In betweens" and or "Bells" during my first year at Cegep where I was already playing hockey. Then I did not coach again until I graduated from University and I started to help out. I believe I did this for two years after I graduated from [University name]. I also coached swimming from the time I was fifteen until I was about nineteen years old. [C1]

I was going to school here at [University name] and I coached a high school team at the time. They practiced either before us or after us and I got to know the head coach of the women's team. And after one year of coaching at the high school he asked me if I would be interested in assisting him. I started off as an assistant for one or two years and after that he resigned and they offered me the full time Head Coaching job. [C2]

I was approached in my community of [town name] the first year they were starting up a team. I had coached double A boys so they figured it would be nice - so I got involved with it. [C3]

I started coaching because my daughters started playing hockey. Actually it was interesting because there was a gentleman who wanted to start female hockey and an association in [area name] and my girls did not live in that region. He said that they could play in that region if I were willing to coach the team. At that time, I guess I was coaching at the bantam level. I had been running a hockey school for a number of years. So I had been teaching at hockey schools and teaching hockey here for a long time. And I had helped with some boy's teams. So I was keen to help and I had already coached my own daughters in soccer and softball and other things like ringette, so starting in hockey was natural. [C4]

Two of the coaches felt that it was important to remember that coaching women

was very different than coaching men. When coaching women, the coach must be sure to pay attention to the way he or she is communicating, be it with body language, tone of voice, or facial expression, because women may take things more personally than men do.

If I ever blew up at an individual player it would affect 20 players. I think in the men's game if you go in and blow up at a player, the 19 other guys do not really care about that guy. So I think that that is a big thing. I have really learned that coaching women, to criticize in private and praise in public. And I have learned that if you criticize an athlete on her play in front of other players it is the others it seems to affect more than the player you were talking to. [C2]

There is one coach in our league with a lot of attitude and bad language. And often we will get them at the college level, the men who have never coached women before. The first year they are sometimes a little too aggressive, and now they have backed off and they understand the philosophy of girl's hockey and college hockey and they are much better. [C3]

Another issue that coaches faced was dealing with the athletes' parents. One coach described her experiences this way,

Parents are a big factor all the way up. It is not until they get to boys midget Triple A and the parents are just there to see them. But at every other level, parents are very involved and sometimes it is negative. With parents, what I say is we have a team on the ice and a team in the stands. I do not want to see one parent standing behind the goalie. I want to see the parents sitting with each other and they sit beside someone they should never say anything negative about anybody else's kid. This would make life good. Once when my son played Triple A the parents who would sit beside me would say: "we are going to be good"! [laughs]. I said, "do not start criticizing another kid out there". We want to enjoy the game here. There are some parents whose kids do not get picked for teams because of their parents. Both of my kids are pretty good hockey players and I have seen some obnoxious parents who drive the coaches crazy... "Why did my son not play?" And they are videotaping. I saw something in a game [near Montreal] that I will never forget. There was a father there - he had his videotape going and a stopwatch to see how much time his kid was getting. That poor kid would have to drive all the way home with his Dad yapping at him and then he would have to sit through the video and listen to how many minutes he was on. I said this is unbelievable! That poor kid - we wonder why so many kids quit sports? [C3]

Coaches' Planning Issues

Factors related to administrative issues that coaches did to help prepare athletes for competition were included in this section. Ice time, game strategies, practice and game

schedule, practice plan, coach teaching skills, and play-off preparation were included in this property.

Coaches gave very similar responses when asked to describe their plan for a regular practice. All coaches started with a warm up activity, some were designed to be fun (Simon says, frozen tag) and others were designed to work on skating and puck handling. All teams worked on passing, shooting, puck handling, and offensive or defensive skills. Following this, the team reunited and worked on team skills such as break-ins or breakouts, communication, or timing drills. Some coaches then finished off the practice with a fun activity so that the athletes would leave on a good note.

The skills taught by the coaches were an important part of every practice. One coach described in detail what types of techniques she worked on during every practice.

Being able to angle and steer people into spaces where they have less options is important. It is something that is taught to hockey players of all levels who need to learn how to play body contact. They have to learn checking skills first, so it is approaching, angling, reading the player with the puck options and forcing them into situations where their options are limited. You can either separate them from the puck or force them to make an error. [C1]

With the defence we will also do drills where they are covering in front of the net but they do not get to use their sticks. It is all about good body position getting low, blocking players out before they get into a position where they can be a threat in front of the goalie. I do not teach them any of the pokes in the back or any of that stuff. [C1]

The issue of teaching skills to the athletes led to a discussion concerning game strategies the coaches worked on during practices. Two coaches described some techniques designed to give their team an advantage over the opponent,

One of the big things is that you can still pin somebody against the boards, it is just in how you do it. You can not hit them into the boards. You have to press them into the boards. In many ways it is much more difficult to learn, and it creates some problems in women's games. I think when girls start to play they know that there is no checking so they focus a lot on the puck. That in effect is a mistake because they still have to learn to play off the puck. They still have to learn when they are

forechecking they have to take the body. It is just how they take it. [C4]

Anytime you have an offensive player in front of the net you want to get control of their stick. If they do go for a rebound or a loose puck or a pass, you can always get their stickup off the ice. They are not going to score if their stick is down on the ice. Make sure that you have control of their stick. In other words, your stick is not on top of theirs, it is under theirs so if the puck does come you can lift it. Or there is the old technique of just wrapping your stick weight around their shaft. When a pass comes you can pull their stick and they will not get control of the puck. [C2]

Athletes' Psychological Attributes

Athlete attributes associated with personality or innate mental processes were included here. For example, athlete confidence, dedication and the way the athlete composed herself. Building confidence in players was important to the coaches,

Everybody has his or her own techniques, and it is a confidence thing too. Some players are much more confident doing things that they are comfortable with. We really work on keeping proper space between players. If you are not playing with confidence, there tends to be a little more space. A lot of it has to do with how confidently you play your game and how your week is going. If they have a bad shift - we want to make sure they bounce back from that properly. What you want to do as a defender anyway...you want to take away time and space from the person who has the puck. Players who do that well are usually talented players - those who do not do that well are usually players without confidence. Or have lost confidence. So as coaches we try to build confidence by creating game situations in practice which is a difficult to do. [C2]

All coaches agreed that athletes should compose themselves in a classy way.

The year before I coached our team they had twelve unsportsmanlike conduct penalties. So last year we put a 20 dollar fine in place. If one of them got an unsportsmanlike conduct whether it was two minutes or ten minutes or whether they deserved it or not, it went down on this sheet. They would then have a 20 dollar fine to pay. [C1]

No way, I am totally against retaliation. My philosophy is you take one for the team and you keep your mouth shut. We go on the power play, we put the puck in the net and that is the best revenge. People who retaliate end up sitting on the bench with me. [C1]

Another aspect of the way the athletes composed themselves was the way in which they behaved emotionally while playing hockey,

If you are beaten you can hook and pull and there is nothing wrong with that, hockey players are used to it. Lots of girls come off wimping and whining to the bench, “ she hooked me and she hurt me” - get a life! This is hockey! [C3]

Athletes' Social Issues

Issues surrounding social aspects of women's ice hockey and how the athletes handled themselves and presented themselves to others were included here. Developing life skills, image and lesbian issues made up this property. Helping to develop life skills was something the coaches were interested in.

99.9% of the players will not earn a living playing hockey. The best they can do is develop some really good life skills while they are playing that they can use in other situations. I think that is a big part in playing a team sport. [C1]

The image of the athletes and the team itself was important to the coaches. One coach said: “I always try to tell the girls that I coach – it is a classy team, I want them to look attractive, I want them to dress appropriately. We have a dress code and they have to follow it”. [C3]

While discussing the image of the team, the issue of homosexuality was brought up by some of the coaches.

That [lesbianism] concerns me...I think the social aspect of the game really concerns me... the women's game is sort of tagged. There are a lot of women with different sexual preferences and I think it is given a stigma and that concerns me. I have seen it have a bad affect on their game and it has been a bit of a recruiting tool as well. [C2]

I think it is an issue because it has an affect on the dynamics of a team. I have nothing against...lesbians or gays but it can have a huge affect on the team dynamics. If someone on the team is in a relationship it is my biggest concern. I have a couple of people on my team who are seeing each other. It is going to have an impact. I think it affects how they perform and how players react to them. I have seen it on our team and I have seen it on other teams. Players have switched teams because of problems. It is not really something that is easy to bring to the forefront as a male coach. It is a little more difficult for us to bring it up as an issue...but I think it is an issue in the game. It is not only hockey, it is other sports also. There seems to be an issue specifically with women's team sports. [C2]

So we have to build a reputation for girl's hockey. The lesbian issue is a big issue in girl's hockey. And at the University level when you are together at practice every day, everyone really has to be on board with these kinds of issues. [C3]

State of Women's Ice Hockey

The current state of elite women's ice hockey was affected by the four properties outlined in the previous section (athletes' psychological attributes, athletes and coaches' social issues, and coaches' planning issues). These topics referred to the athletes and coaches themselves and how they got involved and fit into the sport of women's ice hockey. The state of women's ice hockey category involved external factors that influenced women's ice hockey, which were unrelated to the athlete herself. A total of 88 meaning units or 36% of the data came from this category. The properties included in this category were rules and officiating, difficulties in women's hockey, influence of other leagues and the connection with men's ice hockey. An explanation of the state of women's ice hockey category will now be presented by discussing each of the four properties with supporting citations.

Rules and Officiating

Topics concerning rules and officiating in women's hockey were frequently discussed. It included the rules in the women's game, the body checking rule and general officiating issues. One coach spoke specifically about the rules in women's hockey.

There are so many rules in the women's game because of the men's game. There is shaking hands, the line change, stupid things that have nothing to do with the women's game are there because of the men's game. The defensemen coming in from the blue line, you never see that in women's hockey, line changes. There is the coincidental penalty, there are some rules that have no bearing on women's hockey – it is the result of the men's game, or the violence in the men's side of things. They have to stay on their side of the ice, if a puck goes on the other side of the ice, in the men's game if you go over, you get your head pounded in. You just do not see it in women's and there are other examples that I cannot think of right now. Often I will say to my players..."that is a stupid men's rule". They are two totally different games with two totally different attitudes towards the game. [C2]

In spite of the fact that only one coach spoke about the general rules of women's hockey, all coaches discussed the fact that there was no body checking permitted in the rules of the game. One coach described the fine line between what constituted a body check and what did not.

The definition of a body check is that you cannot use a change of direction to knock somebody off the puck. But you can in the same direction as they're moving, make contact, eliminate the space they have, and angle them into the boards. As long as you are not changing the direction. [C1]

Three of the four coaches felt that the game was better without body checking. It gave players greater opportunities to form plays and concentrate on other skills.

No, I think it allows the game to be played the way it is supposed to be played. It takes more skill to angle and steer and remove somebody from the puck. Using good technique than just physically knocking them off it. There is no body checking but there is tons of body contact. [C1]

However, one coach felt that body checking should be allowed in women's hockey and that it would improve the game on a whole if it were to be permitted.

Why is it that you get to this level and there is no body checking? In the very first world championships of women's ice hockey in 1990 there was body checking. That was the only level it was allowed. I would like for someone to explain to me why there is no body checking. There is no difference between women's rugby and men's. I do not see why there should be differences in ice hockey. I do not think you can implement body checking by starting at the university level. You have to implement it at the grassroots level. [C4]

Officiating was mentioned while discussing the rules in women's hockey. One coach discussed the development of officials and commented on the level of officiating in the province of Quebec.

Quebec is a leader in terms of developing officials. They have a provincial program. But in their quest to develop female officials they have left out males who like to do the female games that are good at it. They approach the game with professionalism, and want to do the best possible job. You can pick and choose your games where you can develop your female officials. We're paying to have

officials there we deserve to have the best that we can have. I am not paying for their development - it would be unjustified. [C1]

Difficulties in Women's Hockey

Difficulties or problems in the current state of women's hockey were discussed. Information focused on the lack of fan attraction to games, the problems in women's hockey and unsatisfactory officiating. In addition, the inability to fill the stands at women's games was mentioned.

You go to the Molson Center to see team Canada versus team USA and the very next night they have more people there to watch lacrosse. You know we have a long way to go. A lot of people enjoy watching girls' hockey because it's a little cleaner and there is a little more play making. They need more skill to make it more entertaining. There are not enough entertaining female hockey players out there! [C3]

The problems encountered raising money was expressed. Without money and support, the coaches had a difficult time securing ice time, tournaments and attracting players and fans.

The first couple of years I was there, we did not get very much [money], the team did not do very well. I figured we could work very hard to raise the money and so we did. The budget was 50, 000 dollars and very little came from the school. The coaching is easy – it is getting the money that is difficult. [C3]

Another coach had similar thoughts relating to the financial burden these women and their coaches had. In addition to the financial troubles for the team, it was difficult for players to support themselves financially.

Nobody in women's ice hockey is making any money right now so it is a real sacrifice. There is still sacrifice at our level whether it is moving in from out of town to a half decent program, or finding opportunities for themselves. It can be expensive and not necessarily financially rewarding. But the women's coaches, most of them have been fighting ... we have had to fight for everything that we have gotten on behalf of our teams. Whether it is ice time issues, equipment issues or basic equity issues that the women's program have had to fight for. I have been doing it for 20 years. [C2]

Unsatisfactory officiating was an issue raised in every interview. All coaches had

an opinion about why it was a problem and how it arose. Consistency of call making, skating ability, and knowledge of the game, lack of feel for the game, lack of trained female officials, and the pressure to have female officials instead of men were mentioned as concerns.

It is really tough on our players because the officials that do our games are struggling to officiate at our level. A lot of them know a lot of the players that they are officiating and they have a little bit of a bias. So it is a real challenge on all of the teams to not end up with tons of penalties just because of the quality of officiating. That is the biggest problem we have. We have some really good officials. We have four female officials in the province that I think can officiate at my leagues' level. At the University level most of the females who work the lines cannot skate at the level and are forever being run over. They are not in position to make calls. I understand completely the need to develop female officials, however they should not have excluded the male officials who like and want to continue to do our games and that is what has happened. [C1]

The players like to play a physical style of game right now in Canadian women's hockey and the referees are not letting us do that and the consistency is not there. I think it is much more consistent in the US college system; they let them play a little more. It is really frustrating from the coach's point of view the type of officiating that we are getting. There is a bit of a debate as to whether some of the female officials should be refereeing our games and not somebody else with more experience, or that have a feel for the game. I think that is the biggest complaint we get from coaches is that a lot of the female officials do not have a feel for the game. The men that officiate have played boys hockey at a pretty good level, but it is a real issue in the women's game. They can't skate at our level or they do not have a feel for the game or they just do not have the experience to referee at that level. Both male and female coaches coaching the women's game would prefer to have somebody who is experienced and somebody who can keep up with the play, whether it is a male or female. A lot of coaches do not like when they just throw females into the game. [C2]

Nobody has anything against female officials, but I think that the big problem is there are too many female officials that are not competent right now to officiate at the level that we are playing at. I do not think they have gone through the same type of training and experiences that the male officials have gone through. And there are some good female officials, there are some wonderful female officials, but there are a lot of really poor ones too. [C2]

Influence of Other Leagues

The influence of other hockey organizations, teams, or other sports had an impact on women's hockey. American hockey, the men's game, old timers hockey, influence of the Olympics, the Olympic team and ringette were the topics discussed. Most coaches felt each of these other leagues affected women's hockey in some way. One coach spoke of the influence and effect of American hockey on our Canadian players.

You watch a game like Cornell playing the University of Toronto and it is excellent hockey! Not many people go out to see the games. You want to get people in the stands though. Plus they have to advertise more. The [National level team name] playing out of Montreal does not have many people there at the games and it is tough. Advertising costs money. I find it different in American style prep school hockey, and I have sent some girls down there. They find it tough at first because in American hockey there is more stick work. The sticks are up around your head even if you are wearing the neck protector. But the sticks are up around your shoulders; and your armpits and you do not find it as much here. It is a different style of hockey it is chippier and they get away with it - they can hook, and hold. [C3]

The Olympic Team was discussed during an interview, which was not surprising due to the fact that this was a winter Olympic year. The coach had concerns for the well being of the game and expressed it the following manner.

Look what happened as soon as the women started losing - they wanted to fire Danielle. They do not say anything about the fact that the Americans have a man in charge but he is been in charge since 1997. That is his full time job, he makes reportedly a six figure income to coach them and that is all he does and he makes all the decisions - the buck stops with him. Nobody else makes the decisions for him on the Canadian side. We [women] approach hockey as a part time sport, our athletes are out doing their things, and our coaches are out doing their thing holding down full time jobs. We get together before an Olympic year - six months before, and we expect that we are going to have the same results when the Americans have been centralized. Basically that group of athletes with the exception of two have been together for two and a half years full time. It has nothing to do with the level of coaching - we have three of the best coaches in the country at the helm of our program. The women's team has made huge sacrifices, all of these athletes give up their lives and give up their time and put things on hold in order to play for their country and they do not make their living doing it. It is not what they are going to earn their dollars. Nobody has come forward and said "stop shitting on them Canada and get behind them!" But the minute the men's team fumbles (these are

professional hockey players) we have to prop them up and support them. For me this is the state of women's hockey in Canada. For all of the window dressing that that is done all over the place we are not as far ahead as we think we are in terms of where we fit in the picture. But in terms of how the sport has grown, we are doing a great job. We get better and better every year. [C1]

Connection with Men's Ice Hockey

Comparisons with men's hockey, including using men's hockey to prepare females for the sport was discussed. There were inherent differences in the way the athletes played the game. The absence of body checking allowed for a different style of hockey.

The big [difference] on the ice is that there is no contact. With the individual skill level of the women's game, you really have the opportunity to display your individual skills because there is no contact. The aggressive part of the game, the intimidation part of the game, is not necessarily a part of the women's game like it is in the men's game. The individual skills that are displayed in the women's game you don't see as much of it in the men's. This is because of the size of the guys, the size of the rink that they play on, and there is less room for them. The women's game, I think it's a good teaching tool for a lot of men's teams. [C2]

It is a little bit easier because [women] do not have to worry about getting hit. So they can look around a little more and be stationary, whereas in men's hockey if you are standing still with your head down you are going to get nailed. In girls hockey you can just keep your feet moving and get a chance to look around. They are always going to hit you...especially in the neutral zone that is where they really hit hard in the men's game. They [the women] have a little more time for puck protection and play making is easier. But the play making, I think that is what is going to sell the girls hockey. People that like clean hockey and do not like the fighting. [C3]

Another coach felt it was important to note there were differences in recruiting for women's hockey and men's hockey. Women's teams were searching for different qualities and looking to put together a particular type of team.

All you really need is one really good player. She scores goals and that will win your games. That is not the case in boys hockey because their defence is better, and one person is not going to make a team. In girls' hockey that is still the case. If you look in the CEGEP league the top scorers are up there, and they will have most of the goals for their team. There are players who will play the whole season and never get a goal or assist. You do not usually find that in boy's hockey. Some girls will

get more ice time, and those girls, their skill level is a bit better than everybody else's. It will get better. [C3]

There is a difference in what you can do and what you cannot do. In the men's game you have to play aggressively but there are rules, you cannot hit somebody with your stick you cannot hit from behind. In the women's game you want to play as aggressively as you possibly can but within the limits of the rules. [C4]

Some coaches said it was beneficial for female athletes to play men's hockey in preparation for women's hockey. One coach expressed her opinion about the benefits of girls playing boys hockey.

A lot of the girls that have played boys hockey are more competitive and more aggressive. And they have had to be because they have had to live through it if they really wanted to play hockey. They had to go through the taunting and they had to be better. To change in their own rooms they really had to want it. Out on the ice they are not treated any different which is good. They have and it is more physical in boys if you have played Pee Wee double A or B. [C3]

Another coach confirmed these sentiments when discussing the advantages and the differences between girls who had played boys hockey and those who had not.

The girls that have come from playing on a boy's team have the tendency to be more aggressive and they might be a little stronger. I think the intensity level might be higher. I think a woman who played the women's game most of her life and gets to our level, will get a lot more intense and a lot more aggressive. A woman who has played boys hockey will tone it down a little. [C2]

Aggressive Techniques

This category included factors that led to or influenced aggression in the sport of women's ice hockey. A total of 85 or 35% of the meaning units came from this category. The aggressive techniques category was distinguished by three properties: athletes' physical attributes, causes of aggression and issues surrounding aggression. Aggressive techniques included such things as particular instances where aggression may have been more likely and the size and strength of the modern female athlete. As well, it alluded to the impact that the increased size and strength of the modern female athlete had on the

sport of hockey. An explanation of the aggressive techniques category will now be presented by discussing each of its three components with supporting citations from the coaches.

Athletes' Physical Attributes

Athletes' physical attributes consisted of physical aspects or physical growth of the athlete. Coaches discussed the physical or skill differences between players, their physical training and the athlete's general skill level.

Each of the coaches mentioned the skill level of the female athlete for different reasons. Some discussed the skills worked on in practice and the skills that were important for success.

[We worked on] being quicker in general, and being quicker to get to the puck, but not necessarily a foot race with the other player. It is about taking the other players' space. You have to get to their space. You have to beat her there, but not beat her to the puck, beat her to the space. You have to cut her off. You cannot cut her off by being beside her you have to cut her off by being in front of her. [C4]

All of the coaches discussed the differences in skill and physical attributes. One coach at the National level described how there was a difference in the level of aggression exhibited by her players.

Certainly, some of my players are easier to get to play an aggressive style where as they will go hard they will go at the puck but some of them are more tentative and hesitant. But I am sure that you find that on any team not just women's team but no. We try to play an aggressive, physical style. [C1]

Size differences between players was mentioned as a potential factor affecting success.

The bigger player in the women's game who is in shape and has size and strength has a big advantage. You just do not see a lot of big strong physical players in the game. They can really separate themselves from the puck and the person who is trying to take the puck from them. Their puck protection is usually much stronger and they have a stronger reach so it is a little more difficult to reach the puck. Any battles along the boards or in the corners against someone who might not be as

strong as them or big as them – they will win. Battles in front of the net, if you have a big defenseman who is battling against a smaller, shorter forward distinctly has an advantage. So it is not only strength, but it is reach, and overall body mass - if you lean on someone they will know you are leaning on them. [C2]

All four of the coaches discussed off ice physical training and the importance of it in improving the performance of their athletes. For some of the coaches it was difficult to motivate their athletes to go to the gym and work on their physical training, especially at the lower levels of competition. It was also difficult to monitor their diligence with the programs due to the minimal time the coaches had with the team as a whole each week. However, for one of the university teams, off ice physical training was much more ingrained in the athletes and they knew it was necessary for improvement and success. The coach described what the athletes worked on and why it was important.

We do a lot of strength training programs for the off-season that they maintain during in-season. In the in-season they really work on their quick-feet. For off ice quick feet they do some ladder work, getting their feet in and out of a ladder and different drills that they have that their Conditioning Coach gave them. And on-ice we work hard with our defence so that they are not beaten outside. We have a number of drills that we use to increase their speed or increase their foot speed or we work on explosiveness. The first step is making sure that they win races to the puck and things like that. He [Conditioning Coach] gives them a program in-season but it is not necessary to get any stronger it is more to maintain what they have done off-season. I would say our players are in the gym or the weight room three times a week, as opposed to six times a week in the off-season. Not everybody does it but it has increased, specifically in the last five years. I think it has a lot to do with the National team players that we had here. Our players saw what it took to play at a high level. They really followed them because the motivation was there. [C2]

Causes of Aggression

Causes of aggression included potential reasons for acting aggressively in women's hockey, either individually or team related. Protecting the goalie, the coach teaching aggressive acts, team rivalry and other reasons for acting aggressively were explored in this section. It was mentioned that protecting the goalie was a potential cause of aggression.

Usually in front of the net, someone will hit the goalie and then the defence will say “you cannot touch our goalie”. The goalies are pretty well protected. I find that a little much. If you are going in for a rebound and there is a rebound there then you just take a shot. I do not think that deserves someone coming in and cross-checking you from behind. That happens all the time and sometimes the refs will let it go. And they say, “well you touched their goalie...” [C3]

One coach went into a lengthy discussion of how she taught and demonstrated aggressive or illegal techniques in order for her athletes to gain an advantage in competition.

When you are a small player, you tell them you want them to cause the bigger player to get the penalty. So a little bit of instigation, taunt them a little verbally, a little hook with the stick. You always want your small wingers to go wide on your defence because they [the bigger players] will probably squash them into the boards. Of course they will get a penalty. It is the smaller ones that are usually faster anyways, so they can accelerate fast. But I would always tell the smaller ones to accelerate when you get near them and squeeze through there. I actually taught them how to tuck lower so that the big person who is not that agile will push them like this way or this way, and of course if you scoot through here, all they do is hit the boards and you are gone. Or if they get a piece of you or they make a noise on the boards, then they will get a penalty. So you teach them that kind of stuff, the little ones need to instigate more. [C3]

In a face-off situation you teach your centre a lot of different things to do. If for example you are not fast enough to win any face offs, you tell them to forget the puck and they just have to play the player. So what they simply do is freeze the other girls stick or they skate right into her and the puck then stays behind her. Your winger then comes in and takes the puck. She is saying I am not going to look at the puck, I am going to take this girl out. Coaches will teach them to do that same thing with the people that are blocking. They can lift the stick and quickly skate by her so you can get your man around her. [C3]

Most of the coaches agreed that rival teams exhibited increased levels of intensity and or aggression. This was due to an increase in the interaction between the players and the fact that many of the players knew each other. One University coach explained, “Yes, I think those games [rivalries] are certainly more intense. The physical part comes with the intensity of the game so the intensity level is certainly increased. The physical part of the game is increased”. [C2]

In addition to protecting the goalie and the coaching received by players, emotional reasons for acting aggressively were discussed. Feeling frustrated and angry in the heat of the moment may have led some players to act aggressively when they may have otherwise refrained. "I think that a lot of emotions come out in a hockey game and when that happens you are going to have instances where people are going to get annoyed and frustrated". [C4]

Issues Surrounding Aggression

A discussion of athlete or spectator aggression/violence in women's hockey, including potential ramifications of aggression in the sport was outlined here. Topics covered in this section also included concussions, verbal and physical forms of aggression and violent acts. Suffering from concussions was discussed by one of the coaches. In particular, the causes, prevalence, and severity of concussions in women's hockey were discussed.

There is hitting from behind and they will [the referees] just give them a boarding penalty. There are a lot of concussions in girl's hockey now, yes! You know look at Canada's team- [player's name] was out for three months there were two girls out with concussions on that team. You get one or two concussions and your hockey career is finished. It is all from an illegal hit and your head either hits the boards or the ice and there is a lot of that stuff. These concussions should not be happening. Usually it is from a check or something really illegal that they are doing. [C3]

A real concern for people who have had concussions in hockey is that the next time they fall they will get another one. There is a lot of whiplash, hits from behind and falls. Concussions are a real concern in hockey right now and that is why they are trying to design helmets a little differently now. [C3]

It was discovered that the coaches were divided with regards to the occurrence of verbal aggression. The CEGEP level coach and one University coach agreed that it happened in their leagues. Conversely, the other University coach (playing in the same league), and the National level coach said verbal aggression infrequently occurred. The

CEGEP coach explained it this way.

In a close league they get to know each other so they know things about the players, and so they use the French/English taunting. It is funny because [name omitted] is an English CEGEP but 75 % of the girls are French and suddenly they are playing against [French name omitted], and they are calling them names. And their sweater name is like [French name omitted] or [other French names] so it is funny with the English French thing. [C3]

One coach offered the following comment about the prevalence of verbal aggression in the league, "Oh yeah [it happens] but I discourage our players from any sort of trash talk. They tell me that other teams will often say things". [C4] Two of the coaches admitted that verbal aggression occurred once in a while and added it was nothing like the trash talking that occurred in the men's leagues.

From a player's point of view - there might be some [verbal aggression] but it is nothing like the men. Very little trash talking goes on. There are probably one or two players who trash talk in our league. You very seldom see it, and if you do it is usually in good nature, somebody falls in front of the bench and then somebody is going to say something. But it has never been like: "You are a f'ing idiot". [C2]

It [verbal aggression] does happen and it is harder to control then unsportsmanlike conduct. The very first thing I did when I took the team over was say I would have no trash talking on the ice and if they trash talked they would sit on the bench. And I try to keep track of it. But they are often at another place on the ice but it is not something that is acceptable behaviour on my team. I know it happens and last year I told the referees that my team was not to trash talk and if they were trash talking, I would be really comfortable if the referees alerted me to it. I do have a player and yapping is a part of the way she plays. It helps her play well and she does not say anything disrespectful. But I try to keep it to a minimum. My philosophy has always been that you can win big without becoming small in the process. [C1]

The coaches offered differing ideas on the topic of physical aggression. Some coaches discussed how physical aggression related to their team or things that occurred in their league. Others discussed what being physically aggressive meant to them and how it could be used to the athletes' advantage when competing.

[Physically aggressive] means that you skate hard using good technique and checking but you are not afraid to make shoulder to shoulder contact. You are within the rules of the game, it is all about good technique and timing. You have

got your stick on the ice and if you have two hands on the stick. [C1]

No you rarely see that [fighting], you see stuff around the net after the whistle and it is usually pushing and shoving. Sometimes their sticks get up but it is not really violent. Pushing and shoving gloves in the face but that is about the extent of it. Talking, yapping and it is usually right around the goalies. [C1]

Aggression was a part of the women's game and was important for success.

You have to be aggressive. If you are only going to play the women's game and stay in your own space you are not going to be successful. So you have to aggressively go after the puck and aggressively steal the other players' space, but you have to do it within the guidelines that are set by the rules. Sure, the players make mistakes - sometimes the girls do not play by the rules. [C4]

When asked about fighting, the coach answered: "Not take their gloves off, but yeah I have seen that; I have seen them fight". [C4] When another coach in the same league was asked these same questions, the answers were quite different.

No I do not think there really is aggression. At a high levels, I think that women at the National level, when you see Canada and the US play it is much more aggressive than what you see at our level. The game in the US is a little more aggressive. You see it once in a while but it is done in a respectful way, they are not going to punch somebody in the face. They are maybe going to get their hands up and push away or put their stick between the legs, to shovel them away. You never see anything that is disrespectful. At least I have never seen it. I should not say that I have never seen it - it is very uncommon and anything disrespectful would not happen. [C2]

A more drastic form of aggression is violence. This subject came up with the coaches when discussing aggression in the sport. One coach discussed an incident that occurred during her women's senior league hockey game, in which she competed.

I will not use names because I respect them... I play still play hockey on an alumni team and it is a combination of [university name] and [another university name] graduates. For me it is a release and it is very competitive and our team is really good and we like to win but when we do not, we don not really care. Last Sunday night we were playing against a team in [town name omitted] and one of their players, a very respected official in Quebec - one of our best officials, went to the top of the face off circle in her end and cross checked one of our players in front of the net and sent her flying. That is the worst I have seen in a long time. She thought the woman taken an extra whack at her goalie. That was violent! And to have it come from an official who knows better! She should have been thrown out of the

game for hitting from behind and it should have been a five-minute penalty. That would have meant she would be suspended from all of her activities for a game and would have to sit out a game. If she was scheduled to ref she could not ref until she had sat her game suspension. That is about the most violent I have seen in awhile. On average you see pushing and shoving after the whistle but that is the extent of what we see on a regular basis, there is really not much more than that. [C1]

Another coach elaborated in great detail about violent behaviours in women's ice hockey, including their CEGEP league.

[Violence] in women's hockey? Woo lots. I mean violent stuff. You know hitting from behind, taking four or five strides. I remember at [team name omitted] one of our better players was going into the corner and this other girl came in and took four or five strides and took her into the boards with her head up like this, and she got a three game suspension. It was one of the most vicious... [C3]

Yeah most of the things I have seen are vicious. Someone taking a stick or a two-hander over someone's shoulder. There are some girls who just have tempers they cannot control. [C3]

Table 3

Occurrence of Properties Within Each Category by Coach

Category and Property	n	C 1	C 2	C 3	C 4
Coach and athlete characteristics	69	19	15	25	10
Athletes' psychological attributes	8	2	1	5	0
Athletes' social issues	8	2	2	4	0
Coaches' planning issues	29	12	7	4	6
Coaches' social issues	24	3	5	12	4
State of women's ice hockey	88	13	18	38	19
Connection with men's ice hockey	33	4	9	14	6
Difficulties in women's hockey	16	2	5	9	0
Influence of other leagues	22	5	1	14	2
Rules and officiating	17	2	3	1	11
Aggressive techniques	85	19	15	28	18
Athletes' physical attributes	33	9	10	5	9
Causes of aggression	15	5	1	7	2
Issues surrounding aggression	37	5	4	16	7
Totals	242	51	48	91	47

Nature of the Data – Athletes

Nine categories emerged from this analysis, and were labelled as: 1) athletic career, 2) athlete's social issues and roles, 3) rules and officiating, 4) practicing skills, 5) comparison with men's hockey, 6) body checking and contact, 7) verbal aggression, 8) physical aggression, and 9) reflective experiences in women's hockey. The frequency of the responses in each category can be seen in Table 4 at the end of this section.

The following section explains each of the nine categories, including similarities and differences in the athlete's responses. The quotes were assigned a number ranging from 1 to 15 in order to protect the identity of the athletes. Athletes 1 to 5 competed at the Cegep level, athletes 6 to 10 competed at the university level and athletes numbered 11 to 15 competed at the National level.

Athletic Career

Each athlete described her evolution in the sport of ice hockey in the introductory part of each focus group session. The athletes in our study had been playing hockey between 6 and 19 years, with an average of 9.8 years. Their background before women's hockey varied; three came from ringette, one figure skated, five initially played boys hockey and the remainder started out in girl's hockey. Three out of the five National level athletes had played with boys before starting in women's hockey.

Athletes' Social Issues and Roles

Issues related to the image of women's ice hockey, the relationships between players and opponents, and the roles that players had on the team were explored here. Athletes discussed the effects of lesbianism in women's hockey.

Us girls are seen most of the time as...people say: You play hockey? Are you a lesbian? [A2]

As well, they felt that most males were surprised to see female hockey players dressed up and looking feminine; they expected female hockey players to look masculine.

Sometimes you will be out at a bar and you are all dressed up and you are with the hockey girls and someone will ask if we play hockey. You guys are hockey players? We say yeah and they say: You guys do not look like hockey players! What does a hockey player look like? Like we are supposed to look a certain way or something. [A5]

The social aspect of the dressing room was expressed by two teams.

The social aspect of the dressing room is important to me. We are always kidding around there is always something going on in the dressing room. [A5] It helps the team play better. When you have better bonds within the team everybody is willing to play that much harder for someone else. [A4]

One of the best parts is the dressing room before a game. We tell jokes and hang out. [A8] It is the whole atmosphere...being part of a team. [A9]

Bonding, kidding around and a positive attitude emerged as being important to the athletes. Every player had a role on the team.

Rules and Officiating

All issues related to officiating, officials, and rules specific to women's ice hockey were included in this category. All three teams commented on the level of officiating in their league. Some referees were more lenient than others, some called things that others ignored and there was little solidarity among them. Perhaps, the lack of clarity of the body contact rule affected this.

- 1) The problem is that it is at the referee's discretion, more than anything. There is no concrete rule as to how much [contact] goes by. [A8]
- 2) The rules are not well defined. [A12]
- 3) They decide what they want to call and not. [A11]

Primarily, the female officials were problematic for the athletes. The athletes felt that the female officials did not have a feel for the game, could not skate well enough, and did not know the rules well enough.

I think that if you are not playing hockey anymore and you are officiating...I am just not sure if you are an older woman that you have played the level of hockey we are playing now. They do not have the speed to keep up or the knowledge of the game to officiate it properly. They all think that 10 years ago there was the level of hockey that there is now. [A8]

That is one of the biggest problems in women's hockey - having consistent referees. It's from one extreme to the other, and it is really hard to find someone in between and have a good game that has a bit of contact yet not too much. [A15]

Regardless of whether or not the female officials had played hockey, they had not played at the level of the women today. This put the female officials at a disadvantage while officiating. Sometimes the players thought the refs were biased because they had previously attended one of the schools they were officiating.

I wonder if they are biased sometimes, when we get these old girls that used to play for [university name]. We are playing in the final against [university name] and it makes me wonder. I know she is a ref and she is certified, but still... all the old players are sitting there. [A10]

The players knew that developing female officials was important and necessary, but not at the national level or in the CIS. The athletes felt officials should be developed at the regional level.

They are trying to develop women's officiating, but they put them in the national championships and CIS. It should be males. I know they have to develop them but they are not ready yet. They are screwing up our championships. They should develop them at the regional level, not national level. [A12]

The fact is that most of them do not play hockey before reffing. So some of them do not even know what the game is about and they're reffing! Some of them cannot even skate. [A13]

I do not think it is about girls or men because we have had some men that were not good as well, it is about having it or not. They should take the best referee and not care if she is a girl or not. [A11]

Practicing Skills

Skills worked on during practices and the differences in skill level between players were discussed. Practices were different for each level of competition. At the Cegep level, the athletes worked on skating and passing and gradually moved into playmaking and power plays as the season progressed. Practices consisted of a warm up, stretching, shot taking on an open net, passing drills, flow drills, break-ins, outs, and then power plays and penalty killing to finish the practice.

At the University level, the team worked on individual skills early in the week and moved into team concepts, as they neared competition. The intensity decreased as the week progressed. The team generally worked on skating skills at the end of the year. The skill level between players varied and there was a big difference between the best and worst player, but the team as a whole had a high skill level.

Most of the people are pretty intermingled in the middle, but if you took our worst player and our best player, there would be a very big difference. But most people are at a pretty high level. [A9]

At the National league level, the team worked on a lot of timing drills. They started some practices with a fun game. They worked on three on threes for reaction and quickness of passing. The team was always in constant movement (which helped skating) and practices were always different, always addressing passing, shooting, and thinking. Many two on one drills were executed and thinking fast was always necessary.

A good coach would be trying to do different things. We will not do shots only during a practice. We will have to work on our skating, our passes, our shots, and the way of thinking during the game. We work on a few different things so it is never the same at practice. [A11]

We are always in constant movement so you are practicing your skating at the same time as well you are working on something else. [A15]

Comparison with Men's Hockey

Physical characteristics, personality characteristics, emotional differences between men and women, and between men and women's hockey were discussed. Players mentioned several aspects were different from men's hockey. Speed, strength, size, testosterone, aggressiveness, and violence were more evident in men's hockey. The pace was faster and the intensity was higher.

I think it is slower. I think it is a different game. When guys play they have contact, a lot more speed, they are stronger, they are bigger, they hit each other, and they have hard shots. It is hard to say right now where we are. It is a building process, every year I see us getting better. And I see hockey getting better - all the teams that we played this year are all getting better. It is tough to compete with the guys. [A5]

There was less time to think and there was more contact in men's leagues. There were more shots and they were more powerful. Women had more time to focus on their passes, move the puck around and it was more about finesse.

When you go from playing women's to men's, you have so much less time to think about what you want to do. You have to know what you want to do before. If you have been playing men's and you go back to women's I find you have that extra second to make a decision. [A8]

Another difference between men and women was that women tended to react more to cheap shots and took them personally. Women got more emotional, especially in the team room or on the ice. Penalties for aggressiveness or violence seemed to be harsher for women's hockey than men's. If a woman fought then she would be more heavily penalized than a man.

I would be scared to get in really big trouble and take off my gloves. I think that in our league there is a really big risk. You do not get away with it at all you are going to be suspended for three games. [A5]

You would be suspended for sure. There is a big penalty for fighting in the women's game and not in the men's because we are not even allowed to body check – we would not be allowed to fight. [A4]

Another difference between men's and women's hockey was that women's hockey did not get enough or the same amount of respect and publicity that men's did. It was also mentioned that there might have been more tension on a women's team, because girls took things personally. Women were conscious of how they treated others because they never knew if they would be on a team with a former opponent. Some athletes mentioned that men fought and then would be best buddies afterwards.

I guess that it is different with us because we have been playing with girls on the Quebec team, the junior Canadian team or the Olympic team, or you having training camp together. So you meet them and then the next year you play against them. Because you know them in a way or you know that if you go higher in hockey you will have to play with them. And it is not the same thing with guys. [A11]

Coaches had to be more careful of how they treated female players. They had to make sure not to frustrate or make a player cry, because women tended to take things personally.

The coach has to be careful in the way he says things because girls are kind of emotional. With guys you can say: "do not do that!" and with girls you have to go around it and say it the right way so they do not get frustrated or cry. [A12]

Especially crying, I have seen a lot of coaches make girls cry, not on purpose just saying things and the girl just starts crying. [A13]

Body Checking and Contact

Discussions of the no body-checking rule in women's hockey and the level of contact in the sport were numerous. Opinions of what constituted contact and what should be tolerated in the sport were discussed. Some athletes felt that without body checking it was easier to concentrate on the task at hand without worrying about getting hit.

It is better for us [no body checking], maybe not for people in the stands, but it depends on what you want to see. Some people just want to see fighting so they do not care about our game. But the people who are coming to our game, I think they are happy with the way we are playing. [A11]

We are talking about finesse, and it is not because we are better than them, it is just because it is a different kind of game and we are not more talented than they are in puck handling and shooting - they are a lot better than us. [A11]

Some athletes felt that the absence of body checking improved the flow of the game and made it better hockey. This allowed smaller women to participate in the sport and there was more emphasis on finesse in the game.

It is not good for us because we are smaller. There are little girls like [name] that could not play if we had body checking. She would get killed. It leaves more of an opening because us two, we are pretty small and if it was body checking I could not play - I would be dead! [A13]

Some of the women felt that body checking would be great, as long as girls were being taught at the grass-roots level. Defensive players wanted contact to help them move players out, but forwards were more averse to the idea. The athletes felt that allowing body checking would eliminate a lot of unnecessary penalties. The athletes did not want to stop before they went into the boards for fear of hurting the other player or getting a penalty; they just wanted to play aggressively.

You should be able to go into the boards and get it, and you should not have to stop before you go in. I just think it would be better. If you are going in on defence, the defence can take the player, but they should be able to take the player, and you should be able to be fast enough to go around, that is just the way it should be. [A9]

Two of the women on the University team also played for Team Quebec. They said there was a lot more contact and body checking at the provincial level and the referees let it go. The athletes at the provincial level had to keep their head up for fear of being “smoked”. There were open ice hits and the level of play was higher, so even when a player would get hit, she wouldn’t always fall down like they did in the lower levels.

I liked when we played for team Quebec, it was in between body-checking and [university hockey] and it was perfect. It was at that perfect stage where you could hit because they had the skill level to not fall down. [A10]

People have their heads down and you see it all the time. I was smoked in team Quebec - it was really bad. Right then I decided to keep my head up all the time. Girls will kill you because it is full contact and open ice hits. [A9]

National level players said that there was much more contact in their league than when they played at Cegep. The general feel of the entire group was that more contact would be nice, but not allowing full body checking.

Verbal Aggression

Verbal interactions between players on opposing teams were topics of discussion. Reasons for and consequences of verbal aggression were discussed. Women verbally insulted each other on the ice to get an emotional reaction from their opponent and to get them off their game. Things such as: “you are ugly”, various swear words, bitch, slut, “you are a big girl aren’t you?” penis-check, and other insults that made fun of the way an opponent looked were used.

I verbally insult the other player just because I know that the girl is going to have a 2-minute penalty because she is going to hit me. There are some players where if you talk to them a lot they won’t be focused on the game at all, so they will be out of it. [A11]

A person should be able to take it if you are saying something like “you are ugly” or things like that. Girls do it all the time and they do not really mean it, because they do not even know what the girl looks like. [A9] But the thing is, girls take it personally, so it is fun. [A10]

I said something to a girl that was kind of mean. I said: You are a big girl aren’t you? And she was a big girl. Maybe I should not have said it since she was a big girl. If she has low self-esteem, that is not my problem. Girls say it all the time and if they are going to say something mean then I am going to say something back. If they cannot handle it, that is their problem. [A9]

Some players did this because it gave them an advantage. At the Cegep level, the athletes said it did not happen all that often, but most of it went on in the dressing room in between periods (they would bad-mouth the other team). “I walked by the other team’s dressing room and all you hear is number whatever is stupid and things like that”. [A4]

At University level, the athletes were verbally aggressive to increase their arousal and to frustrate the opponent. Racial slurs had been a problem in the past and athletes had been reprimanded for this.

There was one situation with a racial slur on another team and our team said something to our coach. The girl had to go to the Dean of her school and it was a major thing. [A9] She had to formally apologize to her school. [A8]

Athletes mentioned rivalries increased the chances of verbal aggression occurring.

I know people have made remarks about schools, such as our school is a better school education-wise. You must be at [university name], and we are at [university name], so we feel we are better and we can use better vocabulary. [A9]

[Coach name] likes this nice image of us being a classy school. I feel that I am from a classier school than they are, and I am better. Also, I can talk down to them. I do not have to use swear words, we just have a bitchy, snotty attitude. [A10]

Physical Aggression

Antecedents and consequences of physical aggression in women's hockey were discussed. Physical aggression included cheap shots, techniques, tactics and violence in the sport. At the Cegep level, the athletes felt that aggression was very important to achieve success in their sport. "You need a bit of aggression to struggle, to compete". [A5] "It is not dangerous aggression it is not to harm people. It is more being assertive, being able to play". [A4]

Some teams were more aggressive or cheaper than others. One player thought it could be attributed to watching the NHL. "In the NHL all you see is hitting so people think I play hockey and I can hit too. Some people do it that way". [A3]

Frequently, players were hit in the back of the calves where they had no protection. Goalies were always jabbing the opposing forwards in the back of the legs with their stick. Opponents would often jab them in the ribs while going into the boards or in face offs.

There is physical aggression in our sport. When you are on the boards, it is aggressive. You are not necessarily going to skate and hit a girl from far out, but when you are fighting for the puck in the corners it is aggressive. [A9]

When you go into the face-off, they have their stick like this, they have their hand in here, and they will slide their hand down and jab you right in the ribs. [A8]

Protecting the goalie was important; the defense pushed forwards out of the way or steered them out of the way physically by putting their stick between their legs.

I want my defencemen to push the other forwards away because they are right in my way and I want to see the puck. Sometimes you can see some cheap shots behind the legs. [A1-goalie] ...and behind the calves. [A15]

I know a lot of goalies punch the attacking forwards when they are too close to the net. They just hit them, behind the calves. [A11]

The forwards are trying to get in front of the net and screen the goalie and trying to go for deflections or go for rebounds. The defence are trying to keep the forwards out, so they have to be more aggressive, and a bit more physical. [A4]

Legal aggression was going hard after the puck and being competitive. Smaller players got away with a lot more than the defensive players and some felt this was unfair.

There is this perception that the defence has to be more aggressive, so if you are against someone who is small and you go into the corner, they fall, and you look like you hit them just because you are a lot bigger than they are. [A10]

I played defence my first two years, and I think its easier to get called because of the position you are playing. You're trying to defend your net, and you are trying to defend them from coming in, so it is easy to get called pulling someone down. But if you are a forward there is not very much that you can do. You are just going in, you want to score, and it is the defence that must stop you. [A9]

Spearing, crosschecking, kicking the feet from under their opponent, slashing, hitting from really low and butt ending during the face offs were the most prevalent in the game. Hitting somebody's elbow so that her shot was off as well as getting hit in the laces and in the heel happened frequently. The players did make cheap shots, but not to hurt the other person; they did it to stop them or to gain an advantage. As one athlete

said, "I have given cheap hits but I am not thinking that I am going to hurt the person I am just out there playing". [A9]

We get worked up – I will come off the ice and say "oh my god I cannot believe that girl just stabbed me in the side with her stick, she cannot get away with that." I think [our opponents] do it because they know that they are going to get you riled up. It is also an intimidation thing. They are trying to intimidate you. [A5]

Other people have hit them in the throat on purpose to hurt them. Getting hit from behind happened more near the end of the season, but they didn't think the intent was to injure. Accidents happened when they were playing the body.

If you are playing the body, play the body, and all of a sudden someone turns their back on you, you hit them from behind by accident. [A8]

In front of the net - you take people's skates out and things like that with your stick. You are not intentionally trying to hurt them you are just playing the game. [A9]

At the National level, all players felt aggression was a part of the game. There was no body checking allowed, but there was plenty of contact in their league. They said they had to be aggressive to be a part of the game. There was especially a lot of contact in front of the net and in the corners. The athletes mentioned that goalies were punching and hitting players in front of the net when the referee was not looking.

There are a lot of punches and sometimes when the ref is not looking, there is a lot of hitting and slashing as well. But it is not like fighting for two minutes where everybody stops. [A11]

Those little hits that the refs do not see, that they miss. That is usually what happens. [A15]

The players said that fighting was rare because they would get a penalty and it would stop play. However, there was a lot of lifting between the legs, lifting up or pulling down on the hips. Trying to throw the other player off balance was key to gaining possession of the puck. A good technique was to keep as low as they could with their stick forward and to keep moving all of the time.

My trick is to get as low as I can, into a squat position and really lean forward so that if they push me I will not fall over. My stick is right on the ice and if they unbalance me I still have my stick and I am low. [A12]

Being low and balanced on your skates is key and also moving around is important. The defence gets so tired if you are just skating around, coming in and out. [A15]

Six of the 15 subjects told stories of physical aggression they had seen.

I played in a tournament with younger girls this weekend, and sometimes they give really cheap shots. You are in front of the net and you are just moving her out of the way and turn back and get hit in the face! The girl was like 13 years old I was pretty surprised. [A13]

At our second national championships at [university name] we were playing the first game against [university name]. We could beat [opponent] and they knew they would not win and so they tried to injure us. Between each period all the girls were icing everywhere and the referee would not call anything. We got killed and we did not retaliate at all. There were cheap shots, very high sticks, slashing. We won the game for nothing because we lost our best player, due to a bad call from a linesman. [A12]

I was skating off and I saw these two hands in my face mask and I was pulled down. Then our arms were going nuts and all the guys were saying "two girls are fighting!" They had to separate us, and when I got in the dressing room I was so mad, I took her stuff and threw it in the garbage. [A10]

Players got frustrated with the refs when they did not see the other team performing illegal acts. Mostly, it was the cheap shots that angered and frustrated them. This caused them to retaliate against the other player, such as kick their feet or knock/push them over.

A lot of times we do things just to frustrate them. When you are giving them an extra push or shoving them, or saying something, lots of girls take things really personally and get really mad. [A9]

We come into the dressing room afterwards, and we laugh our heads off in between periods about what we have said to people and it is funny, the reactions that you get. [A10]

Some women said they would hit their opponent and risk getting a penalty if they were provoked enough. Taunting the opponents verbally or physically caused them to

become frustrated and helped gain an advantage. It became frustrating when their opponent was shadowing them. Sometimes the girls reacted to their frustration by hitting their stick against the boards, or slamming the door by the bench, or throwing the water bottles or anything else they could find. Players became frustrated with themselves, the referees, the other team and their own team when they were not playing well. One woman became so frustrated she punched her opponent in the helmet after her opponent had hit her twice, once in the neck.

In one game last year people said I had been in a fight. I got frustrated with a girl from the [city name] team. I think I might have hit her in the helmet once with my glove or something, and we both got thrown out. She hit me in the helmet, I hit her in the helmet and that was our big fight. It was just two seconds, and then the refs came, and we both went off, and then I was really frustrated. I think we were losing 6-1 that game and it was the 3rd period. The ref had been right there, and the girl had hit me with her stick and I went down a long the boards and then she hit me in the neck and the ref didn't call a thing! [A5]

If the team is dirty and if they are rubbing it in our faces then they are not a classy team. I get angrier with them. I rarely get mad at my own teammates. Actually I will get mad at myself before I get mad at my teammates for anything. [A15]

On one team, three out of the five athletes had concussions from playing hockey. They were concerned about sustaining more in hockey. Two were so serious they were throwing up.

I ran into somebody huge, she was twice my size and I was skating really fast. I basically just nailed her and I went flying. I think it was just an accident. [A7]

When I was younger I did not know about concussions. I remember getting hit and I always felt so sick and I started throwing up and I had no idea what was going on. [A9]

Reflective Experiences in Women's Hockey

Personal growth and life experiences attributed to involvement in women's hockey were discussed at the conclusion of the focus group sessions. All 15 athletes said that playing women's hockey was a good experience for them. Athletes at the Cegep

level learned to deal with others and their emotions. Positive outcomes included time management skills, the social aspect and communication skills.

Hockey has been a really good experience for me, especially the three years that I have had at [Cegep name]. I have really learned a lot about myself, and a lot about how to interact with people. I have learned a lot about the game skill-wise, about managing my time around hockey and school. Playing hockey has made me learn so much stuff about life. Personally, I have had some good coaches, and met a lot of girls from all over the place, from different places in Quebec. It has been a good experience overall. [A5]

Hockey has been good for me because hockey is a team sport. There are so many aspects, not only sport-wise, but also athletically intertwined with sports. Hockey helps me with my communication skills, understanding how to deal with people and deal with problems. I have met a lot of my friends there, so it has been a lot of fun. [A4]

The University level players felt that hockey kept them focused and from socializing too much. It helped release stress, increase discipline, and spend time with others with similar interests.

Hockey taught me so much more outside of the sport, like discipline. The hockey itself has been really great and the last two years I have learned a lot. The end of this year was a little bit crappy, because I was hurt for a lot of it, but I mean other than that it's been good. [A7]

Just having somewhere to go and not having any worries is nice. When you are on the ice you do not have to worry about the paper you have due the next day or the problems you are having with your boyfriend or anything like that. It is just somewhere to go and hang out with people who have the same interests as you and the same goals in terms of hockey, and it is just fun. We have had successful seasons the last few years too. [A8]

The National level athletes felt that as time passed they were not only more passionate about hockey but their life improved as well.

As I get older and as I go further in hockey I get more passionate about it and I do it because I love it. Maybe things got better in my life in general but I am also more passionate. [A12]

I think there is a positive effect playing any sport, but I think there is a difference in women's hockey compared to women's basketball for example. It has been a women's movement. In reality, women who are playing hockey are struggling for

their right or their position to play. It is a bit controversial too playing has been a struggle sometimes. [A15]

The participants felt that women's hockey was important because they could not always play with boys. Women's hockey opened a lot of doors for them.

Girl's hockey came to my rescue because when I was 17 or 18 I wanted to keep playing and be part of the sport I loved but with guys hockey it was difficult to continue. But with girls it opened a lot of doors for me and now and I have been through so many wonderful things. I think I have had more opportunities with girls than I could have had with guys. As [subject name] said, that has helped my passion for the game. [A11]

I have been playing with boy's teams all my life. Then two years ago I was cut from every team and I was thinking what is going on? I was not good enough to play with the boy's teams, it was time to switch to girls hockey. It has opened a lot of doors. I was on team Quebec and the National team and that was a good thing for me. [A14]

Table 4

Frequency of Athlete Responses from Focus Group Sessions

Theme	Responses	Frequency (%)
Athletic career	16	11.5
Athletes' social issues and roles	6	4.3
Rules and officiating	8	5.8
Practicing skills	12	8.6
Comparison with men's hockey	17	12.2
Body checking and contact	13	9.4
Verbal aggression	11	7.9
Physical aggression	46	33.1
Reflective experiences in women's hockey	10	7.2
Total	139	100

Summary of Results

Upon examination of the coach and athlete data it became evident that there were very clear similarities between the two sets of data. The coach properties and categories were comparable to the athlete categories. Three common themes emerged after combining these two sets of data into one. The labels of the three common themes were: the state of women's hockey, coach and athlete issues, and aggression in women's hockey. A visual representation of this analysis can be seen in Figure 1 at the end of this section. While all three themes are important for understanding this sport, the section on aggression in women's hockey was the largest, primarily because this was the focus of the research.

The state of women's hockey theme described issues and difficulties currently being experienced by those involved with the sport. The level of officiating was a point of contention, as there were not enough satisfactory female officials overseeing the women's games. The female officials did not have the speed, knowledge, or feel for the game that most other (male) officials possessed. Adequate preparation for the athletes was also discussed. Players were encouraged to participate in boy's hockey. This would allow the athletes to experience a faster pace, more intensity, more practice time and sometimes superior coaching. Due to the nature of the research, comparisons were made between men and women's hockey. Men's hockey was said to be faster, more aggressive, more competitive, and there was less emphasis on the finesse of the game. Finally, several difficulties in women's hockey were identified, including lack of financial support and ice time, and the inability to attract fans to competitions. It was

noted that women's hockey has gone through a "women's movement", where coaches and athletes continue to fight for their rights and accomplishments.

The coach and athlete issues theme described social and psychological characteristics of the coaches and athletes, as well as their coaching and athletic careers. The participants in the study were deeply involved with the sport for many years. The coaches had all been coaching women's hockey between 6 and 30 years, and with an average of 19 years. The athletes had been participating in the sport between 6 and 19 years, with an average of 9.8 years. Coaches were concerned with developing life skills of the athletes and athletes enjoyed the social bonding in the dressing room. Presenting a classy image of the team and for the sport as a whole was deemed important.

All our participants felt that aggression was necessary to compete and to achieve success at a high level of play. Female hockey players are stronger and faster, which increases the speed and aggressiveness of the sport. However, in some instances it was beneficial to be small, as smaller players got away with more illegal behaviour. Body checking and contact were not well defined or understood, and as such, contributed to difficulties with officiating and differences in aggression demonstrated by the players. Most players and coaches felt there should be more contact permitted in the game in order to improve the flow of the game and fan attraction. However, eliminating body checking allowed smaller players to participate in the sport and kept the focus on finesse. Verbal aggression was present, although there were differing opinions with regards to its prevalence. Most players used it to psychologically intimidate their opponents. Some players used it to increase their own arousal and to improve their game. Physical aggression was present in women's hockey, such as hitting from behind, spearing, hitting

on the calves, jabbing in the ribs, and hitting on top of the laces. Techniques such as staying low, skating fast, keeping the stick on the ice, and remaining balanced were advantageous. Tactics such as butt ending in face offs, lifting or flipping sticks and funnelling opponents into the boards were discussed. Although some aggression ended in injury, most players claimed their intentions were instrumental and not hostile. The primary reinforcement for instrumental aggression is a reward, such as praise or victory, whereas the primary reinforcement for hostile behaviour is seeing pain or injury inflicted on an opponent. In addition to the aggression, several instances of violence were mentioned. These included fist fights, slashing, kneeing in the stomach, and checking from behind.

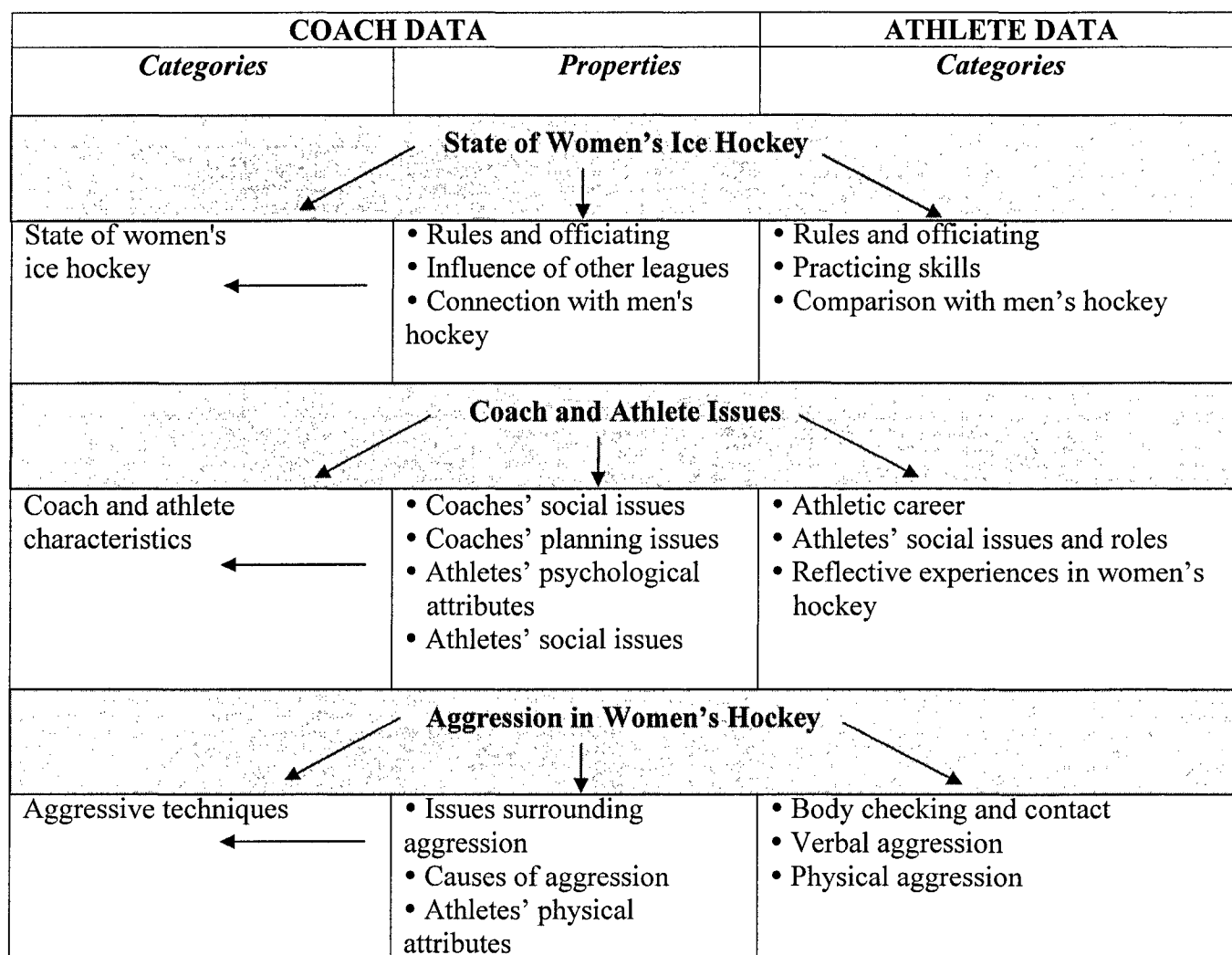


Figure 1. Visual representation of coach and athlete data.

Shaded areas indicate the title of the common themes that emerged from coach and athlete data analysis.

CHAPTER 5

DISCUSSION

This chapter evaluates and interprets the results of the study. The objective of this research was to explore elite women's ice hockey. This included the lives of those involved with the sport (coaches and athletes) and topics that were unique to women's hockey. It was important to attain a general understanding of the sport before exploring the topic of aggression. Three themes emerged from the analysis of the data; they were labeled as the state of women's hockey, coach and athlete issues, and aggression in women's hockey. Each of the three themes is discussed with regards to previous literature in the area. The final section of this chapter includes a summary of the current research study, as well as conclusions, and recommendations for future research.

The State of Women's Hockey

The analysis of data within this higher-order theme revealed a number of common topics, including the level of officiating, encouragement to play boys' hockey, financial difficulties, securing adequate ice time, and the daunting task of attracting fans to the sport. As well, those involved felt the sport could be likened to a women's movement, as accepted practices in men's hockey had to be fought for in the women's game.

There have been few studies in the area of women's ice hockey and the topics discussed in the current study, while touched upon, were never the focus of previous research. Officiating (Theberge, 1997), playing boys' hockey (Theberge, 1995a), financial difficulties (Fabrizio-Pelak, 2002; Williams, 1995), securing ice time (Fabrizio-Pelak, 2002; Theberge, 1995a; Williams, 1995), and attracting fans (Theberge, 1995a,

1997) have all been addressed in previous studies. Comparisons between the results of the current analysis and the aforementioned studies will be discussed.

Officiating

The quality of officiating in women's hockey was a primary concern for both the coaches and athletes. Both groups felt there were not enough skilled female officials involved with the sport, and that the few who were participating were not as skilled as their male counterparts. As such, most felt that it would be advantageous to include more male officials. Theberge's (1997) work on physicality and the production of gender in women's ice hockey explored this topic. Theberge noted that one of the main concerns in women's hockey was that there were not enough female officials. The shortage of officials made it necessary to employ males. The problem with using male officials was their unfamiliarity with the differences between men and women's hockey. This unfamiliarity in officiating resulted in frustration for both the players and coaches. Theberge determined that the problem was not necessarily with unskilled female officials but with unsatisfactory male officials.

These results were similar to the present study in that there were not enough female officials to choose from. However, the coaches' and athletes' feelings in Theberge's (1997) study were different from the sample in the current study as it was discovered here that the male officials were greatly appreciated and even necessary to the sport. The participants in the current study noted that frustration was caused by female officials who made unnecessary calls concerning contact and did not have a "feel" for the game. Theberge noted that female officials were less familiar with the body checking aspect of the sport, making it difficult for them to officiate. It was suggested in

Theberge's study that keeping contact out of the game would improve the level of officiating and eliminate confusion for all officials. Furthermore, it was noted that a reexamination of the rules and extra training for female officials were necessary for the development of the game.

Playing Boy's Hockey

The number of young athletes that join the sport every year affects the development of women's hockey. Although large numbers of girls are flocking to the sport, many continue to play in boy's leagues. Many of our athletes played boy's hockey as long as they were able. In addition, several coaches encouraged their female athletes to do the same. This was supported in the literature as Theberge (1997) noted "across the country, and especially in areas where girls' programs are not yet well established, untold numbers of girls are playing with boys, particularly at younger ages" (p. 37).

Playing boys hockey would provide the athletes with superior training, coaching and level of competition. This idea was supported in the literature regarding Manon Rheaume and her struggle for legitimacy in women's hockey (Theberge, 1995b). Rheaume grew up playing boys' hockey, which led to her becoming the first ever female to compete in a men's professional hockey league. Although Rheaume had made a name for herself in the media by participating in men's hockey, it was not advantageous for the overall development of women's hockey (Theberge, 1995b). One athlete discussed her feelings about Manon's participation in men's hockey.

It is not a girl excelling in and helping out women's hockey, it is a girl playing in a guy's sport. And I do not think this is good publicity at all for the female program because (especially in my community) this year we had about seven girls that would not play with the female program, they wanted to play with the boys because they said they would play better hockey.... (Theberge, p. 40).

Interestingly, similar sentiments remain after seven years. Coaches and parents continue to encourage young female athletes to participate in boys' hockey. The hope is that the female players would be placed in a superior training environment. The belief is that if girls could survive in boys' hockey, then these skills would translate to excellence in women's hockey. Although men's hockey is more competitive, includes a more aggressive atmosphere, and may be beneficial to the development of the individual athlete, it may not be beneficial to the development of women's hockey.

Financial Difficulties and Ice Time

Financial difficulties and securing ice time were also discussed in previous research (Fabrizio-Pelak, 2002; Theberge, 1995b; Williams, 1995). Fabrizio-Pelak described the struggles and unfairness experienced by a women's hockey team at a large mid-western university in the United States. Members of this team were constantly fighting for equal treatment at their home rink, including ice time, finances, and equipment. The team also faced social injustices, such as prejudice and taunting. Theberge supported these findings as she noted that ice time is still dominated by boys' and men's leagues, in addition to media coverage that focuses almost exclusively on men's hockey. Williams also substantiated this idea when she discussed a city hall meeting in Toronto, Canada during which the Parks and Recreation Department made demands that the city owned rinks gave female hockey players equal ice time.

Although women's hockey has survived since the turn of the century, it has done so with little help from those who support the men's game. In spite of the surge of participants in women's ice hockey, women and girls were still being given fewer resources and programs, inferior facilities for competitions, and inconvenient or

unsuitable event times (Williams, 1995). Williams noted that while women's hockey has been overlooked in the media, the lack of equality was most evident regarding allocation of ice time.

Attracting Fans

Attracting fans to competitions was another difficulty expressed by participants in our research and in previous studies. Coaches and athletes discussed the lack of fans at the games, including National competitions. Even the best female hockey teams in Canada had a difficult time attracting fans. Players felt that more advertising and media attention would be beneficial in improving the visibility and attractiveness of the sport. Theberge (1995b) noted that despite the success of the Canadian National Team and the increasing numbers of programs and participants, women's hockey still suffered from an absence of public recognition and media attention.

As the coaches and athletes fight for equality in the sport, some have drawn parallels to a women's movement. With the inception of Title IX in 1972, sporting opportunities for girls and women increased dramatically in North America (Coakley, 1994; Fabrizio-Pelak, 2002). Female athletes are no longer satisfied with sitting on the sidelines and are now challenging barriers in male dominated sports. Women and girls entrance into ice hockey illustrates these advancements (Fabrizio-Pelak, 2002). The enrollment in women's ice hockey has increased over 600% (from 8,146 to 51,105 participants) between 1990 and 2000 (Canadian Hockey, 2002). Pleas for better training of players, coaches, and officials, as well as improved material conditions, including medical support, are an important aspect of the struggle within women's hockey to gain

legitimacy (Theberge, 1997). The results of the current analysis suggest that the struggle for equality of women's hockey is far from complete.

Coach and Athlete Issues

Several common topics emerged when the coaches and athletes spoke about themselves and their relationships with each other. The athletes discussed social aspects of participating in women's hockey and reflected on individual past experiences. Both the athletes and coaches felt that the manner in which the coaches composed themselves was important.

As previously noted, there have been only a few studies conducted with female ice hockey players. However, the topics mentioned above have been discussed in previous research, including social bonding (Boyd, Trudel, & Donohue, 1997; Theberge, 1995a), reflective experiences (Theberge, 1997), and learning opportunities in hockey (Boyd, et al., 1997). Coach composure was mentioned briefly in the literature (Boyd, et al., 1997); however, literature from other sports can be compared to the current results (Coakley, 1994; Silva & Stevens, 2002).

Social Bonding

The athletes expressed the importance of social bonding in the dressing room. Joking, talking, and spending time together as a team were cited as sources of enjoyment for the athletes.

The social aspect of the dressing room is important to me. We are always kidding around there is always something going on in the dressing room. [A5] It helps the team play better. When you have better bonds within the team everybody is willing to play that much harder for someone else. [A4]

These sentiments were supported in previous research in women's hockey (Boyd, Trudel, & Donohue, 1997; Theberge, 1995a). Boyd and colleagues (1997) asked parents,

coaches and athletes various questions about what they thought the players liked and disliked about women's hockey. The participants highlighted the social aspect of a woman's hockey team. Meeting new people and doing things with friends were perceived by participants to be important factors for the athletes' enjoyment. One athlete was quoted as saying, "The dressing room atmosphere, the socializing in the dressing room is probably, I think, is more important with the girls once they join than it is with the guys. The friendships that are developed over the course of time" (Boyd, et. al., p. 41). The older athletes in the current study (between ages 18 and 24) continue to seek and enjoy the social bonding that takes place on the hockey team. The athletes in Boyd and colleagues' study were between the ages of 12 and 15, therefore suggesting that social bonding was, and continues to be, important to the athletes throughout their careers.

Theberge (1995a) supplements the understanding of women's ice hockey culture with research on an elite Canadian woman's hockey team. It was suggested that a shared identity as female hockey players and their commitment to the sport were central to building a strong community of women from diverse backgrounds and social standing. The athletes in the current study attributed personal growth and positive life experiences to involvement in women's hockey. All 15 athletes said that playing women's hockey was a good experience for them. Positive outcomes included making friends, and improved time management and communication skills. One athlete described her experience,

Hockey has been good for me because hockey is a team sport. There are so many aspects, not only sport-wise, but also athletically intertwined with sports. Hockey helps me with my communication skills, understanding how to deal with people

and deal with problems. I've met a lot of my friends there, so it has been a lot of fun. [A4]

Boyd and colleagues (1997) found similar results when studying why young players loved their sport so much. The importance of social interactions with friends and love of the sport were expressed frequently by the players. One of their athletes said,

It is a big part of who you are, and some people know you by that, and they know what kind of person you are. It just becomes so important to you, you love the sport so much. This is just a great place to be (Boyd et. al., p.40).

Coach Composure

In addition to the relationships among the players on the team, the relationship between coach and athlete was also discussed in the current study. Both coaches and athletes mentioned the significance of treating female athletes with sensitivity and respect. Coaches had to be cognisant not to frustrate or upset the players. Two athletes gave their opinions on the coach-athlete relationship.

The coach has to be careful in the way he says things because girls are kind of emotional. With guys you can say: "don't do that!" and with girls you have to go around it and say it the right way so they don't get frustrated or cry. [A12]

Especially crying, I have seen a lot of coaches make girls cry, not on purpose just saying things and the girl just starts crying. [A13]

Anson Dorrance (1996), who is known for his success and unique philosophy in leading, motivating and coaching female athletes, discussed these issues in great length. Dorrance had previously acted as the head coach for the men's soccer team at his university and believed without a doubt that men and women need to be coached differently. The need to create a team community is more important when coaching female athletes because it encourages a situation in which athletes feel they are valued equally. Communication between player and coach also differs between men and

women. Male athletes will listen to what a coach says and interpret his or her words, whereas female athletes will watch the coaches' body language, listen for tone of voice, and deduce the message without listening to the words the coach is speaking (Dorrance, 1996). Coaches of female athletes should adjust their communication style to portray the desired message to the female athlete. This was supported in our research as one coach said,

There is one coach in our league with a lot of attitude and bad language. And often we will get them at the college level, the men who have never coached women before. The first year they are sometimes a little too aggressive, and now they have backed off and they understand the philosophy of girl's hockey and college hockey and they are much better. [C3]

Male and female athletes react differently to criticism. When a coach is criticizing the team for a poor performance, male athletes will externalize the criticism whereas female athletes will take the exact words spoken by the coach and internalize them (Dorrance, 1996). This creates a situation where the athlete assumes that every criticism or negative reaction is directed only at her, and she tends to take more than her share of the blame for mistakes (Dorrance, 1996). Another one of our coaches supported this argument,

If I ever blew up at an individual player it would affect 20 players. I think in the men's game if you go in and blow up at a player, the 19 other guys do not really care about that guy. So I think that that is a big thing. I have really learned that coaching women, you should criticize in private and praise in public. And I have learned that if you criticize an athlete on her play in front of other players it is the others it seems to affect more than the player you were talking to. [C2]

Boyd and colleagues (1997) found that instruction, positive feedback, and corrective feedback were things that coaches could do to ensure athletes enjoyment and satisfaction. The coaches and athletes both described how they felt athletes enjoyed

receiving positive feedback from coaches. One of their subjects expressed her dislike of negative feedback,

[The coach] can not just tell you negative things all the time or else you have no confidence and you just, you go out there and you never want to touch the puck because you are always afraid you're going to do something wrong (Boyd, et. al., p.45).

In addition to keeping anger and negative attitudes in check, the coaches in the current study felt as though they had another responsibility while coaching young athletes. Coaches expressed the desire to help the athletes develop some solid life skills while participating in their sport. One coach elaborated on why he thought it was important to develop skills other than hockey,

99.9% of the players will not earn a living playing hockey. The best they can do is develop some really good life skills while they are playing that they can use in other situations. I think that is a big part in playing a team sport. [C1]

Aggression in Women's Hockey

This final theme was comprised of several common topics discussed by both coaches and athletes. The increasing size and strength of the female athlete, the use of body checking, and verbal aggression were discussed. Frustration felt and exhibited by athletes, the use of hostile and instrumental aggression, the role of the coach in encouraging aggression, and retaliation against opponents were topics of discussion. This section will be the longest as it was the primary focus of the research.

There have not been any specific studies on aggression in women's ice hockey, although two studies have discussed the physicality of the game or body checking (Boyd, et. al., 1997; Theberge, 1997), and one examined aggression in female field hockey players (Kerr & Kelly, 1982). In spite of the limited research concerning women and aggression in contact sport, there is an abundance concerning aggression in men's hockey

(e.g., Brice, 1990; McGuire, 1990; Sheldon & Aimar, 2001; Trudel, Guertin, Bernard, Boileau, & Marcotte, 1991; Widmeyer, Bray, Dorsch, & McGuire, 2002; Widmeyer & McGuire, 1993; Vaz, 1972). This research will help us to further explore our topic.

Information about violence in female contact sports is also limited. Smith (1983) reviewed research on this topic and concluded that women's participation in contact sports was steadily increasing, and that women in those sports engaged in aggressive behaviours. In spite of these observations, Smith was both unable to conclude if aggression and violence was increasing over time, and what the possible causes of this behaviour were. One possibility was that the improved physical condition of female athletes today may impact the amount of aggression or physicality in the sport.

Size and Strength

Over the last 25 years women have become more competitive, relying increasingly on power and performance to succeed. With increased competition the stakes associated with success have risen greatly (Coakley, 1998). The demand for power and performance has led female athletes to concentrate on muscle development and weight training. The advantages of physical size and strength in women's hockey are evident, as noted by one of the coaches in the current study,

The bigger player in the women's game who is in shape and has size and strength has a big advantage. You just do not see a lot of big strong physical players in the game. They can really separate themselves from the puck and the person who is trying to take the puck from them. Their puck protection is usually much stronger and they have a stronger reach so it is a little more difficult to reach the puck. Any battles along the boards or in the corners against someone who might not be as strong as them or big as them – they will win. Battles in front of the net, if you have a big defenseman who is battling against a smaller, shorter forward distinctly has an advantage. So it is not only strength, but it is reach, and overall body mass - if you lean on someone they'll know you are leaning on them. [C2]

Women's hockey coaches understand the importance of physical training and are

now encouraging their athletes to weight train on a regular basis. In addition, muscle development has become more widely accepted as a desirable attribute among women of all ages, and many female athletes are concentrating on developing their bodies (Coakley, 1998). As skilled athletes, women may see themselves as physically stronger, more competent, and more in control of their lives (Coakley, 1994). Theberge (1997) noted that a coach she spoke with said, “players today are bigger, stronger, and more skilled, such that at higher levels, they are routinely pushing the limits of rules on contact” (p.76).

Body Checking and Contact

The expression of physicality in women’s ice hockey is determined by the rules and regulations that govern the sport. The rules of play in men’s hockey and women’s hockey are essentially the same, with the exception of body checking. The rules in women’s hockey prohibit intentional body checking, or intentional efforts to hit or take out opponents (Theberge, 1997). Despite these rules, there is still a considerable amount of contact during a game. When asked about the inclusion of body checking, players and coaches in the current study felt that the lack of body checking made it easier to concentrate on a specific task without worrying about getting hit.

It is better for us [no body checking], maybe not for people in the stands, but it depends on what you want to see. Some people just want to see fighting so they do not care about our game. But the people who are coming to our game, I think they are happy with the way we are playing. [A11]

Some athletes felt that the absence of body checking improved the flow of the game and improved the level of play. This allowed smaller women to participate in the sport and there was more emphasis on finesse in the game.

It is not good for us because we are smaller. There are little girls like [name] that could not play if we had body checking. She would get killed. It leaves more of an

opening because us two, we are pretty small and if it was body checking I could not play - I would be dead! [A13]

Theberge (1997) found mixed responses when she asked coaches, athletes, and parents about the inclusion of body checking. Theberge observed that there were advantages to both types of hockey (checking and non-checking). While most athletes said the speed and playmaking made the sport attractive to fans, a number of these players also expressed a sense of pleasure and accomplishment in playing the full-contact game. It was satisfying to receive and take a body check well. Some of the athletes interviewed in the current study also felt that it would be nice to have a balance between checking and non-checking, where participants would not have to avoid playing the body for fear of being penalized.

You should be able to go into the boards and get it, and you should not have to stop before you go in. I just think it would be better. If you are going in on defence, the defence can take the player, but they should be able to take the player, and you should be able to be fast enough to go around, that is just the way it should be. [A9]

The coaches interviewed in Theberge's (1997) study expressed a range of views. Some indicated that the way the game is played right now is ideal while others felt that body checking is a skill that can and should be taught and used effectively (Theberge, 1997). Would the inclusion of body checking in women's hockey lead to increased amounts of aggression and or violence? Several people noted that the women's game already has severe penalties (usually suspension for several games) that limit the incidence of dirty play. They felt that as long as those rules were in place, the introduction of body checking would not lead to violence or unnecessary aggression in the sport.

Boyd and colleagues (1997) found that young female athletes (12-15 years of age) enjoyed the physical aspect of the game, including body checking. Skating, shooting slap shots, making saves, aggressive play and body checking were cited as the players' favourite things about competing in the sport. Although the coaches in the current study did not work with athletes under the age of 17, the attitudes of their players appear to be the same as those of the 12 to 15 years olds. This suggests that the acceptance of aggression in women's ice hockey begins with youth hockey experiences. Perhaps as female ice hockey player's progress to higher levels of competition, they exhibit a greater willingness to engage in aggressive behaviour. Similar results have been documented in previous research on elite female field hockey players (Kerr & Kelly, 1982), as well as research on male hockey players (Smith, 1975).

Verbal Aggression and Frustration

Aggressive verbal interactions between players on opposing teams were found in the current study. Reasons for, and consequences of, verbal aggression were numerous. Women insulted each other on the ice to elicit a negative emotional response from their opponent in an attempt to break their concentration. Some players were verbally aggressive because they perceived an advantage over their opponent by increasing the arousal and frustration of the opposing player. Verbal aggression was most prevalent when two rival teams were competing.

I verbally insult the other player just because I know that the girl is going to have a 2-minute penalty because she is going to hit me. There are some players where if you talk to them a lot they will not be focused on the game at all, so they will be out of it. [A11]

Although verbal aggression or "trash talking" is prevalent in sport, there is limited research on this topic specific to ice hockey. McGuire (1990) examined the antecedents

of aggressive behaviour occurring in professional men's ice hockey. It was discovered that verbal aggression was present and occurred primarily late in a contest. It was concluded that either a build up of frustration and animosities among players as the game proceeds, or the cumulative effect of a number of incidents of verbal assault, could lead to a higher amount of aggression.

Despite the limited research on verbal aggression in hockey it is possible to discuss the topic while associating it with another behaviour expressed in hockey: frustration. Frustration is a feeling of helplessness that occurs internally when one's goal is prevented (Widmeyer et al., 2002). Several investigations have been concerned with the competitive frustration-aggression link in sport (Brice, 1990; Leith, 1977; McGuire, 1990). The athletes in the current study discussed instances in which they were verbally insulted, causing them to feel frustrated. They also considered occasions when they used this tactic against the opponent. "A lot of times we do things just to frustrate them. When you are giving them an extra push or shoving them, or saying something, lots of girls take things really personally and get really mad". [A9]

Some women said they would risk a penalty by hitting their opponent if they were provoked enough. Verbal and physical taunting frustrated the athletes, helping their opponents gain an advantage. Sometimes the athletes reacted to their frustration by hitting their stick against the boards, slamming the door by the bench, or throwing the water bottles or other objects.

In one game last year people said I had been in a fight. I got frustrated with a girl from the [city name] team. I think I might have hit her in the helmet once with my glove or something, and we both got thrown out. She hit me in the helmet, I hit her in the helmet and that was our big fight. It was just two seconds, and then the refs came, and we both went off, and then I was really frustrated. I think we were losing 6-1 that game and it was the 3rd period. The ref had been right there, and the

girl had hit me with her stick and I went down a long the boards and then she hit me in the neck and the ref did not call a thing! [A5]

The frustration-aggression hypothesis outlined by Dollard, Doob, Miller, Mowrer, and Sears (1939) states that when one is thwarted in an attempt to achieve a goal, frustration will occur, which will then result in aggressive behaviour. In sports, frustration is often a result of an unsuccessful event or undesirable outcome. Therefore, poor performance may precede aggression (Sheldon & Aimar, 2001). This frustration-aggression sequence could be seen in the account provided by the athlete above. The athlete felt that the official was missing some key penalties and this was impeding her goal (a penalty for the opposing player). Losing late in a game has also been linked to aggressive behaviour (McGuire, 1990), and teams losing by three or more goals were more aggressive than those losing by fewer numbers of goals.

Brice (1990) identified the athlete's three greatest sources of frustration. Players identified bad calls by the referees and not "getting the breaks" as the second and third greatest sources of frustration respectively. The single greatest source of frustration however was the player's own poor play. This was substantiated in our results. As one athlete explained,

I have been frustrated when our team has lost control of the game. For example, if a team is better than us and we can not seem to score and we know we are not going to win, then I just get frustrated and I will be a bit more aggressive, I will be a bit dirtier in the corners or whatever. I am definitely like that when our team has lost control. [A15]

It should be noted that frustration does not always result in aggressive behaviour in sport. Athletes may instead experience embarrassment, anxiety, or dejection (Luxbacher, 1986). This was also evident in our study, as we found that not all of the athletes felt

they became more aggressive when frustrated. Only a few athletes tended to lose their cool and become aggressive when an opponent impeded their goal.

For sure I get more aggressive when I am frustrated but never to the point of losing control. I will be more physical and I will be more frustrated at myself. I will not talk to anybody, and I will just sit on the bench and focus on myself, I never really lose control. [A14]

Physical Aggression

The accounts of physical aggression described by the coaches and athletes in the current study centred around two types of aggression: instrumental and hostile.

Instrumental aggression, based on intent to injure, is calculated behaviour (Luxbacher, 1986). The primary reason for inflicting injury is to attain a goal or reward that results from the injury, such as spearing an opponent so they lose the puck. Hostile aggression is exhibited when the primary goal is to injure an opponent. The intent is to inflict pain regardless of the outcome, and the outburst is often triggered by anger (Luxbacher, 1986). Although hostile aggression was present in women's ice hockey, instrumental aggression was much more common.

In addition to instrumental aggression, just a simple increase in intensity could be interpreted as aggressive play.

There is physical aggression in our sport. When you are on the boards, it is aggressive. You are not necessarily going to skate and hit a girl from far out, but when you are fighting for the puck in the corners it is aggressive. [A9]

Boyd and colleagues (1997) found similar results, noting that playing aggressively and body checking were two of the most popular aspects of playing hockey. One parent of a female hockey player said,

Hockey is a different type of sport in terms of the intensity of the physical part of it, and if there is any girls on the ice right now who do not really enjoy that really

intense focus and just going full out and coming back sweaty and stinky and fulfilled to some extent...(Boyd, et. al., p. 43).

Role of the Coach

As discussed in the second chapter, two studies have focused exclusively on the role of the coach in encouraging aggressive behaviours in men's hockey. Trudel, Guertin, Bernard, Boileau, and Marcotte (1991) found that coaches often exhorted their players to intensify their physical contacts (legal body checking), but more often encouraged them to control themselves and avoid penalties. These results are consistent with the current study, as coaches did not encourage players to engage in aggressive actions, and reprimanded them if they did. Coaches encouraged extra intensity as the situation warranted, but never asked for illegal aggression specifically. As two athletes described:

If you are playing the body, play the body, and all of a sudden someone turns their back on you, you hit them from behind by accident. [A8]

In front of the net - you take people's skates out and things like that with your stick. You are not intentionally trying to hurt them you are just playing the game. [A9]

Athletes may confuse intensity and aggression at times. There is a fine line between acting with intensity and acting with aggression, especially in a fast-paced sport like hockey. Although there is no legal body checking permitted in women's hockey, coaches encourage their players to "go hard" into the corners and play the body as closely as possible. Coaches may be suggesting that players use instrumental techniques or tactics to draw penalties, but they do not ask the players to inflict pain on the opponents. Can this aggression lead women's ice hockey to become more like men's hockey? According to some researchers (Smith, 1983; Vaz, 1982), young male hockey players were socialized into a hockey culture that demanded and rewarded the use of aggression

in order to progress through the minor league hockey system. The participants in the current study implied that the culture of elite women's ice hockey is changing to one that rewards a stronger, more aggressive player. Vaz (1972) found that coaches encouraged physically aggressive play and that fighting techniques were taught. However, in women's ice hockey, the penalties for fighting are so extreme that this is not the case. Although women's hockey has evolved and coaches are asking athletes to play with increased intensity, it is difficult to say with certainty if the level of aggression women's game will ever come close to the level of aggression in the men's game.

Attack from Others

Attack from another person has been cited as the foremost cause of aggression in men's ice hockey (Widmeyer & McGuire, 1993). Brice (1990) asked male ice hockey players open-ended questions as to why they wanted to injure an opposing player. Athletes indicated (83%) that it was because an opposing player had either injured or attempted to injure them or a teammate. This finding was congruent with the current study as athletes described instances in which they would or have acted aggressively in the past. A number of accounts of aggression were in retaliation to an opposing player.

As a forward for instance, when you are in front of the net the defence is cross checking you in the back but they're not suppose to get away with that. It is annoying after awhile, and once in a while you just want to kick their skate. Once in a while, I will swing my foot and knock them over. [A4]

I do not really get aggressive until someone is really cheap with me and that is when I will start to get mad. I do not mind clean contact or accidents or being rough or strong around the puck. But when you start using your stick or you are tripping people from behind, that is what starts to get me upset. Especially when the refs do not do anything about it. [A5]

The current study found that female hockey players retaliated when provoked, either verbally or physically. The athletes felt the need to stand up for each other if one of their teammates was being “picked on” or attacked by an opponent.

Social Learning

Social learning theory explained that people aggressed because they learned it was profitable. This was learned by individuals who had been directly rewarded for certain behaviours or from watching others be rewarded for similar actions. Previous investigations on this theory have been conducted with male ice hockey players (e.g., Russell, 1979; Smith, 1975, 1979; Vaz, 1982).

Smith (1975) proposed the legitimization of violence theory, which held that violence in any sport, whether legal or illegal, always had a certain level of acceptance in our society. Reinforcement of aggressive and violent behaviours by teammates, peers, and parents seemed to influence the actions of male hockey players. It would be difficult to test this theory in women’s hockey, as the expectations for aggression are different for men and women. Until recently, women have been seen as incapable of aggression and violence in sport. Women who have become overly aggressive while competing have been seen as “different” and categorized into an undeserving stereotype. In spite of this, women today seem to be breaking down those stereotypes and women who are not afraid to be physical are looked at favourably.

A recent incident involving a 15-year-old female high school ice hockey player in Toronto is an example of how women in sport are evolving. In this incident, a hockey player was charged with assault after she repeatedly punched an opponent in the head, causing her to suffer whiplash and bruises to her neck (McGregor, 2002). While the

executive director of the women's hockey association was quoted as saying, "We don't believe that (the words) violence and hockey even belong in the same breath," this incident does reveal the behavioural changes in competitive women's ice hockey (McGregor, 2002), and may foreshadow increased episodes of this sort.

Summary of the Current Research Study

Ice hockey is a large part of North American culture and involves people of all ages and socio-economic backgrounds. Many people are deeply interested in the continuance of popularity of the sport. However, along with all the fun and healthy competition comes a rising amount of aggression and violence. In the past three decades, there has been a substantial amount of research and public debate regarding violence in men's ice hockey. In particular, research has included the causes, explanations of and potential ramifications of violence and aggression in men's ice hockey. Due to the increased interest and participation in women's hockey, there have been a few recent studies examining women's involvement in the sport. However, no study has explicitly focused on the topic of aggressive behaviours in elite women's ice hockey. The purpose of this study was to examine elite women's ice hockey, with particular emphasis on various aspects of aggression associated with the sport. A qualitative research methodology was employed in the current study. Participants included four elite coaches of women's ice hockey teams along with 15 elite hockey players. Each coach was interviewed using an in-depth open-ended format. The interviews were transcribed verbatim and were inductively analyzed following the procedures outlined by Côté and colleagues (1995). Each of the players participated in one of three focus group interview sessions. The focus group sessions were transcribed verbatim and analyzed following the

procedures outlined by Morgan and Krueger (1998). Three higher-order themes were developed to provide an overview of the current state of elite women's ice hockey; they were called, the state of women's ice hockey, coach and athlete issues, and aggression in women's hockey. The data focused on the lives of those involved with the sport (coaches and athletes) and topics that were unique to women's ice hockey, including aggression in the sport. Results focused on reasons for acting aggressively and how the athletes expressed it.

Conclusions

- The level of officiating was a point of contention, as there were not enough satisfactory female officials overseeing the women's games. The female officials did not have the speed, knowledge, or feel for the game that most other (male) officials possessed.
- Several difficulties in women's hockey were identified, including lack of financial support and ice time, and the inability to attract fans to competitions. It was noted that women's hockey has gone through a "women's movement", where coaches and athletes continue to fight for their rights and accomplishments.
- Coaches were concerned with developing life skills of the athletes and athletes enjoyed the social bonding in the dressing room. Presenting a classy image of the team and for the sport as a whole was deemed important.
- Verbal aggression was present and most players used it to psychologically intimidate their opponents. Some players used it to increase their own arousal and to improve their game.

- Physical aggression was present, such as hitting from behind, spearing, hitting on the calves, jabbing in the ribs, and hitting on top of the laces.
- Although some aggression ended in injury, most players claimed their intentions were instrumental and not hostile.
- Some instances of violence were mentioned, such as fist fights, slashing, kneeling in the stomach, and checking from behind.

Recommendations for Future Research

There are a number of future directions research could take. As this was an exploratory study on aggression in women's ice hockey, future studies could include a more in depth analysis of the topic. The current study may be replicated with lower levels of women's hockey or with younger athletes. Gender differences between male and female coaches and the role they play in encouraging aggressive behaviour could be examined. As an extension, examining the differences between coaches that have experience coaching boy's hockey and those that have always coached females could provide some useful answers. The frustration-aggression link and retaliation in women's hockey may both be explored, as we know both to exist. Furthermore, quantitative studies on various aspects of the amount and type of aggressive athlete behaviours in women's hockey can be examined.

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APPENDIX A

McGill University: Faculty of Education
RESEARCH SUBJECT CONSENT FORM
Coaches' Perceptions on the State of Elite Women's Ice Hockey

When a research project is designed to understand human beings at McGill University, the Ethics committee of the university requires written consent of the participants. This does not imply that the project involves risk. The intention is to assure the respect and confidentiality of the subjects.

The purpose of this study is to look at the current state of elite women's ice hockey. In particular, we will be examining the use of different tactics and techniques employed by elite women hockey players. We are interested in the coaches' perspective regarding this issue. This study is part of the requirements for a master's thesis by Julie Vanier, a graduate student in the Department of Kinesiology and Physical Education. We would like to invite you to take part in this study. If you choose to take part, you will be asked to participate in one interview. The interview will last between 60 and 90 minutes and will be audio recorded. A second interview may be necessary if more data is needed. Following the interview, you will receive a typed transcript of your interview that you will be allowed to edit, if you desire. You will also receive a copy of the results and conclusions before they are printed. All information disclosed during the interview session will remain confidential. Data collected from the interviews may be used for publication purposes in journals or presentations at sport psychology conferences; no names will appear at any time.

Your participation in this study is voluntary. You are free to withdraw from the study at any time without any negative consequences to you.

I (please print), _____, have both read the above statements and have had the directions verbally explained to me. I agree to participate in this research project based on the terms outlined in this consent form. I understand that the information collected will remain confidential.

Signature

Date

Please feel free to contact us at any time.

APPENDIX C

Elite Coaches Biographic Questionnaire

Name: _____

Age: _____ Gender: _____

E-Mail: _____

Mailing address: _____

Current University/School/Team Affiliation: _____

Highest level you have coached: _____

Number of years of coaching experience at each level:

Have you also coached male hockey teams? If so, at what level?

Special coaching achievements/honours:

Highest academic level: _____

Briefly describe your hockey-playing career:

APPENDIX D

Elite Athletes Biographic Questionnaire

Name: _____

Age: _____

E-Mail address: _____

Mailing address: _____

Current University/School/Team Affiliation: _____

Highest level you have played hockey: _____

Number of years experience playing hockey: _____

Number of years experience playing women's ice hockey: _____

Special athletic achievements/honours:

Highest academic level: _____

APPENDIX E

Interview Guide for Coaches

1. How did you become involved in coaching women's ice hockey?
2. What skills do you focus on teaching at practice?
3. How is women's ice hockey different from men's ice hockey?
4. Is there a greater focus on skating and skill in the women's game because body checking is not permitted? Does the non-checking rule change the flow of the game?
5. Do you feel aggression is a part of the women's game?
6. What forms of aggression have you witnessed?
7. Is there anything else you would like to add?

APPENDIX F

Focus Group Question Guide for Athletes

My Introduction

Informed Consent

Biographical Athlete Information

Opening Questions:

These questions are based on facts as opposed to attitudes or opinions. This will give everyone the opportunity to talk.

1. **Please give your name and say how long you have been playing hockey.**
2. **How did you become involved playing women's ice hockey?**

Introductory Questions:

These questions introduce the topic of discussion. Creates conversation and interaction among the participants. Use open-ended questions that will allow the participants to talk about their feelings about the topic.

3. **What skills do you focus on the most during practice?**

Transition Questions:

These questions help the participants see the topic in a broader scope than the introductory questions. This makes a connection between the participants and the topic to be studied.

4. **How is women's ice hockey different from men's ice hockey?**
5. **Do you feel as though there is a greater focus on skating and skill in the women's game because of the non-checking rule?**

Prompt: does the non-checking rule change the flow of the game?

Key Questions:

These questions are there to drive the study.

6. **Do you feel aggression is a part of the women's game?**
7. **What forms of aggression have you witnessed? (No, then ask why not)**
8. **Have you ever felt frustrated in a game and acted in away that you might not ordinarily, if you were not playing hockey?**

Ending Questions:

These questions bring closure to the discussion and allow the participants to reflect on previous comments. This is important for analysis.

- 9. Considering everything that has been discussed today, in one sentence, how would you describe your experience playing women's ice hockey?**
- 10. Is there anything else you would like to add about playing hockey, or anything we missed?**

Summary Question:

This is asked after the moderator has given a 2-3 minute summary of the key points made in the session.

- 11. Is this summary adequate? Does it summarize what was said here?**
-

Debriefing:

After the participants have left, the moderator and assistant moderator will have a 15-60 minute debriefing session. It will be tape recorded as well. Some questions to be considered are:

- What are the most important themes or ideas discussed?
- How did these differ from what was expected?
- How did these differ from what occurred in earlier focus group sessions?
- What quotes should be remembered and possibly included in the report?
- Were there any unanticipated findings?
- Should we do anything differently for the next focus group?

APPENDIX G

Table 1

Occurrence of Tags by Elite Ice Hockey Coach

Tags (Level 1)	n	C 1	C 2	C 3	C 4
American hockey	5	1	1	3	0
Athlete confidence	1	0	1	0	0
Athlete dedication	3	0	0	3	0
Body checking rule	10	1	1	1	7
Coach composure	8	0	2	6	0
Coach taking over a team	1	1	0	0	0
Coach teaching aggressive acts	7	1	0	5	1
Coach teaching skills	11	7	1	1	2
Coach-athlete relationship	1	0	1	0	0
Comparing men's and women's hockey	29	4	8	11	6
Concussions	2	0	0	2	0
Developing life skills	2	1	0	1	0
Female player composure	4	2	0	2	0
Game strategies	5	0	2	0	3
General officiating	5	1	1	0	3
Girls playing boys hockey	4	0	1	3	0
Goalie protection	1	1	0	0	0
Ice time	2	1	0	1	0
Image	2	1	0	1	0
Issues with parents	3	0	0	3	0
Lesbian issues	4	0	2	2	0
Men's game	4	0	0	4	0
Off-ice physical training	7	2	2	1	2
Old timers hockey	2	0	0	2	0
Olympic influence	2	0	0	2	0

Tags (Level 1)	n	C 1	C 2	C 3	C 4
Physical aggression	18	3	3	4	8
Physical/skill differences amongst players	11	4	4	1	2
Play-off preparation	2	0	2	0	0
Practice and game schedule	3	2	0	1	0
Practice plan	6	2	2	1	1
Problem with the term aggression	3	0	0	0	3
Problems in women's hockey	7	0	3	4	0
Reasons for acting aggressively	3	1	0	1	1
Ringette	2	0	0	1	1
Rules in women's game	2	0	1	0	1
Size/strength of athletes	4	0	1	2	1
Skill level of player	11	3	3	1	4
Spectator aggression	1	0	0	1	0
Start of coaching career	10	2	2	2	4
Team rewards	1	0	0	1	0
Team rivalry	4	2	1	1	0
Verbal aggression	5	1	1	2	1
Violent acts	8	1	0	7	0
Totals	242	51	48	91	52

APPENDIX H

Table 2

Occurrence of Tags Within Each Property by Coach

Property and Tags	n	C 1	C 2	C 3	C 4
Athletes' physical attributes	33	9	10	5	9
Off-ice physical training	7	2	2	1	2
Physical/skill differences amongst players	11	4	4	1	2
Size/strength of athletes	4	0	1	2	1
Skill level of player	11	3	3	1	4
Athletes' psychological attributes	8	2	1	5	0
Athlete confidence	1	0	1	0	0
Athlete dedication	3	0	0	3	0
Female player composure	4	2	0	2	0
Athletes' social issues	8	2	2	4	0
Developing life skills	2	1	0	1	0
Image	2	1	0	1	0
Lesbian issues	4	0	2	2	0
Coaches' social issues	24	3	5	12	4
Coach composure	8	0	2	6	0
Coach taking over a team	1	1	0	0	0
Coach-athlete relationship	1	0	1	0	0
Issues with parents	3	0	0	3	0
Start of coaching career	10	2	2	2	4
Team rewards	1	0	0	1	0
Coaches' planning issues	29	12	7	4	6
Ice time	2	1	0	1	0
Coach teaching skills	11	7	1	1	2
Game strategies	5	0	2	0	3
Play-off preparation	2	0	2	0	0
Practice and game schedule	3	2	0	1	0
Practice plan	6	2	2	1	1

Rules and officiating	17	2	3	1	11
Body checking rule	10	1	1	1	7
General officiating	5	1	1	0	3
Rules in women's game	2	0	1	0	1
Influence of other leagues	22	5	1	14	2
American hockey	5	1	1	3	0
Men's game	4	0	0	4	0
Old timers hockey	2	0	0	2	0
Olympic influence	2	0	0	2	0
Olympic team	7	4	0	2	1
Ringette	2	0	0	1	1
Difficulties in women's hockey	16	2	5	9	0
Lack of fan attraction	3	0	0	3	0
Problems in women's hockey	7	0	3	4	0
Unsatisfactory officiating	6	2	2	2	0
Connection with men's hockey	33	4	9	14	6
Comparing men's and women's hockey	29	4	8	11	6
Girls playing boys hockey	4	0	1	3	0
Causes of aggression	15	5	1	7	2
Coach teaching aggressive acts	7	1	0	5	1
Goalie protection	1	1	0	0	0
Reasons for acting aggressively	3	1	0	1	1
Team rivalry	4	2	1	1	0
Issues surrounding aggression	37	5	4	16	12
Concussions	2	0	0	2	0
Physical aggression	18	3	3	4	8
Problem with the term aggression	3	0	0	0	3
Spectator aggression	1	0	0	1	0
Verbal aggression	5	1	1	2	1
Violent acts	8	1	0	7	0
Totals	242	51	48	91	52