

**THE EXPERIENCE OF A MAJOR SPORT INJURY
FOR FEMALE ADOLESCENT ATHLETES**

By

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Abstract

The purpose of this study was to describe the meaning of a major sport injury from a female adolescent athletes' perspective. A qualitative, phenomenological methodology was used to find a general structure for this phenomenon. Interviews were conducted with six ($N = 6$) female athletes between 14 and 17 years of age who had incurred an injury that would not allow them to fully participate in sports for a minimum of 21 days. Inductive, thematic analysis revealed eight common themes as the essence of having a sport injury for adolescent female athletes, which included: From Daily Frustrations to Sources of Anger, A Sense of Emptiness, A Sense of Uncertainty and Worry, Not Accepting the Injury, A Sense of Guilt, Seeing Makes it Real, I am Support But Alone, and A Coming to "It's Not All Bad." A follow up interview with participants both confirmed and clarified the findings generated from the first interview. Taken together, these findings revealed that for these female athletes, the experience of a major sports injury is a complex and multi-faceted phenomenon. Findings are discussed with respect to the sport injury research, as well as adolescent social-cognitive development. Suggestions for future research, limitations, and implications for working with an injured female adolescent athlete are discussed.

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Chapter One

Introduction

"Serious injury is one of the most emotionally and psychologically traumatic things that can happen to an athlete. Injury can take away an athlete's career at any time, and it threatens the feelings of invincibility and immortality that all young people have to some degree." (Petrie, 1993, pp. 18 - 19).

This study sought to extend the existing sport psychology literature by employing a phenomenological approach to illuminate the experience of a sport injury for a female adolescent athlete. An injury can be a devastating experience for an athlete, and research demonstrates that it can affect a person's perception of self, capabilities, and worth (Weise-Bjornstal, Smith, Shaffer & Morrey, 1998). A sport injury is widely recognized as a complex experience involving physical, psychological and social dimensions. However, much of what is known relies upon research that has focused on elite and college athletes, and therefore very little is known about the non- professional adolescent athlete's experience of a sport injury.

Statement of the Problem

The psychological responses of athletes to sports injuries have been well researched in the sports psychology and sports rehabilitation fields (Brewer, 1993; Crossman, 2001; Granito Jr., 2001; Heil, 1993; Quinn & Fallon, 1999; Udry, Gould, Bridges, & Beck, 1997). Unfortunately, the vast majority of the investigations have studied elite or college athletes' responses to injury. Despite their unique life-stage and characteristics, young athletes have been underrepresented in this literature; to date only one relevant study has been published (Manuel et al., 2002). Clearly more research is required to understand the specific needs of

adolescent athletes who have sustained an injury while playing sports. In particular, female adolescents have been the focus of this research because there are indications that females and males may experience, and cope with, injury differently (Anderson & Williams, 1988; Brewer, Van Raalte, & Linder, 1993; Granito, 2002; Shulman, 1993).

Background and Related Literature

A worldwide examination on trends in youth sport has documented that over half of early teens participate in sports. This is the most popular leisure-time activity among youths, and participation appears to have increased significantly in Western countries over the last two decades (De Knop, Engstrom, Skirstad, & Weiss, 1996). With an increase in participation comes an increase in the frequency of adolescents sustaining injuries. According to Health Canada, approximately 40% of grade nine and ten students reported an injury that required medical attention, most of which were sustained in a sports facility where the most common type of injury was sprained, strained or pulled muscles. For girls, the incidence of these injuries increased from grades six to ten (Trends in the Health of Canadian Youth, 1998). The report concluded that an unintentional injury might be the most serious health problem facing school age children. In addition, a study at a rehabilitation clinic in the United Kingdom found the peak frequency of sport injuries for children and adolescents between the ages of 5 and 17, occur at ages 13 to 14 (37%) for females (Watkins & Peabody, 1996). Moreover, an eight year prospective, longitudinal study of athletic injuries to students in grades 7 to 12 determined that 48% of athletes sustained at least one injury during their season, with 35% resulting in a minimum of one day lost in that activity (Beachy, Akau, Martinson, & Olderr, 1997). Similarly, in an American study of the incidence of injury in high school girl's basketball (ages 14-18)

reported a rate of almost 50% per athlete per season, with sprains and strains being the most common and accounting for 56% of all injuries (Gomez, DeLee, & Farney, 1996). An Australian study surveyed all students in selected schools ages 11 to 12 and 15 to 16 (N=3538) on the prevalence of injury from recreational exercise and found that 25% reported that they had incurred some type of injury during the previous week (Grimmer, Jones, & Williams, 2000). Finally, Manuel et al. (2002) found that for 15 to 18 year olds this was the first major injury that they had experienced.

While the popularity of different sports varies from country to country, typically the most prevalent sports account for the highest number of injuries (Watkins & Peabody, 1996). However, generally there is a higher risk of injury associated with sports that involve physical contact and/or a high rate of jumping and landing. Thus, according to research, adolescents commonly experience injuries due to sports, with the frequency depending on the amount and type of sport played (Beachy, Akau, Martinson, & Olderr, 1997; De Knop, Engstrom, Skirstad, & Weiss, 1996; Gomez, DeLee, & Farney, 1996; Grimmer, Jones, & Williams, 2000; Manuel et al., 2002; Watkins & Peabody, 1996). Furthermore, Kibler and Chandler (1993) assert that an increasing number of youngsters are participating or aspiring to participate in nation-level sports. They also argue that there is more pressure than ever before on adolescents to excel and with this demand comes an increase in year-round training, conditioning. As competition and as the training programs become more intense, the likelihood of injuries increases. More commonly however, it has been recognized that the primary reasons adolescents participate in sports are to have fun, make or be with friends, learn new skills and be fit (Weiss & Petlichkoff, 1998). Also of importance is that active lifestyle habits formed in childhood and adolescents carry into adulthood. A sport

injury has immediate consequences in all these realms for the adolescent, and could have long-term effects to fitness as well as decrease the ability to participate in an activity that once brought the individual enjoyment.

Given the popularity of sports, and the likelihood of participants becoming injured, it is important to investigate the psychological responses and situational factors that affect athletes following an injury. Sport injuries influence a person's sense of well-being in a number of different areas, including the physical, psychological, and social. These domains are recognized in Weise-Bjornstal et al.'s (1998) widely used conceptual model of responses to sport injury, which presents the idea that personal and situational factors moderate psychological responses (which include cognitions, emotions, and behaviours). Some of the factors included in the model are age, pain tolerance, coping skills, social support, family dynamics, accessibility to rehabilitation, and self-perceptions.

According to these factors, adolescent athletes represent a distinct group that may experience injury differently than other groups of athletes. First, being younger than most elite and college athletes, adolescents are cognitively in a different developmental stage, which means they do not use the same coping strategies as adults and their identity formation may be less stable (Fields & Prinz, 1997; Kleiber & Kirshnit, 1991; McCabe, Roberts & Morris, 1991). In addition, a person's social cognitive development is in a distinct period of transformation during this age, as adolescents have a tendency to "believe that others are always watching and evaluating them and that they are special and unique, labeled the imaginary audience and personal fable, respectively" (Vartanian, 2000, p. 639). These constructs may play important role in the way in which an injury is perceived and the consequent emotional and behavioral reactions to being hurt and vulnerable (Elkind, 1985;

Holmbeck, Crossman, Wandrei, & Gasiewski, 1994). Second, their social interactions (e.g., living with parents, peers being very influential, coaching level and being in high school) are most likely distinct from the elite/college athlete's social conditions. In particular, perceived social support, especially from parents, coaches, and peers, is recognized as an important facet in the way a person psychologically adjusts to changes in athletic role and injury and in all likelihood varies between these two populations (Granito Jr., 2001; Udry et al., 1997; Van Yperen, 1998). Third, the experience of pain, sports medicine access, and rehabilitation adherence, are important aspects to the reaction to and recovery from a sports injury. There may also be differences in the way an adolescent deals with the injury as opposed to an elite/professional athlete. For instance, young female athletes will likely not have access to sports medicine and rehabilitation services in the same way more established athletes do.

Findings in the research suggest there are also significant differences in anxiety between athletic adults and adolescents in the first 24 hours following anterior cruciate ligament (ACL) surgery (Stanish, Tripp, Coady, & Biddulph, 2001) and that post-operative pain is undertreated in adolescents (Gillies, Smith, & Parry-Jones, 1999). As well, pain is associated with coping styles used and is also related to rehabilitation adherence (Brewer, 1998). Moreover, it has been noted that elite/college athletes usually have better access to sports medicine teams, which affects the outcome of the injury (Granito Jr., 2001).

Because a sport injury affects a person on a variety of different levels psychologically, socially and biologically, individual responses will vary depending on these factors. However, due to the many aspects that differ for the adolescent athlete versus an elite/college athlete, it could be expected that female youth experience this event differently. Furthermore, in the emotional domain, Weise-Bjornstal et al. (1998) conclude that although

the majority of all athletes do not become clinically depressed after an injury, approximately 10% to 20% do experience extreme responses. The most common of these extreme responses is meeting the criteria for clinical depression, which means some individuals may be at risk for suicide. Smith and Milliner (1994) assert that athletes most at risk for suicide share several common factors, which include: being in the high-risk age group (ages 15 to 24); receiving a serious injury, being highly invested and competitive; and being unable to return to preinjury participation despite arduous rehabilitation.

Manuel et al. (2002) have conducted and published one of the few research studies thus far on the psychological impact of sport injury for adolescent athletes. In this quantitative study the researchers explored the psychosocial outcomes of a sport injury to adolescent athletes over time through a battery of tests (some of which were the Beck Depression Inventory, Adolescent Coping Scale and the Adolescent Perceived Events Scales). They found that 27% adolescents scored in the moderately depressed range shortly after the injury and the scores significantly improved during the three-month follow-up. These findings indicate that adolescents react emotionally to becoming injured; however, depression is only one emotional response, among many, that have been found to be relevant to an injured athlete. Furthermore, as with most sport injury research, gender differences were not considered important variables in understanding the experience of being injured. Therefore, although this study extends the literature in a much-needed area, it is limited by the scope of questionnaires administered. Consequently, there is still much to be explored in terms of what is experienced and significant for this group of people.

Purpose of the Study

The literature in this field does not adequately address the experience of sport injuries for young female athletes. Consequently one can only speculate about the meaning and impact of an injury to a female adolescent athlete. Since we know little about what is meaningful to this group of people, a rich description from those adolescents who have sustained a significant injury helped illuminate the relevant aspects of their experience. The purpose of this study, therefore, was to explore the experience and meaning of a sport injury for a female adolescent athlete. The question that guided this research was: **“What is the experience of sustaining a significant sports injury for a female adolescent athlete?”**

Definitions and Delimitations

An *adolescent* is defined in this study as a person undergoing a period of transition between childhood and adulthood characterized by accelerated processes of change in cognitive, social and psychological functioning, accompanied by marked physical restructuring (Seiffge-Krenke, 1995). The adolescent age range usually encompasses the second decade of life. The term adolescent has been used interchangeably with the terms youth and teenager throughout the text.

According to the Concise Oxford Dictionary an *athlete* is a “competitor or skilled performer in physical exercises” (pp. 59). In addition, to ensure the *competitor* element in this definition is understood, the individual must belong to an organized school team and/or community club. This definition is very similar to definitions used elsewhere (Diamant, 1991) and has been used to guide this research.

There are many different ways to define a sport injury – according to the type, body part injured, severity, or duration of time missed from training or competing. Currently

there is a lack of consistency throughout the literature on defining a sport injury and each definition has inherent flaws. However, the most common classification used in the literature is determined by the severity of injury, which is calculated by a time loss criteria (Flint, 1998). Therefore, a *major sport injury* will follow the National Athletic Injury/Illness Rating System (NAIRS), which uses days lost in participation as their guideline to assessing severity of injuries. According to this rating system a minor injury is classified as loss of 1 to 7 days (unable to participate), a moderate injury is defined as 8 to 21 days lost and a major injury is more than 21 days lost. A major injury in this study is considered the same as the NAIRS major rating and must be sustained while participating in physical exercise. The major rating has been chosen since the length of time the athlete is unable to participate in sports is thought to be long enough to be a significant experience for the individual and is consistent with other research in the area (Johnston & Carroll, 1998; Johnston & Carroll, 2000; Manuel et al., 2002). The most inherent difficulty with this rating system is that it does not include those injuries that do not result in time loss. This difficulty does not affect the definition needed for the proposed study since the focus is on injuries that are significant enough to require time off from participation.

Rationale

The findings from this study provide information that add to the literature by filling a gap that exists on a particular population, female adolescents, that has not been represented in the sport injury research to date. As well, the information from this study should better inform rehabilitation therapists, medical practitioners, coaches and parents that may be involved in an adolescents physical and psychological rehabilitation process so that youth can receive the best care for, and outcome from, her injury. In addition, since the primary

focus of this research addresses the psychological components of the injury process, the findings will be of particular interest to sports psychologists and counsellors who work with adolescents as “good psychological rehabilitation helps ensure a healthy future that must include more than just their playing careers” (Williams, Rotella & Heyman, 1998, p. 414).

Chapter Two

Literature Review

A sport injury has an obvious detrimental effect on physical functioning and sport performance; however, a sport injury can also affect a person's psychological health, resulting in changes in emotion, cognition and behaviour. These psychological reactions have become increasingly important in the field of sport injury research as specialists who work with sport injuries recognize that the mind, as well as the body, needs to be addressed in the rehabilitation process. This chapter will review relevant sport injury literature and examine the characteristics that are of particular importance to female adolescents. This chapter will begin by discussing the major theoretical models in the field, and will proceed by reviewing the research, which investigates the psychological aspects that result from a sport injury and discuss information that may be pertinent to understanding an adolescent perspective of this event. The chapter will conclude with a section that concentrates on specific issues for female athletes.

Theoretical Models of Responses to Sport Injury

There are two main theoretical frameworks in the sport injury field: Grief / Loss models and Cognitive Appraisal models. The primary components and theoretical approaches of each one will be discussed and followed with critiques from the literature.

Grief / Loss Model

The earliest literature on and initial investigations into the emotional responses to sport injuries tend to be conceptualized in terms of grief and loss (Astel, 1986; Heil, 1993; Rotella, 1985). The most common grief model in the sport injury field is an adapted version of Kubler-Ross's (1969) stages of grief and loss, which was derived from research

conducted with people suffering from terminal illnesses. Kubler-Ross proposed that people going through a loss process pass through a series of stages: denial and isolation, anger, bargaining, depression, and acceptance. In applying this model to injured athletes, it was proposed that athletes frequently experience a similar grieving process, following a temporary or permanent loss of athletic-self, including loss of identity, self-esteem and external objects such as money or tournament. This model has intuitive appeal and can be easily understood when applied to the complex set of emotional responses an athlete may feel after becoming injured.

Critics contend, however, that research does not consistently support the application of this model to an athletic injury response (Brewer, 1994; Weise-Bjornstal et al., 1998). The main criticisms put forth by Brewer (1994) and Weise-Bjornstal (1998) asserts that all athletes' reactions to injury do not follow the sequential stages; furthermore, the model cannot predict or explain the emotionally varied responses to injury. Their arguments question the notion that an athlete's response to an injury is similar, or parallels, a person's experience with a terminal illness. However, Evans and Hardy (1995) counter these criticisms in their review by claiming that Kubler-Ross's model has been misinterpreted since she did not intend the stages to be sequential and absolute. These authors also suggest that other grief models may be more applicable to the sport injury field; they recommend looking at distinctions between stage/component/phase and task models of grief, as well as developing more rigorous and consistent methodologies.

Integrated Model of Response to Injury

The Integrated Model of Response to Injury (Wiese-Bjornstal et al., 1998) is primarily based on Lazarus and Folkman's (1984) cognitive appraisal model of the stress

and coping process. Consistent with this research is the focus on cognitions and the role they play in interpreting (or appraising) a stressor, such as an injury. The central principle of cognitive appraisal models is the individual's unique interpretation of the injury that affects the emotional and behavioural responses; therefore, the "fact that an injury has *occurred* is less critical to understanding emotional reactions than is the way in which the injury is *perceived*" (Brewer, 1994, p.90).

Cognitive appraisals are influenced by situational and personal factors. According to the Integrated Model of Response to Injury proposed by Wiese-Bjornstal et al. (1998), personal factors affecting cognitions are based on the injury, including type, severity history and prognosis; and individual differences, including psychological aspects such as self-motivation, athletic identity, and coping skills; demographics such as gender, age and ethnicity; and physical health such as status and disordered eating. A few of the situational factors considered to influence cognitions include: association with sport (type, level, and time in season); social context (team and coach influences, family dynamics); and environmental aspects (rehabilitation environment and accessibility to rehabilitation). According to this model, personal factors are relatively stable individual characteristics, while situational factors depend upon the physical and social environment within which the individual exists. Contingent on the situational and personal factors are behavioural and emotional responses. The identified behavioural responses range from adherence to rehabilitation program, malingering and use/disuse of social support; while potential emotional responses could be fear of the unknown, anger, frustration, depression or positive attitude.

Wiese-Bjornstal et al. (1998) suggest that this model could “serve as a blueprint for future researchers who seek to understand the injured athlete experience from a physical, psychological and social perspective” (p.65). This model also integrates well with Anderson and Williams’ (1988) model of athletic injury occurrence and can accommodate the grief process models, an advantageous quality which allows for the model’s incorporation into a larger context without excluding other relevant models. Brewer (1994) advocates the use of cognitive appraisal models, maintaining that this theoretical approach accounts for individual differences in coping with athletic injury; is based on empirical evidence; and has the ability to drive future research. Furthermore, Williams, Rotella and Heyman (1998), once supporters for the grief model, have revised their beliefs to reflect the cognitive appraisal response model. At present, the majority of sport injury research is guided by and conceptualized from Wiese-Bjornstal et al.’s (1998) integrated model of psychological response to sport injury and rehabilitation (Green & Weinberg, 2001; Granito, 2001; Quinn & Fallon, 1999).

Research Findings on Sport Injuries

Personal Factors

Several personal factors, which are considered to be relatively stable, are thought to influence an athlete’s reaction to a sport injury. One of the most researched personal factors is athletic identity and subsequent adjustment to an injury. Athletic identity can be defined as “the degree to which an individual identifies with the athletic role” (Brewer, 1993, p. 237) and it is an important construct regarding both theory and application. In essence, if an individual’s self-concept is centered on the role of an athlete and that individual’s life focus

is primarily sports-related, the incidence of an injury may disrupt that focus, which would typically lead to negative emotional reactions.

Brewer (1993) conducted four quantitative studies using a battery of questionnaires to test the hypothesis that a strong exclusive identification with an athletic role would be positively correlated with depressed mood after an injury. In these studies, he used both real and hypothetical situations with college students and injured athletes from a sports medicine clinic. The hypothesis was accepted in three out of the four of the investigations.

Similarly, Granito (2001) found athletic identity to be a theme that both athletes and athletic trainers identified in a qualitative focus group investigation. In this research, two groups of injured intercollegiate athletes ($N = 7$) and two groups of student athletic trainers ($N = 8$) were interviewed with a focus on the meaning of injury for athletes. From the focus group interviews, 43% of athletes and 87.5 % of trainers commented on this theme as a significant factor to the emotional adjustment to an injury.

Additionally, Smith and Milliner (1994) conducted a case study on five athletes who had attempted suicide after an injury. The injured athletes in this group were between the ages of 16 – 18 years of age. Although athletic identity was not stated specifically, one of the several factors common to all members of this group was that they had enjoyed considerable success before sustaining their injury. It is generally accepted that greater involvement with a sport and greater success lead to stronger identification with an athletic role (Brewer, 1993; Williams et al. 1998).

From the sport retirement literature, Webb, Nasco, Riley, and Headrick (1998) carried out a correlational study to explore the relationships between athletic identity, circumstances under which retirement occurred and adjustment to retirement. Ninety-three

college students (females = 45, males = 48; $M = 22.4$ years), who played organized sports at either the high school or college level, completed questionnaires in the study. Results indicated that injury related retirements are more problematic for individuals with strong athletic identities. Indeed, 46% of respondents reported that a difficult retirement was “quite characteristic” or “very characteristic” of their experience, especially if there had been a strong athletic identity and even more so if the retirement was injury related.

Furthermore, Manuel et al. (2002) conducted a three-month longitudinal study involving 48 adolescent athletes. The participants completed a battery of questionnaires, including the Athletic Identity Measures Scale (AIMS; Brewer et al., 1993). It was found that a high athletic identity was associated with early depressive symptoms after accounting for injury severity.

Green and Weinberg (2001) however, did not find results consistent with previous research. In this investigation, 30 recreational athlete participants (18 males and 12 females) ranging in age from 19 - 70 years old ($M = 30.8$) completed a series of tests to examine the relationships between athletic identity, coping skills and social support as predictor variables of mood state and physical self-esteem following the occurrence of injury. No significant relationship was found between athletic identity and total mood disturbance however the small number of participants involved in the study compromised statistical power. The researchers explained that the discrepancy from these findings and other studies could be attributed to a greater variability of athletic identity scores in this investigation.

Coping Skills

The coping skills used by the individual constitute another moderating factor to the response of injury. *Coping* is generally defined as regulatory efforts used to maintain a

desirable level of functioning in the face of demands on one's resources, and *coping skills* are comprised of a wide range of behaviors that help a person with those demands (Anderson & Williams, 1988; Lazarus & Folkman, 1984). With respect to the appraisal model, the coping skills used by the injured athlete are an important factor in determining emotional and behavioural responses.

Udry (1997) examined coping and social support with 25 injured athletes between the ages of 16 and 40 years of age ($M = 27.9$) during their rehabilitation from knee surgery. The participants completed a variety of measurement tests five times: once pre-surgery, and at 3, 6, 9 and 12 weeks post-surgery. Results indicated that the most frequently used coping strategy across the studied time frame was an instrumental coping strategy: the attempt to alleviate the source of stress through activities; similar to Lazarus and Folkman's problem-focused coping. Overall, the researcher found that the greatest number of coping strategies, of all types, were used at the three-week time period; over time the amount of all coping strategies decreased, presumably as the amount of stress decreased. It was also determined that instrumental coping was significantly related to rehabilitation adherence at nine-weeks post-surgery. Additionally, palliative coping (self-help activities and responses aimed at reducing unpleasantness or providing a soothing effect), fluctuated the most throughout the survey period although it was the least used strategy overall. Unfortunately, the small sample size limits the interpretation of the results, which in turn greatly reduces statistical power.

Quinn and Fallon (1999) obtained both similar and dissimilar results to Udry's investigation. Their study examined personal characteristics and emotional responses of elite athletes from injury onset to full recovery. Elite athletes ($N = 136$), from a variety of

sports and ages ($M = 24.6$), were surveyed through four periods of an injury: first week of injury, partial recovery, semi-recovery and full return to participation. In contrast to Udry's study, results from this research indicate that coping strategies change throughout rehabilitation. Consistent with both investigations, however, was the result that athletes used active coping more often than any other type of coping. These strategies typically included planning, increasing effort towards recovery and finding out more about the injury.

Johnston and Carroll (2000) conducted a study in order to clarify the discrepancies found in the previous two investigations, and also to explore gender differences in coping strategies and the role of social support. Questionnaires were used to assess coping style, and perceptions of and satisfaction with support, during three points (beginning, middle and end) of formal rehabilitation. Participants consisted of 93 patients requiring rehabilitation for an injury, and were allocated either high or low sport involvement. Findings revealed that all coping strategies significantly decreased as rehabilitation progressed, with the exception of seeking alternative rewards coping style. In addition, the only significant differences between the two groups were that the more highly involved group was more likely to use support-seeking coping approaches. Finally, no significant gender differences were observed for any of the coping subscales. The researchers comment, "The most striking feature of the coping data is the similarity of mean values for the different coping strategies. On average, participants did not favor any particular strategy over any other" (Johnston & Carroll, 2000, p.299). Therefore, findings from this study reflect those of Udry's examination of the role of coping strategies for athletes recovering from an injury.

Adolescent coping strategies have also been of interest to researchers in an attempt to understand the unique relationship between developmental changes and life stressors for this

population. Prinz and Fields (1997) reviewed 10 years of published studies in this area with non-clinical populations. These researchers conclude that the coping abilities of adolescents can differ in fundamental ways from those of adults and younger children because of developmental and environmental circumstances. In particular, as children enter adolescence, it appears that the number of different cognitive coping strategies increases, however the overall variety of coping strategies decreases. Compared with younger children, adolescents tend to use fewer problem-solving and behavioural avoidance strategies and evidence is varied as to whether avoidance approaches increase or decrease. Furthermore, Prinz and Fields (1997) suggest that results from the review indicate adolescents primarily use emotional-focused response patterns, such as positive-self-talk and diverting attention from event, when coping with a medical stressor.

More recently, an investigation was conducted to compare adolescent and adult coping strategies and the relationship to symptoms of depression and anxiety (Garnefski, Legerstee, Kraaij, van den Kommer & Teerds, 2002). This quantitative study measured the use of nine cognitive coping strategies, as well as symptoms of depression and anxiety, from 487 adolescent ($M = 14$) and 630 adult ($M = 42$) participants. Analysis revealed that adolescents used all nine cognitive coping strategies significantly less often than adults, with the largest differences found for positive reappraisal, refocus on planning, putting into perspective and ruminating. All of these differing coping strategies may play an important role in understanding a youths reaction to a distressful situation, such as being injured.

Goyen and Anshel (1998) also researched coping strategy differences between adolescents and adults but in the context of stressful events in competitive sport. Athletes from a variety of sports participated in this quantitative study and consisted of 74

adolescents (age range 13.8 to 16.9 years; $M=15.4$) and 65 adults (age range 19 to 45 years; $M=26.6$). Results showed significant gender differences in coping tactics of adolescents after sustaining an injury, as males indicated a preference for problem-focused coping, whereas females were more likely to emotionally focused strategies. In addition, analysis revealed significant differences between the two age groups. Adults showed more concern about making mistakes during a game than adolescents but the younger athletes reported more intense stress from the actions of others (e.g., parents or coaches yelling or criticizing, being hassled by teammates, and opponents' cheating). Also, anger was specified as a more common response from adolescents than from adults when criticized or yelled at from a significant other. The investigators conclude that teenage athlete's are less likely to control negative emotions in some tense situations and suggest that "adolescents rely more on significant others (e.g., coach and parents) for social support, advice and encouragement than adults do" (pp. 483) and feel more pressure to perform.

The findings from the coping research have important implications for understanding adolescents reactions and experience to a sport injury. This group of young athletes may have a tendency to show more anger (Goyen & Anshel, 1998), and generally use less coping strategies than adults, especially those that may be beneficial to rehabilitation and positive affect (Garnefski et al., 2002; Prinz & Fields, 1997).

Situational Factors

Social Support

Recent sport injury research suggests that social support plays a key role in an athlete's emotional adjustment to the injury and subsequent adherence to rehabilitation. According to the stress and appraisal approach, social support is considered to reduce, or

buffer, the likelihood of an event being appraised as threatening (Lazarus & Folkman, 1984). As maintained by this model, social support can be conceptualized as multidimensional; it depends on the situation, and ranges in type (from empathetic listening to reality conformation to tangible assistance); and the manner in which it is perceived (as helpful or not helpful).

One of the first studies to investigate social support for injured athletes was Udry, Gould, Bridges and Tuffey's (1997) research that used a qualitative approach to examine specific interactions that are important to athletes coping with burnout (N=10) or an injury (N=21). In-depth retrospective interviews were conducted and analysis revealed that social interactions were perceived differently, depending on whether the athlete was suffering from burnout or from an injury. The researchers broke down the interviews into two groups (family and teammates, and coaches) and organized the themes into three categories (negative role, positive role, and neutral role). All the participants cited the positive role of family and teammates. Six themes emerged: emotional support and understanding, motivational support, kept in contact, tangible support, teammates provides a frame of reference and other. Negative family and teammate influence was mentioned by 38.1% of the athletes. Themes from this dimension included lack of contact/disconnection, inappropriate participation agenda, and other. Interestingly, coach interactions were more negative than positive. Coaches were cited in the negative category at 66.6%, with reference to the following negative themes: distant, insensitive to injury, inappropriate/insufficient rehabilitation guidance, lack of belief in athlete and other. Positive coach influence was only mentioned by 57% of the athletes; themes within this category include: stayed emotionally connected, supported and encouraged, and consulted with.

Robbins and Rosenfeld (2001) furthered Udry et al.'s (1997) findings and formulated a study to investigate athletes' perceptions of and satisfaction with social support provided by their head and assistant coaches and athletic trainers before and after an injury. Thirty-five university athletes, from a variety of sports that had sustained minor to severe injuries, completed a modified social support survey, which were quantitatively analyzed. Results indicate that, overall, there were only slight differences in satisfaction between the support providers before the injury; however, post-injury athletes were the most satisfied with the support from the athletic trainers. The authors discuss the implications for coaches and assistant coaches stating that some athletes would have appreciated receiving more support during their rehabilitation.

In another qualitative study using focus groups, Granito (2001) found relationships to be a major theme, as it was mentioned by all athletes and trainers participating in the study. Trainers, teammates coaches, other injured athletes and parents were found to be significant people in the injured athletes' lives. The trainer relationship was perceived to regulate the way in which an athlete copes with an injury. In this investigation, teammate and coach relationships fell into two categories and were described as either supportive or non-supportive and had an enormous effect on the emotional state of the athlete. Making an emotional connection with other injured athletes, especially those with similar injuries, was also determined to be a valuable source of support. Finally, contrary to Udry et al.'s findings, parents were found to be more of a source of stress, rather than support, because the athlete felt pressure to recover or because he/she had let their parents down.

As mentioned above in the coping section, Udry (1997) carried out a quantitative study, which investigated coping strategies and social support through a 12-week time span,

and measured the effects of these variables on rehabilitation adherence. Contrary to her prediction, there was no a significant positive correlation between social support and commitment to rehabilitation. Green and Weinberg's research (2001), as already described, similarly failed to support their hypotheses: that the higher an individual's coping skills and social support, the less mood disturbance and lowered physical self-esteem that individual would suffer after sustaining an injury. In both of these studies, however, the contrasting results from their hypotheses could be explained by the small sample size, which decreases the statistical power.

Finally, a study using an interview style of methodology focused on the differences between male ($n = 15$) and female ($n = 16$) university athletes' experience of an injury (Granito, 2002). The researcher conducted in-depth interviews to collect data, which was then inductively analyzed, in order to compare themes between male and female participants. Results from this study suggest that both male and females expressed many of the same concerns, although three themes emerged as different: (1) females had a tendency to be less satisfied with the coaching relationship after an injury (2) expressed concern over their future health due to the injury and (3) males reported feeling supported by a significant other. The difference in themes between males and females indicate that women may not feel as supported as their male counterparts during an injury.

Social support has also been of interest to researchers investigating child and adolescent coping and psychological adjustment to stressful situations. Shulman (1993) reviewed literature on close relationships and coping behaviour in adolescents and generally found support for the concept that "the availability of close relationships buffer stress and enhance adaptive coping" (p. 280). Furthermore, he adds that supportive family, parents and

peers provide a secure base so that adolescents do not perceive their surroundings as threatening; that this population, however, still does use more emotionally focused strategies than adults. He also argues that relationships and coping strategies during this developmental period can change significantly; it must be recognized, therefore, that the results from the majority of studies, which are conducted with young adolescents, may not necessarily apply to older adolescents.

A study examining adolescent psychological health and support from parents after poor performance found results corroborating with the buffering notion (van Yperen, 1998). This quantitative longitudinal study looked at male elite soccer players ($N = 59$, $M = 15.6$ years old) who hoped to make try-outs for a prestigious soccer school; and the effects of performance, psychological well-being and perceived support from parents. Results indicate that a high estimated chance of being cut from the school is associated with an increase in negative psychological well-being only when there is less perceived support from a parent. It was also noted that both parents play an equal role in this respect.

Ryska and Zenong (1999) aimed to extend the buffering hypothesis in adolescent sport research by investigating the effects of perceived coach support on competitive state anxiety. Participants consisted of 270 tennis players (male = 126, female = 144), ranging in age from 12 to 18 ($M = 16.2$), who were given a battery of tests on competitive state and trait anxiety, as well as a modified social support scale both at a practice and immediately before an official match. The findings revealed that perceived coach support was a mediating factor for athletes scoring high in trait anxiety. More specifically, those athletes who scored high on trait-anxiety but also felt they had support from their coaches, experienced lower pre-competitive state anxiety than did their counterparts who perceived

little support from the coach. However, this effect was not present among low-trait anxious athletes, therefore coach support may only be a significant factor for those teenage athletes who generally are more anxious.

Results from these studies generally indicate that perceived social support does contribute to better emotional adjustment when an athlete is under stress, however, it is a complex relationship. One factor of importance is the type of interaction that occurs between the athlete and the significant other. The athlete must perceive this interaction as positive in order to reconcile the stressful event. It cannot be assumed that the number of interactions or number of people is synonymous with the concept of support. Results also indicate that an injured athlete may benefit from continued support from the coach to decrease feelings of isolation and still feel valuable as a team member.

Responses to Injury

According to Wiese-Bjornstal et al's model (1998), there are both emotional and behavioural responses that follow the person's appraisal of the injury. Each of these responses will be reviewed in accordance with the relevant literature.

Emotional Reactions to Injury

Sport researchers have become increasingly interested in investigating athletes' emotional reaction to injury. Emotional responses have been investigated using both qualitative and quantitative methods. Studies have been conducted to examine mood in conjunction with: mediating factors, such as social support and athletic identity (as described above); as a function of time during rehabilitation; and different situational factors that influence emotional adjustment. Emotional responses are considered to be vitally important

because high and/or constant negative emotions may adversely affect rehabilitation behaviours and outcomes (Brewer, 1995; Crossman, 2001).

Researchers have been increasingly conducting qualitative investigations to gain a comprehensive understanding of an athlete's experience of a sport injury. Findings from this type of methodology have been reasonably consistent and have provided insight into the emotional reactions as the athlete describes the situation. First, Udry et al. (1997) conducted in-depth, retrospective interviews with 21 US ski team athletes ($M = 23.9$ years old) who experienced season-ending injuries, in order to examine both the psychological responses and the perceived long-term benefits from the injuries. After inductive analysis, one of four general themes that emerged was "emotional upheaval/reactive behaviour", which was mentioned by 90.5% of the athletes and generated 44.1% of the raw data themes. In this dimension, six higher order themes became apparent: emotional agitation, vacillation of emotions, emotional depletion, isolation/disconnection, shock/disbelief, and self-pity/poor me. Specifically, 76.2% of athletes described feelings of anger, panic, worry, frustration and sadness. In addition, the third largest thematic dimension was "positive outlook/coping attempts" which was noted by 81% of the participants and contained 22.8% of the raw data themes. Themes within this dimension included: acceptance/dealing with it; positive coping attempts; good attitude/optimism; and relieved about progress. It was observed that although the positive outlook/coping attempts theme was often mentioned, this response varied greatly between athletes with regard to the time period during the rehabilitation process. It was also recognized that many of the themes coincided with the grief/loss models but there was little support for the denial stage and no backing for the bargaining stage.

Johnston and Carroll's (1998) grounded theory study, which was conducted with 16 seriously injured recreational and competitive athletes ($M = 22.8$ years of age) at various times in their recovery, offers mixed support for Udry et al.'s (1997) results. Similar to Udry et al.'s (1997) findings, Johnston and Carroll's observations show that athletes feel shock and disbelief shortly after sustaining an injury. Additionally, results from these two studies (Johnston & Carroll, 1998; Udry et al., 1997) indicate high amounts of anxiety shortly after injury onset, followed by a variety of negative emotions such as anger, depression and frustration. However, Johnston and Carroll's (1998) study does not portray as many positive aspects to injury and recovery as Udry et al.'s research. In fact, it was found that frustration and depression were prevalent throughout most of the rehabilitation process, for various reasons, and at the end of rehabilitation there was an impatience to return to sports. Furthermore, it was determined that following the return to sport participation, those athletes who did not perform well had associated feelings of depression and decreased confidence. Therefore, this research generally found similar results to other qualitative research; however, it also provided contextual information that influenced the emotion reactions.

In another qualitative study, which used a focus group approach and consisted of both university trainers ($n = 8$) and athletes ($n = 7$), all participants cited feelings associated with the injury (Granito, 2001). Of those feelings, every participant reported frustration. Other common emotional responses mentioned were: isolation, boredom, depression, relief, anger and confusion. These results collaborate with Udry et al. (1997) and Johnston and Carroll's (1998) findings.

Although there have been several qualitative studies in this area, investigators have primarily used quantitative methodologies to understand emotional reactions to injury, especially in identifying factors that influence affective responses. One of the first studies to examine this area was Smith, Scott, O'Fallon and Young's (1990) quantitative investigation aimed at identifying athletes' ($N = 72$) emotional responses to injury, and determining which of these affects have a negative impact on rehabilitation adherence. Interestingly, the participants were also statistically analyzed in age groups, separating high school athletes from adult athletes (ages 12-18 years, $n = 45$; ages 19-54 years, $n = 27$). Subjects were asked to complete the Emotional Responses of Athletes to Injury Questionnaire (ERAIQ; Smith, Scott & Wiese, 1990) and the Profile of Mood States (POMS; McNair, D.M., Lorr, M., & Droppleman, L.F., 1971) every two weeks, from onset of injury until resuming full participation, or four months, whichever came first. Results indicate that the emotion most frequently specified during the initial assessment was frustration; and significant differences were found between the adolescent population and college norms on the POMS depression and anger scales. Multivariate analysis of variance was used to compare mean POMS scores by age, gender, and injury severity. The high school athletes had significantly more anger than the older age group, and no differences were found for gender. Understandably, those athletes who had more severe injuries also had more mood disturbances that lasted longer than those athletes with less severe injuries.

In order to determine if mood states and self-esteem differences existed prior to an injury, Smith et al. (1993) performed a prospective study with 276 athletes from a variety of sports. Of these athletes, 36 sustained injuries and nine were rated as severe. A modified version of the Emotional Responses of Athletes to Injury Questionnaire (ERAIQ; Smith,

Scott & Wiese, 1990) and the Profile of Mood States were used to measure the affective states of the participants. After sustaining an injury, the athletes' scores showed significant increases in depression and anger, and a significant decrease in vigor. From the results, it was concluded that the change in mood states was likely due to the injury. It was also noted that the severity of the injury was the most predictive variable of post-injury depression: the more serious the injury, the increased likelihood of depression. These findings are congruent with Smith et al.'s (1990) results, although it must be noted that the similarity of emotions might only exist due to the implementation of the same assessment tools.

Brewer, Linder and Phelps (1995) conducted a study to investigate the association between situational variables (e.g. injury status, impairment of sport performance, social support for rehabilitation, etc.) and emotional reactions and adjustment for an athlete after the onset of an injury. Participants ($N = 121$) were recruited from a sport medicine clinic and asked to fill out a number of surveys, including the Beck Depression Inventory (BDI; Beck, 1967) and the Profile of Mood States. After analyzing the data, it was concluded that overall, there was only a weak relationship between situational factors and emotional adjustment, and that the athletes appeared to be coping well with their injuries. The authors suggest that the results indicate the complexity of situational factors and subsequent emotional responses to an injury, because it is unlikely that any one situational variable will significantly influence an athlete's mood state. A limitation of this research is that the BDI used in this study was developed to assess clinical depression and therefore it does not adequately measure other less drastic emotional responses. It is noteworthy however, that age was found to be "negatively associated with emotional disturbance...[which] suggests that older athletes are better able to cope with the emotional effects of athletic injury"

(Brewer et al., 1995, pp. 244). This finding is similar to Smith et al.'s (1990) results, which found that injured high school athletes tended to be angrier than their adult counterparts.

Another quantitative study was carried out to examine emotional states from injury onset to full recovery. Using a battery of questionnaires, Quinn and Fallon (1999) examined the psychological characteristics and reactions of 136 injured elite athletes throughout four phases: upon injury, and then at one third, two thirds and end of rehabilitation/full recovery. Findings indicate the negative mood states (tension, depression, anger, fatigue, and confusion) were highest at Phase 1, and significantly decreased over time. Conversely, the positive emotion, vigor, was lowest initially and significantly increased at each phase. Once again, these findings are consistent with other research.

A generally consistent pattern of emotional distress has been identified from the body of literature that has investigated emotional responses to injury. Studies have regularly found results indicating that emotions change from the onset of injury and over the course of rehabilitation (Johnston & Carroll, 1998; Quinn & Fallon, 1999; Udry et al., 1997). Initial reactions to injury include frustration, anger, fear and depression (Quinn & Fallon, 1999; Smith et al., 1990; Smith et al. 1993; Udry et al., 1997). As rehabilitation progresses, frustration continues but is directed more at the rehabilitation process (Johnston & Carroll, 1998). Near the end of rehabilitation, with the imminent return to participation, athletes tend to feel impatient about returning to sport, but this feeling is tempered by the fear of re-injury (Johnston & Carroll, 1998). It has also been established that the intensity of feeling tends to decrease over the rehabilitation period, but is contingent on setbacks that have occurred (Quinn & Fallon, 1999; Smith et al., 1990). It is worth noting, that despite the many negative emotions that athletes are likely to experience during this time, they seldom meet

the requirements for clinical depression (Brewer et al. 1995; Smith & Milliner, 1994).

Furthermore, it is also likely that younger athletes have a tendency to have greater emotional distress following an injury (Brewer et al. 1995; Smith et al. 1990; Smith & Milliner, 1994).

Behavioural Responses

In addition to cognitive appraisals and emotional responses, it is crucial to understand behavioural responses after the occurrence of a sport injury. In accordance with Wiese-Bjornstal et al's model (1998), behavioural responses are thought to be contingent on situational and personal factors, as well as cognitive and emotional reactions. Researchers consider adhering to a rehabilitation program, which requires considerable commitment over an extended amount of time, is vital for optimal recovery. Adherence behaviours include actions such as attending regular physiotherapy appointments; completing practitioner recommended home-based activities; modifying physical exercise; and taking medications as prescribed (Brewer, 2001).

A recent qualitative study investigated the subjective experience of rehabilitation in order to detect variables that might influence compliance after reconstructive knee surgery (Pizzari, McBurney, Taylor, & Feller, 2002). In-depth interviews were conducted with 11 participants, on average five months after surgery, and data was inductively analyzed using thematic coding. Three themes became apparent: environmental factors, physical factors and psychological factors. The following variables were included in the environment category: lack of time/need for organizing time for rehabilitation; informational and emotional support from physiotherapist; comfort and convenience of rehabilitation clinic; and successive progression of program exercises. Different variables emerged for adherers and non-adherers in the physical category. Participants who adhered to rehabilitation

viewed returning to sport as a motivating and exciting aspect that inspired their rehabilitation process. Alternatively, non-adherers often expressed fear of returning to sport and preferred delaying involvement in activities, despite recommendations from health practitioners. Within the psychological category, self-motivation was the most significant characteristic and was cited by all the respondents. Non-adherer's typically described a lack of enjoyment of at home exercises as a reason for not complying with the suggested program.

Similar results were also described in Granito's (2001) qualitative focus group study (previous presented in the personal factors section). All trainers and athletes participating in this investigation mentioned adherence to rehabilitation, which included factors such as motivation, attitude, personal control and expected recovery. It is worth noting, that the athlete respondents in this investigation all belonged on varsity teams and comments in this section reflected the quick access to and ease with which they were able to receive treatment. This notion complements Pizzari et al's (2002) environmental variables, which indicated that convenience plays an important role in rehabilitation adherence. As well, Granito (2001) states, "Other types of athletes (recreational or high school) may not have the advantage of easily accessible treatment for their injury and for this reason it is possible that this category may be different for other types of athletes" (p. 78).

Quantitative research has produced similar results. Fisher, Domm, and Wuest (1988) investigated factors associated with poor rehabilitation adherence among university athletes who had sustained an injury to the knee, shoulder, or ankle. Social support, self-motivation, and pain tolerance were positively related to rehabilitation adherence. Duda, Smart, and Tappe (1989) also conducted a study with 40 injured college athletes to identify variables

related to rehabilitation compliance. Congruent with Fisher et al.'s (1988) research, a strong positive relationship was found between adherence to rehabilitation and social support and high self-motivation. Additionally, Ievleva and Orlick (1991) performed a study with 32 athletes (age range = 14–48 years; $M = 30$ years of age) who had an ankle or knee injury and were identified as either slow or fast healers in order to identify factors related to the recovery process. Indeed, results indicated that the fast healers believed they had direct control over their rehabilitation progress. As well, the rapid healers were more likely to use psychological strategies such as positive self-talk, relaxation, goal setting and healing imagery.

In a book chapter, Smith (1996) addresses rehabilitation adherence for children and adolescents after sustaining a sport related injury. However, she qualifies the material by stating that the information presented in the text is based on personal clinical experience - not research, because it does not exist. Smith claims that children and adolescents are less likely to care about receiving educational information about their injury and rehabilitation program, primarily because adolescents do not want to distinguish themselves as different from their peers. Moreover, teenagers have a tendency to feel invulnerable; therefore, even after an injury they may not think that re-injury is probable. She suggests focusing rehabilitation strategies on performance improvement to influence teenagers to maintain their recovery program. She also suggests the rehabilitation program should begin when pain and physical impairment is still present, and that interesting, well-defined exercises in which progress can easily be noticed, should be implemented.

The notions of secondary gains, malingering and somatization are also pertinent to injured adolescent athletes. As with other types of injuries, it is important to assess whether

the athlete benefits from the injury in some manner. An injury may provide a reason not to participate in sports; therefore, the athlete may find some relief from the pressure to perform. This situation is more likely to occur when a child or adolescent feels extreme pressure to succeed from parents or coaches and the "injury provides the athlete with the only perceived escape from a sport that is no longer enjoyable" (Smith, 1996, pp. 234). For the struggling athlete, an injury can provide a socially acceptable reason to discontinue participation or an explanation for not playing well. Heil (1993) also warns of parent-child relationship problems contributing to the "sick role" and to look for prolonged recovery that persists unexpectedly. Furthermore, he suggests that somatization issues are more common with young people as they may confuse bodily sensations that stem from emotional distress (nausea, tight chest, muscle tension) with indications of physical illness or injury. Another behavioural response to consider is malingering: "an adaptive response to adverse circumstances that requires an external incentive for being injured" which is thought to stem primarily from fears and/or a need for attention (Weise-Bjornstal, 1999, pp. 38).

Treatment program adherence is a multifaceted issue, however, variables can be categorized into three major groups: personality characteristics, rehabilitation setting/environment characteristics, and social support. Athletes are more likely to follow the prescribed rehabilitation regimen if they feel supported; if the treatment clinic and exercises can be attained with ease; and most importantly, if the person is self-motivated. However, there is the potential for the employment of maladaptive behaviours when injured athletes perceive little support or no alternative form of action to their situation.

Female Athletes

There are unique issues that pertain to female adolescent athletes. First, there is evidence that adolescent girls may have higher rates of major injuries than boys, particularly knee injuries for female basketball and soccer players (Arendt & Dick, 1995; Gomez et al, 1996; Powell & Barber-Foss, 2000). In addition, adolescent girls appear to have different injury patterns, such as higher incidence of anterior cruciate ligament injuries, pelvic injuries, shoulder instability, ankle sprains and stress fractures, among many others (Arendt & Dick, 1995; Loud & Micheli, 2001). Second, certain female athletes may be susceptible to three interrelated medical conditions – disordered eating, amenorrhea (absence of menstruation) and osteoporosis (decreased bone mineral density) – termed the female athlete triad (Committee on Sports Medicine and Fitness, 2000; Kohrt, 2000; Loud & Micheli, 2001). The female athlete triad tends to occur in female athletes who participate in sports in which it is considered advantageous, either for physiological or aesthetic reasons, to have a low body fat content (Kohrt, 2000). Athletes are often pressured by coaches and/or parents to maintain a low body weight, despite the negative consequences of this behaviour.

Summary

Research has indicated that the factors and responses related to a sport injury are complex and interrelated. In addition, although injured adolescent athletes have received little direct attention from research, there are indications that suggest this population may experience this event differently from other athletes. Evidence has emerged suggesting that injured teenage athletes have increased levels of depression if they identify strongly with an athletic role (Manuel, 2002); display more emotional distress, including anger, than college norms (Brewer et al. 1995; Smith et al. 1990; Smith & Milliner, 1994); use more

emotionally focused strategies than adults (Shulman, 1993); are considerably influenced in their reactions to sport-related stress by their parents (Heil, 1993; Shulman, 1993; Smith, 1996; van Yperen, 1998); and can benefit from different rehabilitation strategies from adults (Smith, 1996).

Although previous research indicates that the adolescent experience of an injury may be different from older athletes, there is an obvious lack of integration of the findings in order to appreciate the complexity of this event. The present research advocates a holistic approach to discover the commonalities and integral nature of sustaining a major sport injury from an adolescent perspective. In this manner, a comprehensive understanding of the phenomenon emerges and allows insight to this phenomenon.

Chapter Three

Methodology

Method Selection

A qualitative, phenomenological research method was used for this study to gain a rich understanding of a female adolescent's experience of a major sport injury. This method is an approach that is well suited for an area where there is sparse empirical research since it exposes the complexity of factors that contribute to the entire experience (Colaizzi, 1978). Streaan (1998) advocates for the use of qualitative research in sport psychology stating, "We have proceeded in many areas of sport psychology without first gaining a description of what athletes experience or what variables seem to be particularly influential" (p. 335).

Moreover, a phenomenological methodology fits well with the objectives of the research: I wish to describe the experience of a sport injury for an adolescent from the voice of the teenager herself, thus enabling the reader to understand the phenomenon as those who have lived it, have experienced it. Phenomenology involves relating the unique experience to the universal essence: the parts to the whole. Furthermore, its aim is to relate the description and meaning of the phenomenon in a way that genuinely connects with the reader (Van Manen, 1997). The emphasis was placed on identifying shared themes of meaning after the participants renew contact with the original experience and describe how they have experienced their injury. Ideally, the reader will gain an understanding that is both reflective and experiential of the phenomenon.

Personal Assumptions and Bracketing

It is my belief that I am an interpreter of the phenomenon I researched (Van Manen, 1997). My personal interest in, and experiences with this research topic inevitably

influenced the outcome of the descriptions – it is unavoidable. However, rather than denying my influence, I engage in rigorous self-reflection by documenting my own beliefs at the start of this research and as I went through the process of understanding and describing the stories that I heard. This belief and attempt to “bracket” presuppositions is congruent with hermeneutic phenomenology philosophy. This branch of phenomenology asserts that interpretation by the researcher is inescapable however it is the responsibility of the researcher to explicitly acknowledge his/her biases in the research process so that the reader can take this influence into account (Osborne, 1994). Although I acknowledge that I am inevitably a part of the analysis, my objective was to stay as close to the original stories as possible. For this reason, I aimed to *describe* the experiences I heard, rather than *interpret* them, which is compatible with a descriptive approach. I used journal writing and discussions with colleagues and supervisors as methods to explore my own beliefs and experiences, and to reflect on the ways in which they may affect my research. From such discussions, I recognize that my experience and training as a counsellor influenced my interview style and analysis to be particularly oriented towards emotional content. In addition, an exposition of my experiences and presuppositions is presented in the following paragraphs for the reader’s consideration.

Personal Experience and Presuppositions

In the spring of 1983, at age 16, I tore my meniscus cartilage and partially tore my anterior cruciate ligament (ACL) in my left knee by long jumping. It was at the first training practice of the season that incorporated jumping, and the last jump of the day. I had hoped to do well at this event and found it a crushing blow to my aspirations, not only that season but also for the following seasons, to play the sports I really loved, soccer and basketball. I

found the next two years at high school particularly painful both physically and emotionally. Physically, eight months after the initial injury, and being misdiagnosed and enduring more falls, I had arthroscopic surgery. A third of the menisci cartilage in my knee was removed however I did not receive reconstructive knee surgery because the surgeon had not known the extent of the damage and assumed the surgical techniques I needed would be much better in the next few years. I was told I had a 90% chance of requiring the reconstructive surgery. Emotionally, I felt scared at the prospect of having another surgery – I had seen the people that had received reconstructive surgery while I was in hospital and I did not want to go through that! As well, I did not feel understood by coaches, physical education (P.E.) teachers, my physician, or friends, and worst of all I could not play at the same level or intensity as I had previously. I had lost both the ability to do what I really enjoyed and an important reference group of friends.

I acknowledge I am biased as a result of a frightening, and at times, bungled medical experience, as well as feeling unsupported by coaches and P.E. teachers. Furthermore, I am aware that I have a presupposition that other people (such as coaches, teammates and doctors) may assume that adolescent sport injuries are insignificant, which therefore diminishes the feelings that are experienced. Such sayings as, “you’re young, you’ll get over it quickly” or “that’s nothing! Wait until you get older, then you’ll know what real pain is!” exemplify an attitude that some adults possess towards young athletes. This presupposition became more prevalent for me as I researched the topic and found very little study on adolescents’ experiences to injury. It must be remembered though, that despite the biases and researcher’s experiences, it is the phenomenon that is ultimately being

investigated, not the researcher, and “if there is a structure to the phenomenon it will transcend particular interpretation” (Osborne, 1990, p. 81).

Participants

In order to be involved in this research, the female participants needed to meet the following five inclusion criteria. First, participants were between the ages of 13 and 16 years of age at the time the injury was sustained. This age range is in the middle of the adolescent period and high school years and likely to be the time when most injuries occur in school aged female children (Watkins & Peabody, 1996). Second, they sustained a major injury from participating in a sport activity as defined in the above text. A major injury would likely elicit a more emotionally charged response than a minor injury. A severe injury includes those that are permanently debilitating and death. It is my belief that sustaining a severe injury would be a different type of experience and therefore is beyond the scope of this study. Third, the adolescent sustained the injury a minimum of six months and a maximum of two years prior to the interview. This time frame allows the participant to have some perspective of the experience and be able to reflect on being injured from a meaning making stand point. Another important aspect that was considered in this time frame was that the person giving the description would still have the perspective from an adolescent. The aim of phenomenology is to reflect lived experience; therefore, the view was taken that it is important to have the experience expressed from an adolescent context. Fourth, participating in physical activity must be considered important in the life of the person involved in the study. This criterion is used in order to differentiate between those who happen to have incurred an injury while participating in a physical activity and those for whom sports and athletics are a regular and important part of their lives. Fifth and finally,

participants had to be able to describe their experience orally in English and in a reasonably articulate manner. The type of methodology chosen requires a rich verbal account of the experience; therefore being articulate in English is necessary.

I found that six participants was sufficient to gather a contextual description of the phenomenon and to reach a point of saturation of themes – when it is likely that themes from one person's experience are apparent in another person's experience (Colaizzi, 1978). This number is consistent with the aim in phenomenology, which is not focused on the quantity of information but rather emphasizes the richness and depth of information.

Data Collection

Participants were invited to take part in the study in two ways: (i) through posters placed in various health care facilities, such as physiotherapy clinics and doctors' offices, (ii) through personal contacts and networking with teachers, coaches and health practitioners. For recruitment through a third party it was asked that the potential participant contact me for more information. Five of the participants were recruited through networking and one participant responded to a poster in a health practitioner's office. Two people that wanted to participate in the study did not fit the inclusion requirement – one was too young at the time of the injury and the other had a long-term injury but it had not kept her from participating in sports for more than three consecutive weeks. A variety of offices and sports facilities from different areas in the city were posterred and invited to participate in an effort to gain a diverse mix of participants from different ethnic backgrounds, socioeconomic status as well as type and level of sport played. As it happened, all participants that responded and participated were from similar cultural and socioeconomic status (SES), that being Caucasian and middle to upper-middle SES. The participants

ranged in age from 14 to 17 years old, although four of the participants were 16 years of age at the time of the interview. Of these participants four primarily played one sport (soccer, sports aerobics, basketball and field hockey) and the other two participants played both soccer and field hockey.

The initial contact through a telephone conversation and serve the purposes of screening, providing information about the study and answering any questions regarding the study or myself, and establishing rapport. I screened individuals to ensure that they meet all the inclusion criteria and still wanted to participate. As well, I provided information about the purpose and requisites of participation of the study (including estimated time of involvement) to both the participant and the parent or guardian over the telephone. It was explained that I needed to complete an informed consent from both the parent/guardian and the person participating in the study and a time was arranged to have both parties sign the form. The informed consent form adhered to the University of British Columbia ethical guidelines and included the purpose of the study, adherence to confidentiality and the right to withdraw from participating without consequence. To assure confidentiality all tapes, journals and other confidential material will be kept in a locked filing cabinet for five years and then destroyed, as per the University of British Columbia ethical guidelines. Also of critical importance during this first contact was to initiate rapport since this is a crucial element to obtaining authentic descriptions (Osborne, 1990). This initial contact also served to alert me to any ethical issues that could arise, such as parent/guardian wanting their child to participate, but the youth themselves not wanting to play a part in the study. However, this did not happen.

The first meeting was at a mutually agreeable time that began with signing the informed consent form with the participant as the parent/guardian consent had already been signed. Interviews were audiotaped and conducted in a mutually agreed upon location where the participant felt comfortable and safe to talk openly about her experience with minimal distraction. With each participant, I conducted an in-depth, tape-recorded, unstructured interview consisting of open-ended questions, reflection and paraphrasing. The interviews lasted approximately 45 – 75 minutes. I started the interview process by briefly introducing of myself, including information of my field of studies and interest in the field of sports injuries. My aim in this introduction was to both provide information for participants in order to familiarize them with the interview context, and to increase their comfort level through our rapport to facilitate an in-depth interview. Once any questions that the participant had regarding the study were answered, I invited the participant to begin with the context of their sport injury such as how and when it happened to frame the experience. The following orientating statement will also be read, *“I am interested in hearing your own experience of being injured. Please talk me through your experience of being injured and how you felt throughout each situation.”* This question was also used in another qualitative study investigating sport injuries and will be used since it fits with the intent of this research and with suggestions in conducting a qualitative inquiry (Johnston & Carroll, 1998). Both van Manen (1997) and Mason (1996) stress the importance of carefully preparing for the interviews since the researcher cannot rely on predetermined set of questions. Van Manen (1997) advises being strongly orientated towards the research questions and staying close to the lived experience. Therefore he suggests being concrete and posing questions that ask about specific instances, situations, people or events and then explore these experiences to

the fullest. Similarly, Osborne (1990) suggests emphasizing to the participant to tell their experience as it actually happened and then to explore the feelings associated with the event. I followed these recommendations. As well, a prepared list of questions was used if the participant found it difficult to explain a range or depth of the experience but the participant was not prompted until she had "run out of steam" (Osborne, 1990, p. 84). Care was taken not to lead the participant in direction or responses so as to let her speak openly and freely about her experiences and not be influenced by my hunches or presuppositions. As a counsellor-in-training with experience in working with teenagers, I used my knowledge and skills to facilitate a deeper exploration of an issue raised by the participant by providing active listening, empathy, and reflection. A list of counsellors was available to give to the participant in the case they became distressed by the interview discussion and needed a referral but this was not needed as none of the participants displayed an intense reaction.

The faculty supervisor reviewed an interview to ensure it was carried out according to phenomenological methods and with minimal influence to the participants recounting of their experience. Participants were encouraged to contact me if they felt they had any further reflections that were not described during the interview as successive data gathering allows for greater illumination of the phenomenon (Osborne, 1990). None of the participants called to add any additional information.

A second interview was held with five of the participants after the initial analysis and thematic interpretations have been developed. One of the girls was at the height of her playing season and could not participate in the second interview by the necessary date. The purpose of this interview was to validate the themes by checking with the participants whether the interpretations are an accurate reflection of her experience and to provide an

opportunity to add or change any of the information. Prior to this second interview I emailed a package for each participant to review and reflect on before we met. The email contained a summary of their experience from the interview and my interpretation of themes common to all participants. During the interview the participant was asked to reflect on the accuracy of the themes according to their own experience and provide any additional information they might want to include. The five girls who participated in the second interview stated that the themes “totally fit” and that it was “all totally good.” The girls also made comments that they had a deeper understanding of their experience after the interview as “no one had asked questions like that before.” As well, some of the girls expressed that reading the findings was validating because it was “good to know that others felt the same way.”

Analysis and Rigor

The interview data was transcribed verbatim and analyzed by thematic data procedures in an effort to capture commonalities of the participants while simultaneously recognizing the unique perspective of the individual. According to Beck (1993) the qualitative terms “credibility”, “fittingness”, and “auditability”, are the equivalent to the quantitative terms: “internal validity”, “external validity” and “reliability”, respectively.

A variety of procedures were followed to ensure credibility and fittingness.

First, I reviewed the verbatim transcripts several times to gain a general understanding of the data and analyze for key points. After becoming familiar with the material, the thematic analysis followed a fairly structured approach as suggested by Colaizzi (1978) and Osborne (1990). According to the procedures they endorse, each interview, or protocol, was reduced on a meaning-unit-by-meaning-unit basis to extract

“significant statements” (Colaizzi, 1978, p. 59). Examination of the protocol was then conducted in a hierarchical style. The statements were sorted into thematic clusters, or “formulated meanings”, and then into higher order-clusters. Each protocol was analyzed in this fashion and then integrated with each other until there is an “exhaustive description” of the topic. The aim of such analysis is to identify the shared themes to form a structure of the researched phenomenon. Such an approach is intended to “capture the essence (meaning) of the phenomenon” as the themes should resonate with each participant regardless of whether or not they appear in every protocol (Osborne, 1994). A short summary was written for each of the protocols so that the reader can situate an individual’s structure in the generalized description (Karlsson, 1993). Second, a supervisory committee member, trained in phenomenology analysis, reviewed the data collection and meaning-unit tags to confirm that the protocol and interpretations were congruent. As well, I had discussions with another person trained in phenomenology to reflect on the emergence of the common themes. Third, the second interview served as a “check” for “goodness of fit” between the researcher’s interpretation and the participant’s experience (Osborne, 1990, p. 8).

Finally, in order to address issues concerned with auditability, rich excerpts from the transcripts are provided for the reader and field notes (journaling) were recorded on the interactions and subjective states during the process (in addition to reflecting with the supervisor and colleagues). In addition to writing about my own experiences and assumptions, the audiotapes and journaling will also serve the purpose of auditing the decisions that are made throughout the research stages. However according to Osborne (1990) it must be remembered “there is no absolute interpretation of data....The best the

researcher can do is to argue a particular interpretation as persuasively as possible, supported by references to the data, and leave the final judgment up to the reader" (p. 87).

Chapter Four

Findings

In this chapter, I will present the description and meaning of the experience of an injury for female adolescent athletes. I will begin with a portrayal and an account of each participant's core experiences and follow with a detailed description of the common themes extracted from across all the participants' experiences.

Participant Summaries

In the following section I provide a summary of the experience of being injured for each of the seven girls who participated in the study. The description and reflection of the experience is based on the information the girls provided in the interview. I have used the participants' words as much as possible in order to portray their experiences and feelings accurately. In the interest of anonymity and confidentiality, their descriptions are presented under a pseudonym of their choice. The information and descriptions were verified with the four participants during the second interview.

Michelle

Michelle is a sixteen-year-old self-professed "perfectionist" who works hard to attain her goals. She lives in a suburb of Vancouver with her mom, step-dad and older sister and attends the public school in the area. Michelle hopes to receive a university scholarship for soccer and emphasized that soccer is a priority to her, although school and soccer are closely linked together. She stated that "sports are everything to me" and has been involved in athletics since she was four years old. Michelle initially sprained her ankle (torn ligaments) during one of the last games of a soccer tournament, which was seven months previous to the interview. Michelle said, "that I knew right away that I had torn something" and was

helped off the field sobbing. Once off the field she found her ankle was not as bad as she initially thought and was embarrassed by her behaviour of "sobbing like a baby" and decided to go back in. She lasted about two minutes. At the time of the interview, it was the first week she was able to participate fully in soccer. However, because she played so much that week, she developed bursitis from her ankle brace and was told by her physiotherapist not to play for another 1 ½ weeks. In the interview, she expressed frustration over how long it was taking to recover from such a seemingly minor injury, but also stated that she kept trying to play and kept re-injuring it over and over; therefore, it was like having four sprains. She stated that subconsciously she knew she could not play but fooled herself into thinking she could and kept going back too soon. She continued on to say that otherwise it would have been harder emotionally: knowing that she is not a part of the team and would miss out on the provincial finals.

Michelle also directed a lot of anger towards herself and at the medical profession for the advice she received. The anger disseminates in her ruminations over the injury and constantly asking "what if...". She blamed herself for not knowing better, stated that "I'm kicking myself" because "I should have been smarter" about tending to the injury. She also stated that she felt "guilty for being naïve that's it's no big deal" and for "letting the team down." There is a strong sense of frustration and disappointment because she stayed involved with the team but did not know how to take on the role of supporting her team members without actually playing (as her coach suggested), nor was there the recognition from playing that she was used to receiving.

Michelle asserted she did not feel entirely understood by others, unless they had gone through the exact same injury, and in some way wished that there were more visible

aspects to her injury (such as a cast or brace) so that others could understand that she was injured. It is my impression that she would have appreciated more help or direction in the decision-making of when and if she should be playing. Even though she liked the independence of making her own choice, she stated, "it's just me...it's all up to me," and demanded straightforward facts from the physiotherapist on her recovery.

Without being prompted, Michelle stated that the experience of being injured "could have been worse," because the timing of the injury was at the end of the season. She expressed that she has learned to listen to her body, not to go back in too soon, and to do all the physiotherapist's recommended exercises.

Cathy

Cathy is a sixteen-year-old girl who originally tore her ACL or MCL (she cannot remember) at the age of 13 while playing in a fun soccer tournament, and has been plagued with injuries ever since. The last time she had to miss participating in sports as a result of her knee injuries was about a year previous to the interview, although she injured her back and shoulder in the last year. Cathy plays both soccer and field hockey competitively, despite the chronic injuries. Cathy lives in a suburb of Vancouver with her parents and attends the local public high school. In the second interview she commented that she was happy to participate in a study that focused on female athletes because her high school focuses on the male teams, which she finds unfair.

The first words that Cathy stated in the interview were, "it has affected me mentally." She continued on to say that she is afraid that she is going to re-injure herself and that "it is the worst thing ever." She spoke of getting in "the worst mood ever" after becoming injured because she was frustrated and angry that she was unable to be out there

playing. Cathy found she really missed being physically active, as well as the social aspects of being part of the team. She also articulated the frustration of being immobile in everyday activities, since "everything takes a lot longer." She mentioned several times, in a dissatisfied manner, of becoming "lazier." Cathy also talked about her "robotic knee braces" that she wears on both legs. These are a constant reminder of being injured; she wants her knees to become strong enough so that the braces "can be gone."

She emphasized that she is always "cautious" when she plays now because of the fear of becoming injured again. She stated, "I am scared to go into a tackle...I'm not doing the things that need to be done, play wise," which led to feeling guilty for letting the team down, especially if they lose. Additionally, she is very disappointed that she cannot play to her full potential, although these feelings have diminished because her knees have not kept her from playing for the last year. Cathy replays the game in her head if the team loses and feels she should have gone into certain tackles if she did not become injured during the game.

She finds herself not doing the exercises recommended by the physiotherapist because she just gets re-injured anyway, and is tired of doing them all the time. She stated that this behaviour leads to feeling guilty because her parents pay for her to go for physiotherapy and she does not follow through with the exercises. She feels particularly understood by others who have gone through the same injury, "or worse," such as her dad, grandpa and coach, and feels supported when given advice such as "don't rush it." She is appreciative that she is not "pressured" to play all the time and that the emphasis is on staying healthy rather than risking reinjury. Cathy likes that "they [coaches, parents] let me tell them" what she feels she is capable of doing at games and practices. Her coaches expect her to attend most of the

practices and games, which "is better than being at home" because she stated that she "feels involved".

Cathy agreed with my statement in the interview that she is extremely worn out, "tired," and distressed from being injured constantly. This great weight of sadness and hopelessness was expressed on her face, the tone of her voice and the many sighs, during the interview when she spoke of her experience of being injured.

Chloe

At the time of the interview, Chloe was seventeen years old and although injured, she was still able to participate fully on her competitive field hockey and soccer teams. Chloe's initial knee injury occurred approximately 1 ½ years prior to the interview, at a soccer tournament. The injury occurred primarily from overuse after having had her orthotics adjusted just before the tournament. She described the injury as feeling "like my leg was hanging from the muscles," and played through the pain until it hurt so much that she had to be taken off and her mom would not let her go back on despite her protests. She was unable to participate fully in sports for about 3 months after this incident. She characterized playing until her leg was "exhausted" as "stupid" but also negates the severity by saying that initially she was not in a huge amount of pain. Chloe lives in a Vancouver suburb with her mom and her mom's partner. She attends the local high school and her family is involved in promoting females in sports.

After the initial injury, Chloe went to try-outs for a field hockey team but did not participate. Even though this was not a team she was "striving for" she still tried to "fudge" the severity of the injury, and downplayed the pain to the coach. It was ultimately the coach who told her she should not be playing that summer. Chloe said that she always had this

push-pull tension going on within her to “cheat” and “trick” herself into continuing to do activities that she should not be doing – a fight between the “fun” side and the sensible side – and the fun side usually won until she became hurt again. She felt guilty after doing these things because many people told her not to play, including her own conscience, but she still did not listen. The pay-off, however, is that she has a “good time” and “I just can’t not do it because it’s fun!” She also described how it is hard to stop doing activities because she could not really “see the injury”. Chloe articulated that she wished everyone would know about her injury and therefore her friends would say to her “don’t do this” when she partook in an activity that she should not be doing. She also spoke about her mom hassling her to do her rehabilitation exercises, which she would initially resist, but that the comments would “stick” with her and she would do the exercises later.

Chloe tries not to get too absorbed in being injured and stated, “I wouldn’t just die inside if I couldn’t play sports again,” because she has other interests (photography and art) outside of playing sports. She has thought of other options to keep her involved in sports if she could no longer play, such as coaching, and speaks as if it is inevitable that she will become seriously injured. This may be because she understands she has structural problems with her feet and therefore has a predisposition towards injuries.

The pain and missing out on playing stood out for Chloe as the key aspects of being injured. She “just wanted to be a part of it” and “the fun” and found she would become “anxious” and “bored” sitting on the sidelines. She did not feel too left out because she continued to go to the games and practices, however she also noted that when she found out she was not going to play on the field hockey team it was “all for nothing” because she could have been doing something more fun than sitting on the sidelines.

Chloe described wanting to have a clear diagnosis from the medical profession, although she did not follow through with her rehabilitation program because she was not convinced that the exercises worked. In contrast, she freely admitted that the injury was a positive experience in some ways because she learned about her body and how it works, as well as had a chance to meet a high level coach and other injured players.

Chloe had a tendency to downplay most of her experiences of being injured throughout the interview and stated several times that "it's no big deal" and "it's fine." However, in the second interview she stated that the discussion about being injured helped her to realize just how affected she really was by this incident and how she had dismissed inquiries from others about how she felt.

Melanie

Melanie is a national-level sports aerobic competitor who was previously involved at a serious level in gymnastics. She is fourteen years old and developed a stress fracture in her hip from over-training about a year prior to the interview. This is the second major injury she has sustained. At the age of twelve, she broke her foot in a fall from the balance beam during gymnastics practice. The main focus of the interview was the experience of her hip injury; however, she often gave a perspective of the difference between the two injuries. She described herself as "not an insane perfectionist" but does put an extreme amount of pressure on herself to do well at anything she pursues. Melanie attends a private girls school in Vancouver and lives with her parents.

Melanie began the interview telling me about her broken foot and stated that, "with the bad comes the good." She said that after this injury she spent a great deal of time being frustrated, grumpy and angry. She blamed the doctor for giving her bad advice and was so

sad at watching other teammates progress, and compete without her, that she cried at one of the competitions. Melanie expressed feeling partially responsible for “letting the team down” when they could not qualify for the group points. When she started training again she felt “scared” and even “embarrassed” and “out of place” because others had improved so much and she had fallen behind. She remarked that she loved gymnastics, but she was also thinking of quitting, and the injury gave her the excuse to become involved in other activities. Melanie also described saying, “what if...” to herself; replaying events surrounding her recovery and advice from the doctor. At times she found she blamed herself for the extended amount of time it took to heal from her hip flexor injury since she began training too soon.

After the second injury, Melanie asked herself, “why does this always happen to me?” No one else was injured and she found herself frustrated at once again watching and conditioning alone. She still went to the gym at the same time as her teammates, but stated she was placed in a “separate area in the gym – in a corner where I didn’t take up too much space.” She understands the reasoning for this but felt a distinct lack of support and a sense of separation from her teammates. Melanie expressed that she would have preferred to be a “more active member of the team” and join in the learning process to the best of her ability and spot the other girls when possible.

Melanie stated that she did not feel as “isolated” with her hip flexor injury, as opposed to her broken foot, because she “wasn’t stuck in a cast.” During the interview, she had difficulty describing why she felt this way but explained that she was still able to walk and do normal activities; therefore, “mentally, not seeing a big thing stopping me” and “reminding me” of the injury helped her not feel as cut off from the others.

Overall, she described a more positive frame of mind during the second injury, because she “knew what to expect and that it would eventually get better.” Despite understanding that she would heal, she explained that, because she loved it so much, she would want to train so badly that she would exercise any time she did not have pain (such as after taking pain killers). Melanie said that others would try and be supportive, but felt that sometimes her teammates would not know what to say. She stated that this was okay with her because she was not able to accept their support, due to her anger, and that it would not change the situation no matter what was said. Melanie found her parents, particularly her dad, were supportive in helping her decide when to start competing again. He would give her the information and his opinion to help her make a decision, but would not tell her what to do, which allowed her to feel “in control.” Looking back at this experience she feels “lucky” and more “appreciative” that she can still be active in sports and has more sympathy for others who are injured.

Erin

Erin is a 16-year-old basketball player who broke her tailbone in the season’s final tournament 15 months previous to the interview. The injury kept her from participating in basketball for a month and can still cause her to miss a couple of days of activity if she hits her tailbone. This is her first “major” injury and she spoke as if she expected to have other injuries in the future. Erin lives in Vancouver with her parents and attends a private girls school in her area.

She stated that she “knew right away” that she had done something serious to her tailbone, which would prevent her from playing, and her instant reaction was one of “frustration.” Erin also contended that the injury happened at a “good time” because it was

the very end of the season; therefore she did not miss any basketball training or games, and did not feel the “temptation” and pressure from herself or others to play before she felt ready.

Erin stated that the first thing that comes to mind when contemplating her injury is that “it sucks,” because it affects both sports and everyday living. The worst part of this experience for Erin was “watching” her teammates playing and “not being a part of the team” because she did not feel she was contributing. She describes feeling “bad for the team and the girl” that replaced her, given that it was not the player’s normal position and it was apparent in the team’s level of play. Erin articulated that it was “weird” sitting on the bench in her street clothes, because “this isn’t me, like, I’m suppose to be playing,” and that she felt “like a manager.” These uncomfortable feelings led her to think about what it would be like if she could not play sports again or had never experienced playing. Thoughts such as these dissipated quickly though when the coach clearly explained the prognosis of a broken tailbone.

The coach established what he thought the injury was as soon as it happened; therefore, Erin decided not to seek medical advice for treatment. She stated that she does not like going for medical help, but looking back she wished she had, just to make sure she had “done everything right.” Instead, Erin spoke to her father’s friend, who is a medical practitioner, and relied on her own judgment to rehabilitate. Throughout the experience, Erin did not look for support or talk about the injury, and stated, “they [her teammates/friends] saw it happen so there’s nothing much to talk about.” However, she explained that although her parents are not athletic, they warned her to give the break time to

heal properly so that she would not have repercussions later, and she listened to this recommendation.

Erin said that normally she would have pushed herself to go back and play, despite other people's suggestions, but that having a *broken* bone, which could not be put in a cast, "freaked me out." At first she wanted something to immobilize the injured area, but then decided to be very careful about what she did, because "nothing was controlling it" – "it's all up to what I do."

Kristy

Kristy is a field hockey player who developed an overuse injury in her back when she was fourteen years old. The injury began a year and ten months before the interview and continued to get worse for about 3 months before she sought medical advice. At that time, she could not participate in any activities because the pain was so intense. Kristy lives in Vancouver with her parents and attends a nearby private girls school (a different school from the previous two participants).

She described going to several doctors, physiotherapists and trainers before finding someone who diagnosed the problem and was able to put her on an exercise program that helped her. This experience was frustrating and annoying because she felt "passed around" and wanted someone to tell her what the problem was and how to get better. Once Kristy found a physiotherapist who recognized the injury, she worked hard doing the recommended rehabilitation program. She still becomes annoyed because the injury reoccurs despite the initial rehabilitation and she has to keep up on the exercise regime continually.

She said that looking back on the situation, she wished her coach had inquired about her back so that she could have received help sooner, but also stated, "this is not his job." It

was Kristy's mom who suggested that Kristy should go for medical attention, and who found the new physiotherapist. Her mom made sure she did the exercises, which she found annoying at the time, but now realizes that this prompting helped her to actually do them. The decision concerning her return to play was left up to her by the physiotherapist, which she thought was "weird," but it allowed her to take responsibility for her recovery and she was consequently "more careful." Kristy described being "happy" that she was actually feeling better and was therefore able to play to her potential again. She stated that when she was playing injured, all she could think about was the pain, and so was "not able to play at a hundred percent." She felt "bad" when she "screwed up," and didn't want to play again until she could play her best.

During the acute stage of the injury, Kristy had two braces, one for everyday use and one for playing. At first she thought it was "kinda cool" that she had a brace because she thought it would help and that it would allow others to see that she really was hurt with a "serious" injury. Within a few days, however, she found that the brace did not help; it was hot and uncomfortable and "looked kinda dumb."

Kristy explained the worst part about being injured was that she was "disoriented" and "bored" because she no longer had her "regular routine": she did not know how to fill the large amount of time that was usually taken up playing field hockey. She also felt "lonely" and missed the fun of playing, stating, "I like being on a team." Kristy expressed missing the "awesome" feeling of "working together." She described having anxiety during the injury because she had an unrealistic fear that everyone else was "getting better and learning stuff." One of the teams she played on did not have a regular coach; this was awkward because she sensed they did not really care that much that she was injured, and she

did not know how involved to be with the team. She felt as if she needed to be playing to be “a part of the team.” These feelings were not as intense with her school team, however, since she knew the coach and the players well. Sitting on the sidelines was multifaceted for Kristy. On the one hand, she found it more stressful than playing and was not sure about what to say or do. On the other hand, she found she learned a lot from watching others and was, at times, glad for time off from playing. Ironically, she also felt guilt about this as well.

Common Themes

Analysis of the meaning-units revealed eight common themes which, taken together, illustrate a generalized essence of the experience of being injured for these girls. The themes were discussed with four of the participants in validation interviews and feedback confirmed the analysis; and new information from the participants was incorporated to refine the essence of the experience. The other two participants stated they were too busy with their sports as the interviews were at the height of their season. Overall, the feedback from the participants was that “the themes totally fit.” They also commented that they liked reading about themselves because it helped them to understand the experience more, and they also enjoyed reading about the other participants because “it was good to know that others’ felt the same way.”

The girls who participated in this study expressed a complex and multi-faceted experience. Although the girls discussed inevitably distressing situations, the reader should recognize that the learning part of the experience often balanced the negative effects of the injury. It must be impressed that although often a distressing situation would be voiced there was often a counter with learning from the experience as well. Thus, while many of

the themes are frustrating and difficult for the participants, the experiences are not necessarily “the worst thing” and they were able to adapt and develop new awareness from their experiences.

Additionally, the injury experience is described here as a process that would seem to follow a relatively chronological manner; however the stories are not told in this way, nor did the experience seem to follow a linear progression through distinct stages. Instead, the themes and sub-themes express the core meaning of a major sport injury for these female adolescents, and they may occur in any sequence and oscillate from one theme to another. It should also be noted that the themes are not necessarily discrete and isolated from each other, but instead interact and impact one another. Therefore the reader should keep in mind that the eight themes extracted from the participants’ accounts is a complex, interconnected experience involving many different aspects. While the participants in this investigation expressed themes that are common to the entire group, their individual experiences are in fact very different. Consequently, some aspects of a theme may be more – or less – relevant to each person, and each individual may be at a different phase in the process. The eight themes that emerged in this phenomenological investigation are as follows:

1. From Daily Frustrations to Sources of Anger
2. A Sense of Emptiness
3. A Sense of Uncertainty and Worry
4. Not Accepting the Injury
5. A Sense of Guilt
6. Seeing Makes It Real
7. I Am Supported But Alone

8. A Coming to "It's Not All Bad"

These themes are explained more fully and corroborated with quotations from the participants in the following section. The voice of the participant is used wherever possible to describe the themes, however, some of the "likes," "kindas," incomplete sentences and short interviewer comments have been deleted so that the reader can better understand the statement. In addition, the words "sense of" were used in naming some of the themes as a way in which to convey the notion that participants had an awareness that they were feeling "something" but had not yet sorted through what the feeling was or what it meant to them. Therefore, the words "sense of" seemed to fit the overarching concept of these vague sensations and feelings that the girls described. Some sub-themes have been identified within the larger context of the main themes and will be acknowledged with the use of *italics*.

From Daily Frustrations to Sources of Anger

Daily frustrations to sources of anger were a common theme in the stories of the participants in this study. This theme encompasses the physical experiences and changes that occurred while these girls were injured. Components of this topic include *pain*, *daily hassles* and *medical encounters*. The pain and the daily hassles were usually brought up by the girls at the same time and will be therefore discussed together. Having to endure the pain that came with being injured is tiring in and of itself, but this aspect also coincided with a lack of mobility. Not being able to "do anything" like "daily life stuff" was "frustrating" and "annoying" for the participants who were interviewed. The girls also told stories about their medical experiences, many of which ranged from frustrating to infuriating.

Without exception, the pain and lack of mobility evoked frustration on a daily basis, especially in the acute phase of the injury. Cathy aptly explained:

Just like when it <an injury> happens, I'm on crutches and stuff. And I'm in the worst mood for like ever, because I'm just unable to do anything. I can't go up the stairs to go to school. I can't go up the stairs to my room. I'm just not mobile, basically, and I hate that. Like not being able to do stuff. So I just get like really frustrated and then <pause> it makes me really mad.

There is also a sense that being injured encompassed the participants' entirety of living. Being in pain and not being able to do activities as easily initially affected their sports life, social life and school life. Being injured "just slows things down a lot" from the quick, active pace they were used to maintaining, and this is "annoying." Erin explained what she thought after arriving home from her basketball tournament after being injured:

When I got back I got dressed up to go somewhere and I was in like these big heels and a skirt and kinda hobbling along and it was just like annoying, like "this is affecting my sports and this is affecting the way I think outside of sports – the way I can move and walk.

Slowing down was also frustrating for these girls given that they were use to being extremely active; as Kristy illustrated, "just like changing your pace because it was different because I've been playing since I was 13, or whatever. It was just hard, like I'd really try to keep myself busy, finding other stuff to do." Socializing with their friends was also sometimes adversely affected because they could not physically take part in some of the activities, such as skimboarding or swimming, or they felt bad if they thought they were "slowing down" their friends and "stopping the fun." As well, getting to school, getting

around school, sitting at their desks in class, and sitting to do homework were all tasks mentioned as frustrating because they were in pain and could not do these simple “regular things” easily any more.

Another common source of frustration, or aggravation was dealing with the medical aspect of being injured. Comments from the participants ranged from finding it mildly annoying to go to physiotherapy and doing the exercises, to being furious and resentful at the advice they were given. All the participants, except for Erin (because she did not seek medical attention for her injury), mentioned their medical experience. Some of the girls found going to physiotherapy a “hassle”: it was time-consuming because they were still attending all the practices and games, and it was just another task to do. Other comments more specifically addressed the “boring and repetitive” nature of the rehabilitation exercises. Participants were “not convinced that they’re really doing a big difference” therefore it “wastes your time.” More extreme responses included being “pissed off,” “angry,” and “mad.” Michelle commented on going to a new doctor because her usual family doctor was away, and “she didn’t know how serious it was, so I got really bad advice from her.” Michelle followed the doctor’s recommendations and reinjured her ankle, “so when I put my trust in this doctor and she tells me to go back in a week, I mean I was so pissed off! So pissed off!” She partially blamed the doctor for her prolonged injury as she received “bad advice.” Melanie also recognized that she spent a great deal of time being angry and blaming the doctor after she broke her ankle. She stated:

I was sooo angry at the doctor! I felt like he was partially responsible because he had told me, “just act as if it’s not there.”... < Interviewer: so you felt angry at him and blamed him...> Yeah, I was looking for someone to blame in a way. But yeah, I

felt like if he had maybe told me to be more careful, maybe stay off it for a bit, that maybe it wouldn't have happened.

Another difficult scenario for the girls was when they could not get a clear diagnosis. Kristy experienced an extreme example of this with her back injury; she felt as if each medical professional was "passing me off." She described going to many different healthcare practitioners:

It was pretty discouraging. I just kind of wanted an answer. I obviously didn't know anything about it. And it was hurting so much, I just, I thought it was a serious problem and I just wanted an answer cause I wanted to fix this as fast as I could. It was really hurting. But it was just, like, yeah it was pretty discouraging and like, I was mad that everyone was just passing it around and like, "Oh I can't deal with it, like, go see this person. I don't have an answer. Go see this person". I want one person just to tell me what's wrong.

Commonly, the girls in this study found the slower pace and inability to do daily activities frustrating and annoying, especially during the initial phase of their injury. This frustration was compounded, and led to anger, if they received bad medical advice or if they could not receive a diagnosis, find out how long it would take to get better, and how to rehabilitate the injury without taking too much time off. However, it was expressed that the daily frustrations and pain was not as significant to the girls as the following themes.

Sense of Emptiness

Sport is a large part of what these participants do for enjoyment and to socialize. As one girl stated, she loves being involved in sports, "because it is active, it is social and it's educational" all in one event. For this group of girls, sports are an important, if not *the* most

important part, of their life and they have been participating in organized sports from a very early age. They all mention, "it's just so fun!" "I just love it!"

Many hours are consumed during the week with training and games/competitions, and feelings of being *disoriented* arose when they were not capable of doing their regular activities. Sport is what these girls do with a significant portion of their time and is tied in with how they view themselves and how they have fun. Therefore, when they became injured, they described being "grumpy" and "more lethargic," saying, "I didn't know what to do" and "I just hate it," because being active is a part how they define themselves: "like I just always have to be *out* somewhere and like doing something." Another distinct sub-theme of this emptiness is *missing out on being a part of the team*. Being a member of a team is a significant factor in playing sports and being apart from the team added to the void felt by these girls. Having a major injury and therefore not being able to participate in their sport, elicited feelings of emptiness and disorientation in their lives with what they do during the day, how they found enjoyment and from being apart from their team.

A significant factor for this group was that they felt *disoriented*: that something was missing from their day and their "routine" was disrupted after their injury. There was a sense of loss; that the day was not complete without doing exercise. Kristy explained:

So, it's like, pretty much almost every day and at least once or twice on the weekends. It takes up so much of my time, other than hanging out with my friends and stuff. So it's just kind of a big routine and I really like having a routine. You know, some people like to be spontaneous, I like having a set routine... It kind of messed everything up a little bit. I was kinda like disoriented. I didn't know what to do, like now, like still, I kind of wander around the house, "I have nothing to do,"

sort of. I do my homework and then I'm so bored. I feel like I haven't done anything yet that day. Like I need - kind of to be out and get some exercise and stuff like that.

I feel like I need it. I love playing it so much.

Cathy similarly stated, "That's the biggest part. That's what like sucks about being injured – just like the active part, cuz I'm just active all the time so it feels like my whole daily routine is thrown off."

Another significant aspect for the participants was missing out on playing and competing because it is so much "fun" and without this enjoyment there was a sentiment that there was a void in their life. Chloe vehemently declares, "I can't not, *I can't not do it!* I don't know, it's just, it's so *fun*... <it's> a big part, of my life, I love it. Sports and being active." Melanie also stated that she loves her sports so much and described how this felt for her, "well I just *love* it, so, I mean, I have so much fun doing it and without that, you know, I just didn't feel totally complete... I love to train so when I wasn't doing it, it was all I thought about, you know, 'I want to be training, I want to be training.'" In Cathy's statement there was also a core feeling of exasperation with all the injuries she has been through and what she experiences when she is injured:

...like I *love* field hockey and soccer, and it makes me mad how I can't participate in the practices and games. And <pause> it just, it just really frustrates me...Cuz I really want to. <Interviewer: So you miss it.> Yeah, I miss it, *really* a lot <sigh>.

The participants expressed a sense of *missing being a part of their team*; it felt very different for them to be watching their teammates from the sidelines. There was a distinct sense that to be a part of the team they need to be playing rather than watching, and this sense was exacerbated if the team was not cohesive or if they were new to the team. The

girls still preferred to go to some practices and games, even if they could not participate, because this felt better than sitting at home. Another aspect conveyed by the participants was that they felt unsettled in this different role on the team (“a watcher”), and did not feel they were a part of the team if they did not contribute. Contrarily, there was also the sense that they missed their contributions being recognized by other people while they were injured. This theme also interconnects and flows through several other themes that will be described.

Participants said that one of the worst aspects about being injured was the sense of isolation from the team; they felt they were no longer a part of the team. Kristy explained that the sense of community fostered by the team is important to her:

I used to do track and field – I didn’t like it as much because it’s all individual stuff. I like being on a team and stuff. And it kinda sucks to be missing out on – like it’s fun to be playing with a team. And so I like that part of it. So it’s like I’m missing out on that too cuz once a day you go and play on a team...It’s a big change. It’s like lonely.

Chloe also talked about missing playing for her team during their final game of the season and feeling different from others:

I just wanted to be part of it, I guess. I just wanted to be a part of the team that was doing so well...like as a team, you’re apart when you’re on the sidelines. Like obviously no one else noticed, no one else really said that I was distant from the team or anything... <but> you’re not going through the same feelings as everyone else.

This feeling intensified when the injured player did not feel a strong bond with the other teammates or coach, as Kristy clarified:

Like our team had been the same for three years and we had the same coach and had been together for a long time, so that was different. Like it sucked a lot but it was like I was still a part of the team and everything, but like this <new team> was a little bit different. Um not really so much, it was more like if I'd been playing. I don't know if this makes sense – like on this other team, it's like I needed to be playing to be a part of the team.

Although it was sad and frustrating for the athletes to go to practices or games it seemed a better option than staying at home because they were showing their team that they were still a part of the group. Cathy expressed this sentiment when she talked about going to practices while being injured:

And like, just to be with the team – just to show that I'm still interested in like wanting to be with the team and stuff...I'd just rather be there than at home. Like even though I'm disappointed and sad and wanna play.

One of the reasons expressed by the participants that it was so important to remain involved in going to practices and games (or competitions) was that it is a time to socialize and be with friends. Melanie, who is involved in an individual sport, was used to practicing with “the team” and found it upsetting to be conditioning by herself. Her experience is similar to those who play on more conventional teams. She stated:

...I was in the corner by myself conditioning <pause>. I don't know, it kinda put me down a bit, just because I couldn't be there. Cuz, I'm really close to the girls that I train with, I mean, I see them so often. So it's just – it was hard.

For these girls, sports are a meaningful part of their lives – it is how they spend

their free time, how they socialize with their friends, and how they define themselves.

Becoming injured therefore affected the “role” they were use to playing and this was an unsettling feeling. Sitting on the sidelines watching was particularly frustrating, not only because they could not play, but also because it was a new experience and felt very different from playing. Watching the team meant that not only did they feel separated from the other players but it also affected how they were used to contributing to the team.

Michelle described not feeling a part of the team while she was watching from the sidelines: “...and then sitting. I think the worst thing is just sitting on the sidelines and having to watch. It’s not like you can just leave the team and not be a part of the team. You still have to be there.” She continued to talk about being in a different “role” and stated, “and I wanted to be there too, you know. But you feel um – you don’t know how you’re supposed to be a part of the team if you’ve always been a player. How do you...?” Other comments from the participants included feeling like a “manager,” a “cheerleader” or a “coach,” and that this was “unnatural. Like this isn’t me, I’m supposed to be playing.”

Another reason that the participants found it difficult to be injured and watching the games was that they missed contributing to the team effort and having their contributions recognized. Erin summarized this point of view in the following statement:

...You want to be part of the reason why they won and you even want to be a part of the reason why they lost. You just want to be *a part*. You want to feel like *a part of the team*, I guess. It’s that feeling, it’s like *amazing*. It’s like being part of a team, it’s just so good that when you get injured, it’s like, it changes. There’s still, it’s not that they don’t consider you a part of the team – you’re still part of the team completely, but it’s just, it’s just your own idea. It’s just your own idea, how much

you give to the team when you're injured. You don't you don't feel like you give anything to the team when you're injured...Because I was there but I wasn't like – I didn't deserve – I wasn't out there putting my - *sweating*. I was just sitting there, kinda watching them...Like we deserved to win but I didn't deserve any of the praise for winning. And I didn't feel I could like celebrate with them properly sort of.

Moreover, there was a sense that they could not say anything, good or bad, to their fellow teammates because they themselves were not participating. As Kristy stated:

It's like watching, like you feel – you just get frustrated, you know when you see someone mess up you just like “ahh” like in general. And then I'd never want to – I wouldn't want to say anything, but I feel bad being like “oh that was such a bad pass” because like *I'm* not in there and *I'm* not working. I'm not running and working hard and stuff, just sitting there....Not that you could make that much of a difference, but it's kinda of like, when it's a hard game, I'd rather be playing than watching on the sidelines.

As mentioned above, the participants felt much better and a part of the team if they continued to go to some of the practices and games and were kept involved contributing in whatever way possible. This may have felt uncomfortable and “boring” but was still better than not being involved at all. Michelle was encouraged by her coach to continue in her role as a team captain, even while sitting on the sidelines at provincial finals, “cuz he knew I that I wasn't feeling great about not playing. So even if I couldn't play he was saying, ‘if you have any input, you know, say something to the girls’ which means I could do something. So that really helped – that was great.” Melanie also had a similar attitude, and stated, “I guess I wish I could have been sort of more with them, even if I was just helping spotting,

like be a more active member of the team as opposed to being by myself.” In the ways described here, the girls appreciated being kept involved with their team, as they are used to being a team member with something to offer. There were limits, however, to how much they felt they were “benefiting” by going to *every* practice and game, since it was time-consuming while they were going for physiotherapy and they “could have been doing so many other things.”

A sense of emptiness was derived from the inability to do something they love; an activity that they spend a great deal of time doing, and missing it intensely. Associated with this overall sense of emptiness were feelings of *disorientation* and *missing being a part of the team*. Because sports are so much a part of these participants, a void was felt when they could not do what is so much a part of their lives.

A Sense of Uncertainty and Worry

Sports and being physically active are so much a part of the participants’ lives that becoming injured evoked feelings of uncertainty and worry. As this experience was unfamiliar, there was an effort to sort out and attribute meaning to this event; this was especially true for the girls who had not been previously injured. Searching for a frame of reference led to questions such as “what now?”, “what do I do?”, and “what if I get injured again?” There was a sense of worry that came with these questions because there were so many unknowns and so many “*what-if’s*.” The what-ifs questioned the past (“what could I have done differently?”), the present (“is it worth it?”), and the future (“what will happen to me?”). The girls often asked themselves these questions and played out different scenarios. In addition, they wanted answers from other people, such as their coaches and medical professionals, in order to help understand the implications of their injury. There was also a

concern with being left behind – an anxiety that developed from not knowing if they could compete at the same level as others when they started participating again.

After injuring themselves, the participants often described the pain as secondary to their apprehension. Michelle described her feelings when she first injured her ankle. She tried to compare this experience to previous injuries but found it difficult because she had not had an injury like this before:

There's also a lot mixed feelings about things ... at the beginning it was kinda just like <short pause> I was a little worried about it because it was different for me. I've never really had - yeah, I've been injured before... <but> it's never been something that's, um, specific time when I hurt it, kind of. It's just been kinda a problem because you're not doing this enough, you're not stretching this enough... So, it's not really, it's never really been like that for me. So I was worried, because I didn't really know how to handle it, I didn't know what to expect...

Other common concerns included the impact of the injury on the athlete's sports involvement; that is, the length of time it would take the athlete to recover. Erin had these questions immediately after breaking her tailbone:

There was a worry while I was in Calgary because I felt like is this going to be forever? Is this always going to hurt me?... Like is this going to stop me from playing sports? But that was right when I first got injured. Like I came to my senses afterwards and realized that this wasn't going to stop me from playing sports for two years. Like, I knew it wasn't *that* bad, but it was just an automatic like "oh no."

For those who had experienced a major injury, such as Melanie, there was a certain understanding of what it meant to be injured. Regarding her first injury Melanie stated, "I

guess I didn't really understand that it was just like a part of life and that it would heal. But at the time, it was like, 'Oh! This is never gonna end!'" With her more recent injury, she expressed not having this same sense of uncertainty: "well this time was better because I had already experienced it, so I sort of knew what to expect. And I knew that it was going to get better eventually."

The worry and uncertainty about the past, present and future manifested itself in imagining different scenarios and asking "*what if*."

Michelle described the constant replaying of different scenarios, such as how different events would have affected her rehabilitation, and how she now feels "naïve" in her actions:

Now I'm going back to all the what-ifs. "What if I had gotten good advice from the doctor", what if I had stayed off it <pause> from the get-go". If I had gone to physio right away, maybe, if I had started exercising it aggressively, rehabing and everything and *then* going back into soccer. That was the end of March! That would have been in time for provincials!... Well really all the what-if's and what if I had done this, what if I had done that. And then afterwards, feeling stupid. Feeling naïve for not thinking it was a big deal for me.

In contrast, Erin wondered what would have happened if she had started to play sooner, "because it still sometimes hurts and I'm just – what if I had gone back <in sooner> and if I fell over again and I hurt it. That would just be terrible."

For others, the what-ifs occur with regard to playing and being worried about reinjury as Cathy clearly illustrated:

Like it makes me think, that every single time there's like a play happening and I'm involved, like I always look forward and I always like fast forward kind of and just – I just think of the future, what happens if - what happens if my knee gives out, what happens if I kick it the wrong way and my knee gives out, and so on.

There were also times when there was a sense of worry and uncertainty about future implications of either this injury, or prospective injuries and their impact on the body. Chloe gave an example, understanding that this particular injury may not have lasting implications for her, but that the structure of her feet may have potential consequences for her both physically and in appearance:

This is going to get better and I'm going to play... I was just thinking like, If I had like a really serious injury coz I don't think I've had a really serious injury yet... It's all because of my feet <laugh> because like I have a hammer toe or something and so that affects my arch so I have to wear orthotics and my knees hurt because of my orthotics ... it's all kinda connected. It sucks... I saw one of my grandma's friends – and it was kinda gross – I saw her toes and they're all like mangled and it was gross. And I was like ughh because that's what my feet might be like coz they're getting worse.

A strong desire for answers coincided with all these questions. The girls often turned to their medical professional or coach for feedback and became frustrated if the answers were not forthcoming. Chloe conveyed a common sense of frustration if there was not a clear diagnosis for the injury: "Well I definitely also wish that everyone agreed. I guess the I.T. band thing everyone pretty much agreed, but for this injury I wish that someone could tell me what it is!" Michelle heatedly expressed the importance of answers for her many questions:

That's also hard too, because <pause> I really need to know like how much I've hurt it. You know, like to what extent...I want people to – I want physio and I want a doctor to tell me, "this is what happened, this is how you did it, this is how you can make it better." You know, straightforward! I don't want all this "potential..."... I mean I have to know, going into something; I *have* to know the results of what could happen. The consequences of being stupid or like if I'm too tired.

The uncertainty of not having a diagnosis and a prognosis seemed to add to the anxiety and frustration of injury. The girls relayed stories of wanting straightforward, concise, visual information about their injuries and the consequences of not rehabilitating properly.

There was an additional *concern with being left behind*, which encapsulates the anxiety the girls felt in several different areas – from simply watching their physical conditioning decline, to fearing that everyone else will have advanced so much they will not be able to catch up when they return from their injury. The participants in this study spoke of these different aspects in their concern for falling behind.

On a basic level, some of the girl's spoke of losing their conditioning and getting "frustrated" and "mad" while watching their teammates learn new skills. Michelle stated, "it's frustrating when you can't really, you want to improve, but you have an injury holding you back. Like soccer, I mean in the summer it was kinda my time, I really wanted to learn by myself almost. I was just kinda trying to improve my individual skills and I couldn't." She went on to say, "I know what it's like to be out of shape and I've worked hard on that sort of thing."

Part of being athletic and competing is to be in good physical shape and to keep improving your skills; however when an injury occurs this progression is halted. Not only did the girls feel they were not improving, but the meaning attributed to this situation, whether real or imaginary, is that they were going to find it difficult to compete at the same level after they recover. Melanie described this anxiety, which occurred during both injuries. The first time she was injured with her broken ankle, she could not train with her intense gymnastics team. She explained:

I saw my whole team practicing and moving on sort of without me. Just like they were all progressing, with all their skills, and I was stuck in a cast conditioning...And I felt sort of out of place...I was a little bit embarrassed I guess, just because I went from being sort of like just as good as everyone else, we were all sort of equal level, to being sort of like the struggling member of the group.

She then talked similarly about her more recent hip flexor injury: "I compete at national level competitions and I felt as if, you know, if I didn't keep training then I would fall behind, not only *my* team, but the competition – and I would just never really catch up to where I could have been."

Kristy also described these same feelings and thoughts occurring, even though she realized it was unrealistic in her situation.

It's kinda lame cuz I want to get *better* <in terms of skills>. Everyone else is practicing and working hard and stuff and I'm really not and I feel like I should be working at it or getting better. Like "oh no, other people are going to learn stuff" and I won't have learned it. I'm afraid that, although this would never happen, but I'd come back three weeks later and everyone would be a million times better and I'd

be like – I know that wouldn't happen <interviewer: but it's sort of...> Yeah, in my head. I'll be like so confused, like not know what's going on. There'll be all this new stuff that takes place and everything.

The participants' specific concerns included losing fitness, missing out on learning new skills, and realistically or not, coming back from their injury below their previous skill level and their teammates' new skill level. These girls work hard to be at a high level of competition in their chosen sport and find it frustrating and disheartening to have their aspirations hindered, even if just temporarily. As competition occurs within a social context, the gauge they used to determine their own skill level was, naturally, within their peer group. While injured they could not participate and they saw others progressing; there was a sense, therefore, that they were not the same as, and were lower than, others in their fitness and skills.

Not Accepting the Injury

As previously mentioned, being involved in sports and being active is a major part of these girls' lives, therefore, after sustaining an injury there was a sense of not wanting to accept this unfortunate occurrence. The girls often spoke of: *not listening* – to the pain, to their body and conscience, and to the advice of others; *fooling* themselves; and *playing it down to others*. The most common rationale was because they missed participating so much it seemed like a more palatable option to try to play. The girls had different reasons why they did not accept being injured, depending on their individual circumstances. Some of these include: not actually knowing what the pain meant, not realizing or understanding the repercussions, wanting to be in a big game, wanting to save face, not trusting other people's knowledge and not wanting to fall behind in their training.

The most common reason expressed for trying to play or train when they knew they were injured was because they missed being involved in the activity. Melanie stated:

So, a lot of the times, I actually made it worse, my injury, because I wanted to train so badly. That I just - after it felt even a little better, I'd go and train, and it'd almost get worse than it was to start with. Just because I wanted to be training so badly, and I would do it, and then after I'd realize that "oh, now look what you've done."

Michelle reinjured her ankle several times trying to play before her ankle had recovered.

One of the times was because "it was one of the more important games and I really wanted to play so I went back in, into the game. And I don't remember how I did it, probably just kicking or something and it was shooting pain again."

For all the girls, except Cathy, having a major injury is a relatively new experience; therefore, these participants spoke about the difficulty of knowing and understanding the pain, especially if the injury was from overuse. Given this lack of knowledge and experience it was difficult to assess accurately the severity of what their bodies were telling them. For instance, with Kristy's overuse back injury, she explained she did not listen to the pain because she did not know what the sensation was telling her:

Cuz like I didn't really know. You just get sore from playing and sore from whatever, stretching and stuff. Just playing a lot you always get sore and stuff, like everyone is sore. So I wasn't pretending it wasn't there or anything, like it was hurting but I actually didn't think it was that big of a deal.

Sports occur within a social context that has cultural expectations, such as playing through pain. Some of the girls spoke about this dynamic; Michelle vividly described attempting to go back into a soccer game despite the pain she felt:

I didn't really want to tell my coaches, "it hurt a lot, but it's fine now" <laughs> you know what I mean? They saw me, on the ground sobbing – I cried like a baby at one point. I felt like such an idiot you know it hurt so much and then now it's fine. So it's just thinking that it hurt a lot...<and> I felt like such a baby for not <short pause> staying on <interviewer: and staying through it?> Yeah! Exactly!...like I know this *has* to be a serious injury, you know but I was like "oh I can walk" so am I just being a baby? And then I felt stupid and I was just kinda like "maybe I should go back into the soccer game, because I looked like such an idiot!" <laughs>

Some participants felt that it was not worth listening to the expertise of others, such as the physiotherapist, because there was a sense that the exercises did not actually help: "...but when like you're in physio, such little tweaking of things you feel like you're not helping anything. Cuz it kinda wastes your time...I'm not convinced that they're really doing a big difference...like I probably know more than the physio about what it's like."

Chloe explained just how prevalent not listening to herself or others actually was for her:

I have my mom telling me. I have physio telling me. Like coaches telling me. Like that I should be taking it easy and doing exercises. And myself <interviewer: and you didn't even listen to yourself.> Yeah. Yeah <chuckle> it's pretty bad that way.

As for Cathy, she has been injured so often that there is a passive non-acceptance in the way she described dealing with her injuries and doing her rehabilitation exercises:

I'm just like 'Why? What's the point' <slight laugh> like I haven't been to physio in a while, which is pretty lucky...I'm just like *tired*, and it hasn't happened for about a year, so I just kinda stopped doing it <physio exercises>. I haven't been injured for a

while so I basically stopped doing the exercises. Now I'm just kinda like gonna see what happens.

The girls also spoke of trying to “*fool*” or “*trick*” themselves into not believing in the severity of their injury, and either tried to participate sooner than they should have or put off acknowledging that they could not play for a certain length of time.

Michelle told the story of her overwhelming desire to play in the provincial finals that she did not acknowledge the possibility of being unable to until the night before the big game. It was only then that she made her decision not to play:

I had just decided the night before that I wasn't going to go and play in provincials. I kept telling myself – I wasn't being realistic, like I knew subconsciously that I couldn't play like five weeks before. But I kept telling myself because I wanted to play so much...I was just fooling my self.

Other participants actually did participate, despite knowing they were injured, and talked about the mental games they played with themselves to try to “get away with it.” Chloe aptly described playing and doing activities against her better judgment:

Yeah I went back <participated>. Like I kept trying. Part of me tries to trick myself, like I know I shouldn't do it, but like some other part of my brain like tries to block that part out <and> the fun side takes over the thinking side...I just kinda do everything until I start to hurt again. And then I thought, “damn! I thought I could get away with it this time!” But of course you can't, you just irritate it again.

Melanie similarly expressed not accepting her injury and thinking she could train:

I guess I just kind of thought that maybe if I started it <training>, it <the injury> would miraculously not be there anymore. I was kind of hoping for it

<chuckles>...and sometimes it wasn't even intentional. Like I would take two Advil's to take the pain away from it. But then I would be thinking, 'oh, it feels a lot better – may be I should go practice.' So I would train but then I guess the Advil just masked the pain.

Yet another way in which the girls displayed not fully accepting the circumstances of being injured was by *playing it down* to others. They did not want to think of themselves as injured; consequently they did not want others to think they were injured either. Chloe described a conversation with her coach about her injury: "she was like 'isn't this injured?' and that kinda thing. And then I <would say> 'no, no, it seems a lot better today.'" Chloe went on to state that her coach would then ask the physiotherapist to write down the prognosis of the injury "and keep track so she could find out how good my knee is cuz if she'd asked me I'd be like 'yeah, yeah it's great.'" Michelle also recognized that she minimized how much her ankle initially hurt when she spoke to the doctor: "like you can say I downplayed it. Just cuz I know I went in there and I said, 'yah, I sprained my ankle in a soccer tournament, I have soccer coming up, how long before I can go back in?'"

As previously discussed, all the girls' situations were different; their reactions were equally diverse. In Erin's circumstances, she immediately accepted her injury. The following excerpt illustrates the possibilities of why her response may have been so different from the other girls, and it also supports the other girls' actions:

...like I could have played, like if it was a big game, I could have played with it after like 2 weeks...<but> I didn't try anything, and I'm normally the type – like if I roll my ankle I'm normally the type to just tape it up and go back, I don't care, but I knew that this, I knew that this could turn into something. Like I'd never *broken*

anything, so right when I heard it was *broken*, it just *freaked me out*, so I was careful. I was careful, so I listened to my parents and sat out the month of August.... But the thought of it actually like broken – like, it scared me, so I was careful, more careful than I would have been if it was a sprain or strain, because I don't care about those. Erin stated that normally she would try to play injured but in this case she did not because she *broke* her tailbone and the image of it being broken without a cast scared her. She also mentioned that she probably would have tried to play if there was a big game. Fortunately, however, the timing was good since the injury occurred in the last tournament of the season, and August is a month that the team does not officially train.

Sense of Guilt

A sense of guilt flowed through the many vignettes told by the participants about their experiences of being injured. The guilt was sometimes minor and other times it was a powerful sensation, but nonetheless it was a pervasive sentiment for the girls. Most often the sense of guilt came from not handling their injury properly: not accepting the injury and not listening to their better judgment. They blame themselves for prolonging the injury and for negatively affecting the team (“letting the team down”). The language frequently used was “I should have...”, “I felt bad...”, “it was stupid...”. It must also be noted that while a sense of guilt and self-blame were mentioned they were also qualified with the knowledge that the causes for their guilt were not truly their fault.

For some of the girls, the feelings of guilt came from small incidences; Kristy stated, “...but sometimes I was a bit grateful when it was rainy and cold out. I was like, ‘Ahhh,’ <sighs> like I was *inside*. I feel kinda bad, cuz I don't feel bad about not going to practice.” She explained that this did not happen often but at times she really liked having a break from

playing and had a sense of guilt because this felt contradictory to the loss she felt about missing playing. Cathy also mentioned feeling bad during her injuries, but with regard to the way in which she managed her rehabilitation process:

I just kinda feel bad, like for my parents - doing the exercises at physio and them paying the money, like all that money, then me not doing the exercises at home. So basically like wasting their money. <interviewer: so going but not following through.> Yeah, or doing it at physio and listening to S. <name of physio> and just saying 'yeah, I know do the exercises' and then going home and just like, 'No, I'll do them later' and eventually never getting to them.

Chloe expressed feelings of guilt about how she handled her injury by continually playing and listening to the "fun side": "<interviewer: and what does that do for you? With this push-pull going on?> I just feel guilty because like I'm hurting. Just like, 'I shouldn't have done that,' like I knew I shouldn't have."

The largest proportion of guilty feelings came, however, from some sense of "letting the team down." Letting the team down is about how the participants felt their injury negatively impacted the team in some way. Although the girls often realized that it was not their "fault" how the team performed, they would still feel some inkling of responsibility for the teams' outcome. Michelle blatantly declared:

...because it <sprained ankle> wasn't that bad to start but it became a big deal after that. Yeah that stands out *guilt – being stupid*. I probably wouldn't feel that way if it weren't for seeing how long I was injured, because I had affected other people as a result of me being stupid, you know...I wouldn't feel guilt if it was just *me* losing out. But if I'm letting the team down then yeah, I feel guilty.

Erin stated that after she became injured her team did not have a back-up person to play her position and explained how this felt for her:

Pretty much frustration, kind of like helpless... Well, it was hard, I could see it was hard for her <person substituting>, so I almost felt bad for her but like, in the sense that I thought like if I was out there, this sounds kind of like I'm boasting, but if I was out there I felt like we could have won the game....I was like, I felt bad for the team because <interviewer: almost that it was your fault that you didn't win?> Sort of. Like I knew it wasn't, but yeah, kind of like that.

A similar reaction occurred for Melanie with her gymnastics team, even though gymnastics is typically thought of as an individual sport:

And also sometimes, you have to have a certain amount of people to qualify for the team. So, if I'm not there, some of the ones they can't really qualify for.

<Interviewer: What was that like for you?> Well, I knew that it wasn't my fault that I had broken my foot. That it just sort of happened. But I also felt partially responsible that, because of me, they weren't going to be able to qualify for different things. I mean, it's not a huge thing, I mean, I guess everybody's goals, weren't focused on your individual performance, but...just because, I sort of felt like I was letting them down.

Cathy also described feeling guilty about letting the team down – not because she was unable to participate, but because she did not sacrifice herself on the field because she worried about reinjuring herself:

Well, if we lose the game, I'm just like, yeah, I didn't get hurt this game, so I wish I would have gone in for that tackle. Or I wish I would have done this or that.

<Interviewer: So you replay and do a lot of “what ifs”> Yeah. That happens like every game, basically, if we like lose. I don’t feel bad if we win. I just sort of forget about it. But if we lose, it’s just something that I could’ve done better, like I didn’t play 100%. <Interviewer: So you take it on?> Sort of, not totally 100% like on me, but, yes, knowing deep down, like all that I could have done better, but I didn’t, because I’m worried about getting injured. I just kinda feel like I’m like letting the team down. So. Yeah. <sigh>

Similarly, Kristy spoke about not feeling good about her playing abilities when she continued trying to play injured. Not playing to the best of her abilities, however, inspired her to stop playing and work on the rehabilitation program until she felt better about her performance:

Yeah, well, ‘cause well I really didn’t wanna, like when you’re hurt, when I’m hurt, like it’s all you can really think about when you’re playing sort of, and it’s like, “oh I’m hurting” kinda. And so, like, and it made me play worse because I couldn’t make a run as fast and I couldn’t do as much or as well. So I’d screw up passes and stuff...it’s like when you mess up it kind of affects the team you know. Like that’s the typed of sport it is and so I would kinda feel like bad, like kind of screwing up all the time or like missing a goal or like, screwing up so I didn’t really want to play much again until I was feeling better and like playing my best.

These feelings of guilt inevitably led to thinking about what they “should have” done differently. By far the vast amount of “should haves” centered on either getting different medical advise or following the rehabilitation program. Statements such as “I should have gone to a physiotherapist right away, being an athlete as I am, being injured before. I should

have gone to physio right away. I was stupid for that,” and “ I wish I would have done the exercises at home” were consistent thoughts expressed by the girls.

Seeing Makes It Real

Throughout the participants’ stories was a consistent theme of “Seeing Makes It Real.” This theme relates to visibility/invisibility of the injury and perceptions regarding the seriousness of the injury. A visual image or object made the injury much more real for the girls. A visible indicator, such as a brace or a cast, legitimized, to themselves and to others, the pain and inability to play, and was evidence of a serious injury. Initially, there was the desire to have a visual sign of the injury so that people understood the extent to which they were hurt. However, this desire diminished over time because it was also a constant reminder of the seriousness of the injury; it was cumbersome and made them feel even more out of place. There was also a perception that other people could understand the injury more if they saw it happen.

The following dialogue with Kristy illustrated the desire to have a brace, something people can see, so that it validated her pain and distinguished her from other people:

I was like this is kinda cool, this brace or whatever and um...<Interviewer: why did you think “kind of cool, a brace?”> Well, I thought it would like help – it’ll make me feel better, which it didn’t really, but then I was all excited cuz it was kinda like a cast, sort of like, I’m hurt kinda. Kinda of look at me like cuz you couldn’t see that I was hurt. It’s not like a big bruise or a scar or anything that you can cast or anything, it was just like my muscles are sore pretty much, like people would be “oh” or whatever. I wanted to have something that would – “well you’re actually hurt” sort of... It was just like I wanted – ‘cause it was kind of like serious, well sort of serious.

And so I don't know...Like almost everyone like, you get hurt and you want to get a cast or something like that, just to be able to like, "look at me. I'm hurt" sort of.

<Interviewer: A bit more sympathy?> Yeah. I didn't really want sympathy. I just, I don't know wanted something there...<and then> it was just like, annoying, with clothes, it was like hot, it was a big hassle. It wasn't cool after like a few days...it just looked kinda dumb.

Michelle shed light on what it was like for her not to have a visible aspect to her injury:

I know what it's like to tear things. I know what it's like to have invisible injuries, stuff that people can't see... I'm not limping, I'm not anything. I don't have a cast on or anything. For my ankle I stopped limping that week. I mean I had a brace on, but it was like, I was wearing pants and stuff and running shoes to keep my ankle stable – so people could never see. And so know one ever knew. It's not visible, like you don't have crutches, you don't have – you know what I mean?...it's bad in that way, that kind of injury people don't understand because they don't see a cast. And it's also that I can still do stuff. It looks like you can - when you can run and you can walk. When I'm walking and I'm not in visible pain.

She continued, "so maybe if, you know - they could see me hurt it, if I had rolled over on it or something like that then they could understand that it's really, really painful."

Chloe also mentioned that having an injury that other people cannot see made it more difficult for her, because "the injuries I've had haven't hardly been anything you can really see but it's like something you can hide. So that kinda makes it harder" to resist being tempted to participate in activities with her friends.

Conversely, some of the girls had casts and braces and found that these were a constant reminder of their injury. Cathy explained her experience wearing knee braces:

I have like these *robotic* knee braces. I have like two of them and they go from like there down to here... So I've always been reminded by it from the knee braces. So slowly after I got to stop wearing the knee brace, it just – the worries started to fade away.

Melanie had a similar experience but compared her two injuries on this aspect:

I guess, just the fact that I had my cast – I couldn't take it off. It was just sort of, <pause> I guess it was just more, like mentally. I felt mentally isolated because I knew I can't walk. I can't really take part in things. And my hip flexor, even though it was still painful, I could still move around, I was more like mobile. Just mentally, not seeing a big thing stopping me... it <the cast> reminded me of it <the injury> so my mind was always on it <the injury> cuz I was always lugging it <the cast>. I could walk, I looked regular. Like I could sit and it wouldn't be hurting. So I began to actually forget about it.

For some of the girls, having others actually witness seeing the injury gave them the perception that other people understood their pain. However, in the following statement by Erin, there is also a sense she was able to understand her injury more because she could visualize a “broken” bone more easily than a sprain or a bruise:

I *freaked out* right away when I heard it was broken. I thought “wow” it actually broke, like I've hit it so many times and it hurt so many times but it's actually *broken*? Like I pictured – like if they said you bruised it badly, you should sit out for

two weeks, I wouldn't have sat out for two weeks – I doubt I would have...but the thought of it actually *broken*.

For these participants, having a visual aspect to their injury seemed to indicate severity of the injury, as well as making the injury more understandable to others and themselves. In other words, the injury became more tangible and real if it could easily be pictured or seen. Generally, those who had a cast or brace did not want it because it was a constant reminder of being injured, while those who did not have one, desired a visual symbol to indicate the seriousness of their injury.

I Am Supported But Alone

This theme constitutes a complex and dynamic intermixture of emotions felt by the athletes: they felt understood and supported by other people, yet at the same time felt alone with the personal experience and choices involved with their injury. This duality of feelings was often subtly expressed in their statements. The girls generally felt supported by other people in their lives, especially if the other person had experienced a similar injury. In particular, adults who had gone through comparable injuries played a special role in giving advice, and ensuring they felt cared for and understood. Certain respected adults also provided feedback and guidance in decision-making regarding the injury. Ultimately, however, the participants understood, and wanted, the decisions to be their own, despite being apprehensive about this. They distinctly preferred not to have in-depth conversations about their feelings of being injured, especially with their friends and teammates, although it is often suggested that they wished others understood them more. As well, they often implied that talking about their injury would not actually help the situation, so rather than discussing it, they rather the topic be “put aside.” Furthermore, some conversations were

just plain “annoying,” such as those filled with questions from strangers and from those who “don’t understand.” This theme is about the relationships the girls have with the people in their lives, and what they found helpful and frustrating within these interactions. “I Feel Supported But Alone” also consists of the awareness that, despite supportive relationships, their experience is ultimately their own. This theme has a great deal of overlap with other themes, especially “A Sense of Emptiness” and its sub-theme *missing out on being a part of the team*, in addition to “Seeing Makes It Real.”

The girls felt most understood by, and were able to accept support from, people who have had an experience that closely reflects their own and with whom they have a close relationship. Aspects that mattered for these participants were involvement in sports and experience with the same injury. Coaches, parents and physiotherapists were all mentioned as the people who best understood what they were going through and provided support to them while they were injured. In particular, straightforward advice and facts from people who had similar injuries were found to be helpful and were considered supportive. Erin’s statement about her coach fittingly illustrates this opinion:

He was good cuz he knew how painful it was because he did it <had the exact same injury> so he was kind of, not like babying me, but was like, “ok give her the seat that she can sit back on” like he knew what to do...I didn’t feel I need to talk to anyone about it, like it wasn’t bad enough anymore that I was worried and needed someone to go to <and ask> “is it normal that it’s doing this or doing that?” He told me what to expect, he told me it was going to get stiff and that it would loosen up during the day. So I kind of knew what to expect from it and stuff.

Cathy's remarks are similar about her soccer coach but she also added that she appreciated the individual relationship between them:

Like my one soccer coach, S., he's had like five knee surgeries so he basically knows <chuckle> what I'm going through. And so he actually understands and he's got it worse than me. <interviewer: how does he show you that he understands? Like does he say anything, does he do anything in particular?> Well, he'll like give me exercises, and he'll like teach me how to stretch out around my knee cuz he knows what he's doing...we just like talk sometimes and he just basically doesn't talk to me like I'm one of his students, he talks to me like I'm one of his friends. And so you know, not so much of a coach as just like a leader.

She went on to state, "The coaches, they're like really great cuz they understand, like what I've been going through with the injuries and stuff. So if I don't feel I can do it they won't make me. I can just take it at my own pace." There was a common sentiment that was valued about not being pressured to play before feeling ready.

For Michelle, she felt that her physiotherapist was one of the people who understood her, because the physiotherapist was athletic, intense and straightforward – just like herself. There is also the impression in the following statement of a personal connection that was important to Michelle. She commented about going to physiotherapy after her first week back playing soccer:

And then she poked her head inside and asked, "how are you?" and I said, "ahhh, not so good" and her face just dropped. But then I said, 'it's not my ankle, it's something else" and she's like, "if it was your ankle, I swear, I'd come in and sit down and cry with you!" <laughter>...you can have physiotherapists that don't play

team sports, they've never played team sports. I think my first physio is like that – she didn't really know. I mean S., she's kinda like me. She says, "how long? How much? How intense is this gonna have to be?"...And she's totally athletic, so she knows. She's been there before, obviously, and she's treated all these people.

The relationship with the coach was important for these girls while they were recovering from their injury, and they felt less understood and supported if they did not have a connection with the coach. Michelle spoke about the team and coach that was familiar and tight knit:

It was really good that he cared – that he wanted me to be there, and he wanted me to be a part of it...other coaches probably wouldn't be that great because they wouldn't have that bond, that personal bond.

In contrast, Kristy expressed what she felt in an interaction with a new coach:

For the one team I was playing on at that time, we kinda had coaches on and off – different ones and stuff. So it was kinda hard because there wasn't a specific coach that knew me, knew I wasn't there and certain things like that...they know who I am or whatever, but they didn't really see me before. So it'd be like weird, not really team-ish, sort of...I just kinda talked with them, like, "oh yeah. I'm on the team," or whatever. "I got injured." And they said, "okay" and didn't really seem to care that much. So it was kinda like eck <sigh>. I was like, "Aw, they don't really seem to care that much." "Just come back when you're not hurt" which is fine but it's, I don't know. It's kinda nice to have people that care a little bit more.

Many times parents were also mentioned appreciatively as providing a supportive role during their injury, especially if the parent was "sporty." Interactions including

providing a sounding board and words of wisdom such as “don’t rush it” and “I know what you’re going through” are valued from parents. Even “nagging” to do rehabilitation exercises and arranging medical appointments is begrudgingly accepted as helpful. However, being asked “a thousand questions” was “annoying” both from strangers and from parents. In the following extract, Cathy exemplified typical feelings of being understood and supported by her family members:

Well, they’ve always been supportive. My dad and my grandpa –like my dad’s side of the family - that’s basically where I get my athletic ability. So my dad and grandpa have been through every injury possible...so he <dad> basically knows what I’m going through. He doesn’t pressure me to do anything. He just tells me to take it at my own pace and just like play when I’m ready to play. <Interviewer: okay. So your dad, you feel understood by him, what you’re going through. > Yeah, like my mom’s really understanding too but she’s not like the sporty type. She still supports me and everything, but she doesn’t really know what’s going on.... My mom’s like comforting, “Aww, it’s ok.” And my dad’s like, “yeah I know what you’re going through.” Like he’s been there – been there and like way worse than me.

Similarly, Melanie’s dad also played key role in supporting her through her injury. She found she benefited from talking to him about her emotions, as well as his input and feedback about her rehabilitation. She was adamant however, that she wanted to be in control of her own decisions:

I have really good relationship with my dad, so, I felt comfortable just talking to him about it, sort of just what I was feeling at the time and how soon was too soon to go

back and you know, how much I should be doing. Should I just be training, starting off going once a week of physical training. And he was really supportive <pause> he would usually just ask me what I wanted to do and tell me if he thought that would be a good idea or not. He left it up to me and then would just – ultimately, it was my decision. And then he would just tell me what he thought to help me make my decision but he wasn't telling me, "do this, do that." I felt like I was in control of my own decisions and I hate being told what to do.

For the players making decisions throughout their injuries was sometimes difficult, especially when it came to deciding when to start playing again. Some of the participants felt the weight of this independence, as only they knew how the injury felt and no one could tell them what was best. Although Michelle previously stated in her interview that she wanted to make her own decisions, she also admitted:

Physiotherapists and coaches always leave it up to you to decide, which is probably the hardest part because it would be so much easier if someone told you, "you can't play"...each one would support me through it <but> I mean it's just me. Only I know how it feels.

Kristy also suggested initially feeling uncomfortable with making decisions about her return to sports and having her physiotherapist leave the issue up to her:

So then he lets me make the decision on my own – when it was safe for me to play and when it was not safe, cuz I know I how I'm feeling. <Interviewer: so what was that like for you when you heard that? > It was kinda weird, a little bit, because usually doctors like tell you what to do, "do this for three weeks and then come back" or something. So he was kind of, "I don't know how you're feeling. I don't

think at this point it would be a good idea, but if you are feeling ok, you can.” It was weird because I could make decisions and I didn’t really know what to decide.

Although they generally felt supported by others, the participants collectively expressed an aspect that they did not appreciate. The girls strongly disliked having conversations with other people that involved being constantly questioned about their injury, getting unsolicited advice and repeating their story (even if the person is athletic). Michelle candidly explained:

My dad was even too worried. He’s really into my soccer – he’s athletic – that’s my connection with him. But he’d ask me questions about my ankle and stuff and I had to repeat myself. I hate that! When people ask me what happened after, and I must have repeated it a thousand times, right.... you’re sick of describing how it feels. It’s not that big a deal for me, for people to understand, I don’t really care. It’s more kinda if they can give me advice, great, but I don’t want to have to explain it 5000 times. Yah, my ankle hurts, how I sprained it, naa, naa, naah. So with my dad it’d be kinda like, “well you should do this” or you know, “I talked to my buddy who coaches this team and he specializes in ankles and is a physiotherapist and he said you should...” and I was like, “dad, I’ve been going to physio for how long? I don’t want your stupid advice!” <chuckle>

Michelle went on to talk about how she preferred not to discuss her injury with her friends too much about her injury because not many of them understood exactly what she was going through, especially her non-athletic friends:

I kinda had to do that with my friends too. I didn’t even bother. I just kinda thought it was stupid – why would I bother explaining it to someone who doesn’t

understand? Like I'll kinda say, "yeah, I hurt myself. Big deal. I don't want to talk about it.

As Michelle demonstrated in the above statement, the girls all choose not to discuss their injury at length with their friends. Different reasons were given for this tendency; for example they do not think their friends understand their experience, the interactions feel awkward and talking about it does not change the fact that they are injured. Instead, they stated that they preferred to act "like nothing's happened" with their friends, and that their friends in turn treat them in the same way. However, it is from these statements that, at times, a sense of aloneness in their experience is noticeable. In the following quotations, Erin and Melanie bring forth the idea that despite the support of their friends during their injuries they also felt a slight uneasiness in conversations with their teammates. There is also an insinuation that their feelings were not addressed but this was "fine" because talking about the injury would not change the situation. Erin stated:

They'd come to the bench. Because we don't talk on the bench, I mean we're watching the game and go, "how's your tail bone?" "It's okay." And then we'd just watch the game. And they didn't, they didn't communicate with me the way they do when I'm playing. I think they almost felt bad so they didn't want to like rub it in, or be like "too bad you can't play" that kind of thing. So they, they just kind of left it, didn't talk about it.

<Interviewer: What was that like for you? > Um. It was okay. I kind of liked that they didn't talk about it much. It didn't really need to be talked about. Like, to me, it didn't feel like it needed to be talked about any more. They knew I was injured. I knew I was injured.

Similarly, Melanie reflected:

I think a lot of them didn't really know what to say. Because I mean, besides saying a lot of, "oh I hope you feel better," "don't worry, you'll be able to get back into it."

But besides that, I don't think there's really a lot you can say. And they were kept busy with their own training too.

She went on to talk about going to school with crutches and how physically taxing this is, but she also mentioned that her schoolmates did not recognize the emotional aspect of her injury:

I found my crutches really difficult because I'd come to school, and then everyone's like, "Oh crutches! That's so much fun!" And they'd take my crutches, and be playing with them, and I'd hop around trying to collect my crutches, and everyone just thought it was really fun, when you know, my underarms are totally raw from the crutches, and I was in pain and I was frustrated.

Michelle felt most strongly about not being understood, despite talking to her fellow teammates who have also experienced injuries. She said she was understood and supported from a superficial level, but not necessarily from her own personal, emotional experience.

I don't know what other teams would be like, but our team is really close and so they were totally supportive of me... They understood, I think, how it felt to be injured.

They know it takes a long time. They know – they always tell me, "don't go back in if it's not important" and that kinda thing. They know that if I go back into it, they know how it feels to be re-injured and have to stay out for a long time. They know how *that* feels. But they don't know *my* injury.

Later in the interview I asked her what would have been an ideal scenario for her. She explained: "For like, everyone on my soccer team to understand everything about my injury.

To know exactly how I feel. To know that because I went in too soon it's going to be a long time. To know that it's really painful." There is a notion that there are friends and adults around to support them, and treat them nicely and the same as prior to the injury, but that their injury is something that they are going through on their own, that no one else can quite understand or change. Melanie summed up this sentiment succinctly in her last comment in the interview:

When I broke my foot – my mentor, she was 18 and she had broken her arm a couple of years ago – so she knew what was going on. <Interviewer: and what was that like for you? > It helps. But at the same time it was kind of like, I was still upset about it, so even though it was nice to know that people were supporting me, I just had to come to things by myself. It made me feel better but it didn't physically help. I mean, I was still by myself conditioning.

A Coming to "It's Not All Bad"

The theme "It's Not All Bad" represents the common experience of the participants that injury can lead to a positive outcome. Many of the girls spontaneously declared that despite the frustrations, worries and difficulties, the situation was manageable and, "I'm not totally down. I'm just like not totally bummed out." Another common statement was, "it could have been worse." The girls indicate *positives*, *learning* and *a broadened outlook* as constructive effects that resulted from being injured.

The *positives* specified range from very small to larger, more beneficial events. Comments about the small benefits to being injured include, "watching was pretty hard. <chuckle> but I guess not that bad when they have to do big running drills" and, "it was still a lot of fun because sometimes you'd have to get up like really early, but like I wouldn't

have to play...". Most of the girls talked about the suitable timing of their injury, particularly if the injury occurred at the end of the season. Chloe conveyed this sentiment: "in the summer everyone gets out of shape anyways. You're not doing anything, so the timing is good I suppose." Erin also explained that she found the timing of her injury suitable because it was the end of the season when she was injured and this helped her to recover properly:

If it had happened during the basketball season, I would have put a ton of pressure on myself to go back. I would have told myself, "It's not that bad. Go back. It doesn't matter." But the timing of it was pretty good, like in terms of how much time I had to recover.

The end of the season was also preferable because not as many games are missed. Michelle exclaimed, "There's next season. And I was lucky. For me, I hurt myself towards the end of the season. It was good. If I had hurt myself at the beginning it would have been 'Oohhh', it would have been serious!"

Another positive aspect to being injured, though fleeting, is that it gave some of the participants some "time off" from their hectic playing schedules. Erin was going to have time off from playing whether or not she had an injury, but stated, "it was summer break so I wasn't going to basketball every day anyway. The month of August I needed some time-off." Michelle revealed occasionally wanting an injury for a short time but then realized the implications in her comment:

At first, you know, you hurt yourself and I guess - you think you can just take a break for a little while. And then you realize that it's longer than you wanted and you don't really want it. Whenever I get tired of soccer, then sometimes I'd like a

break. Sometimes then I wish I was injured so I can just take a break for a week or so. But after a while you just miss it sooo much...

The desire to have time away from their particular sport was most pronounced for Melanie. For her, becoming injured gave her a reason to stop gymnastics and try other sports:

So that was when I just said, "that's it, I'm taking a break from that." And that was sort of <pause> the end of gymnastics for me. That was because my coach, he kept pushing things on me that I just wasn't ready for. Even just before my injury, just in terms of skills. Like, if I didn't feel right to compete something, he would force me into it. So, I don't know. I was more inclined to the idea of quitting and <Interviewer: and then this just sort of pushed >And then that was what just pushed me over the edge...Before my injury I was thinking, maybe it's time to try something new. I had always felt so many people played soccer, basketball, or volleyball or whatever, and I had never tried any of that stuff cuz, I've just been so busy with gymnastics and focused – so I wanted to do other things. So I started doing volleyball, and dance, and basketball. It was a good thing in a way. I tried tennis, I started doing tennis tournaments. I enjoy it, cuz after that I realized that maybe it was bad at the time, but it turned into something good, where I could, just see what else was out there.

Another benefit to being injured, spontaneously mentioned by Chloe, was meeting new people:

I got to know this other coach. It's one of these evaluators. Like S., she plays for a national field hockey team. Um, she's one of the evaluators for the summer games team and she was always on the sidelines and so I got to know her a bit. And she

actually ended up being my high-school assistant coach. So, you know that was good, she's a really nice person; that was one bonus, I guess, of being injured. No one else got to know her a little bit more.... <and> when I was at nationals for field hockey, like when you go in for the physio to do whatever you need to do. Then you like, well you always meet people in there. Like people are lined up from other BC teams that I would meet there. So that was another thing.

Another valuable component of having an injury was *learning* from this experience. Different girls spoke of different aspects of learning, some of which include: discovering how their bodies work, finding out how to handle the injury (not pushing their recovery, listening to others' advice, doing the exercises, listening to the pain, their body and their conscience, and recognizing consequences), and understanding other facets of their sport. Learning how the body works was mentioned as a positive outcome, as in Chloe's comment: "I guess just learning a lot about your body. Just things that affect other things – that what you wear on you feet can screw up other stuff. So that's kinda neat." Becoming aware of how to manage their injury was also a significant learning experience for this group of girls. There was evidence of listening to the physiotherapist, to themselves and learning from the experience if they did not handle their injury well initially. Michelle commented on listening to her physiotherapist and her body the next time she hurts herself:

It wasn't a horrible experience because it taught me, you know, I learned stuff from it... I learned that, being injured like this -all injuries- go to physio *right away!* Go to someone you *trust!* Umm do everything they say. Ice it – a lot, *a lot!* Don't go back in. Even if – from now on – even if it's something little that hurts me, you know, a twinge of pain anywhere in my body, I'm going to go off <the field>...so I

learned that – I’m not going to be stupid about it. I’ve learned a lot from my body because now I know.

Learning is also closely connected with the decision making process and making healthy choices during the recovery. In the following comment, Erin explains listening to her parents’ advice and recognizing that there are consequences to going back in too soon:

I kept my parents kind of updated. They said, I mean they don’t know all that much about sports but they knew that I was injured and they just said, they like, they kind of warned me, like if you hurt it again now it could turn into something worse than it already is and it could slow you down forever. If you let it heal now, then you’re probably going to be okay for the rest – like they said, which would you rather, like be out for a year or be out for two months or a month now. <Interviewer: How was hearing that?> Oh! I felt like I don’t wanna to sit out forever! (laughs) No, hearing that, made me realize that there’s no point in pushing it now, it’s going to benefit you in the long – I’m going to benefit from it in the long run if I sit down now...<But> there was *some* temptation. “Well it doesn’t hurt that much, I guess I can play.” But as soon as I played, I knew. As soon as I jumped and hit it or like even any pounding on it, I knew I shouldn’t do it yet.

Kristy questioned whether playing too soon was worth the risk of reinjuring herself and began to listen to what her body was telling her. She remarked:

I think if my back hurt so much, it’s kinda not worth it, you know. I don’t want to risk getting hurt more and being out for a longer time. I may as well fix this now and deal with it, then go back and feel a lot better.

She also keenly illustrated that she learned from her experience of sitting on the sidelines, despite the frustrations associated with watching:

But, it's nice, I like, I learn a lot more from watching people play and stuff. Like, cuz you can see everything. When I'm on the field you can't see everything. You make a bad pass or whatever and you can't understand, you don't know what you could have done till changeover; but when you're off the field, you can see where people should be passing. I can learn a lot of stuff from that.

The different learning experience seemed to depend on the type and number of previous injuries. After several injuries, Cathy also understands that she needs to listen to her body and explained how she managed practices during her recovery:

I go to all the practices and everything. And if I feel I can do it <drills>, I do it. And then if I don't, then I'll just be like well, "I don't think my knee can take this" and they'll <the coaches> be like, "yeah okay. That's fine."

Most of the girls, however, have not had as many injuries as Cathy and are in a different stage in the process of learning how to handle an injury. Melanie illustrated this notion with her comment, "I'm still learning from my hip injury. I mean the biggest thing with that, the hip, was that I kept trying to get back in too soon, that I just made it worse and that <pause> you just have to be patient <big sigh>." Michelle has also not had to contend with several major injuries and in the following statement demonstrates learning to work through the risk of reinjuring herself. She talked about conversations she had with herself:

So I had to sit down and tell myself that if I don't play, I said, "it's going to be horrible but if I do play, I'm out of shape and my ankle is killing me anyway. So if I do, I'm probably going to be holding back a bit, I'm going to be anxious. I'm going

to be feeling a little awkward, cuz I haven't played on a team for a month and I'm out of shape." So kinda like having the pros and cons in front of you.

Chloe has also not had to contend with repeated injuries and stated what she has learned about managing an injury: "If I could do it again, right now, I would do my exercises. Like I would do all those - like every single - all the things the physio was trying to teach me."

A broadened outlook encapsulates recognizing the big picture in the small incident of being injured. There was an understanding that the girls can cope with future injuries and understand more about themselves and their sport. At times, there was also a sense of meaning making from their experience. Many comments referred to the future and to different aspects that they became conscious of learning. For Kristy, learning that she can handle being injured and that there are consequences to not listening to her body stood out. She remarked, "Well, I learned now when I get injured, like I can actually like deal with it, sort of. And not just kind of keep pushing it away. Now I'm a little bit more careful, I guess. Like I don't want it to turn into something bigger."

For some of the girls, the injury stimulated thoughts about what their world would be like if they did not participate in sports. There was also anticipation of the "next time" they receive a major injury and a sense of fallibility in their words; however, there was also the sense that they can manage further injuries if they do occur. In the following statement Erin talks about her reaction to being injured while she sits on the bench, and further comments on what she gained from this experience:

If I didn't play sports, I don't know what my life would be like (slight laugh)...I thought what my life would be like without sports?...It was good to have my first injury, or

my first real injury at a time where I had time to heal so I know if I injure myself later, there's no point in going back <early>.

Chloe spontaneously expressed how she would respond if she became injured to the point that she could no longer play sports:

If I had an injury and I couldn't play sports forever, like I wouldn't just die inside if that happened...well if I couldn't ever play again, there's just so many options – like I could be coaching and kinda seeing all those options that you can stay involved in sports. It doesn't matter how old you are or how disabled you are, whatever, you can still be involved in the game so that's a good outlook.

Melanie also described how the injury has affected her outlook towards sports and what she has learned from this experience:

I guess I just sort of learned that with the bad comes the good, in some way whether you see it now or along the road, but it happens, and I guess, I think a big mistake that I made was during my injury I was negative the whole time, I was never looking for a positive part. I just assumed you know that no good was going to come of this, it's just a bad thing, so I guess I wasted a lot of time being angry when I could have maybe been more productive, instead I was just being frustrated and blaming the doctor... Well, it makes me appreciative of what I have now, being able to move, and I don't know, it made me think a lot, that I was really lucky not to have been born with something that, you know, maybe a disability or something that I would never have been able to experienced any of it. I don't know, I felt lucky that, you know, I was able to go back to doing it. I mean some people break an ankle or you break something and have to get surgery and then they can't <do it anymore>.

The theme "It's Not All Bad" reflects the positive learning aspects that the girls spoke in regards to having a major sports injury. Although they found being injured difficult and isolating, there was also the implication that they have a greater sense of being able to handle future adversity and have a broader outlook with regard to the relevance of sports to them.

Chapter Five

Discussion

The focus of this chapter is to discuss the significance of the findings of the present study in relation to the current literature on the psychological aspects of sport injuries. I begin with a restatement of the purpose of the study, which will be followed with a comparison of the literature presented in Chapter Two. In addition, I discuss the implications of these findings for counselling practice, as well as reviewing the limitations of this research and finally concluding with recommendations for future research in this field.

Restatement of the Purpose of the Study

The purpose of this study was to explore the experience of a major injury for female adolescent athlete and to identify common themes within their stories. The research question addressed was, **“What is the experience of a major sports injury for female adolescent athlete?”** A phenomenological approach was used to illuminate the essence of injury for teenage girls who are athletes.

Comparison to the Literature

Eight common themes were identified as the essence of sustaining a sport injury for adolescent female athletes: From Daily Frustrations to Sources of Anger, A Sense of Emptiness, A Sense of Uncertainty and Worry, Not Accepting the Injury, A Sense of Guilt, Seeing Makes it Real, I am Support But Alone, A Coming to “It’s Not All Bad.” These findings revealed that for these female athletes this experience is a complex and multi-faceted phenomenon. Overall, experience was described as distressing but not overwhelming, and in fact, participants often recognized positive outcomes. The themes

illuminated by this research augment the present sport injury literature. The findings of this study will now be discussed in the context of existing research and theory.

The findings of this study indicate that being injured is a dynamic biopsychosocial phenomenon where overlap occurs within these various areas. Aspects of both the grief/loss model and the cognitive appraisal model are apparent in the present findings and warrant discussion. The grief/loss model as described by Kubler-Ross (1969), involves a five-stage process: denial and isolation, anger, bargaining, depression, and acceptance. The concept of experiencing different types of loss can be recognized from the girls' stories. The participants spoke of a loss of physical functioning, loss of being a part of their peer group, loss of contributing and loss of ability. Their reactions to these losses are prevalent in most of the themes. Contrary to Udry et al.'s (1997) research, there was ample indication in the current study of denial and isolation. The theme "not accepting being injured" reflects a sense of denial, as the girls initially displayed varying degrees of failure to accept the severity and the implications of their injuries. As well, the girls often felt isolated and alone in their experience because their injury kept them from being involved and contributing to the team. Anger and frustration, directed at both themselves and others, were recurrent feelings expressed by the participants, especially during the early stages of their injury. The depression stage is evident in the feelings of sadness and emptiness that the girls spoke of during the interviews. The final stage, acceptance, is displayed in the last common theme: "Coming to 'It's Not All Bad.'" The girls in this study generally expressed movement towards accepting their injuries, learning to work within their physical limitations to regain their health, and recognizing the need to follow their rehabilitation programs. However, there is little indication for the third grieving stage, bargaining, from the stories of these

participants. The lack of support for the bargaining stage is consistent with Udry et al.'s (1997) findings.

There is a general indication that many aspects of Wiese-Bjornstal et al.'s (1998) cognitive appraisal model apply to the current research results, as many of the personal and situational factors, cognitive appraisals, and behavioural and emotional responses are a part of the common themes. Unfortunately, this type of model cannot be effectively used to understand the qualitative, phenomenological analysis that was carried out in this study. This is because the common themes were extracted from interviews to identify a general experience, rather than trying to distinguish individual variables that affect responses and recovery outcomes. In other words, the aim of this research was to find commonalities of a collective experience, whereas Wiese-Bjornstal et al.'s model tries to identify causality between factors. Given these methodological incompatibilities, there does seem to be some indication that age, injury history, injury severity and social support are all factors that influenced the emotional and behavioural responses of these participants.

The eight common themes established during this study have many similar aspects to previous research; however, certain characteristics either vary or extend the existing literature. All the participants in the present study describe daily frustrations and situations in which they became angry. The girls discuss the pain, frustration of doing daily tasks, and at times, anger towards healthcare professionals during the interviews. This theme is consistent with much of the present literature on sport injuries (Granito, 2001; Heil, 1993; Johnston & Carroll, 1998; Quinn & Fallon, 1999; Smith et al. 1990; Udry et al. 1997). The pain and daily frustrations are very similar to the categories of physical factors, daily hassles and feelings associated with the injury and the sub-theme pain that Granito (2001) indicated

in his qualitative focus group inquiry. Frustration and anger are also well-documented feelings associated with injury, especially in the adolescent population (Granito, 2001; Johnston & Carroll, 1998; Quinn & Fallon, 1999; Smith et al. 1990; Udry et al. 1997). It has also been noted by Johnston and Carroll (1998) in their qualitative analysis that, "anger was prevalent during the early stages of rehabilitation and contact with medical personnel emerged as a key provoking factor" (p. 216). Despite much of the literature identifying pain, frustration and anger as emotional responses to injury, it is interesting to ascertain that this theme was not central, as many other themes were more relevant to the girls' experience, in the present study.

The theme "A Sense of Emptiness" and its sub-themes of feeling "*disoriented*" and "*missing being a part of their team*" and the associated feelings of missing making a contribution to the team effort and having their contributions recognized are all important and strongly felt emotions by the participants in this investigation. These findings resonate with other sport injury research that documents feelings of confusion, isolation, disconnection, role on team and athletic identity (Granito, 2001; Heil, 1993; Johnston & Carroll, 1998; Quinn & Fallon, 1999; Smith et al. 1990; Udry et al. 1997). These intensely expressed feelings are only vaguely mentioned in the literature. This could be for two reasons: this aspect may be more relevant for a female adolescent population, or it has not been the focus of research as of yet. Granito's (2001) research extracts athletic identity and the role on the team as sub-themes, but the trainers, rather than the participants, brought these categories forth. These categories are interpreted as revealing "identity and the importance of sport in the athlete's life" as personal factors that contribute to "how an athlete will experience an injury" (p. 49). Udry et al. (1997) also have a second order theme

involving feelings of isolation and disconnection where the athlete feels lonely and not a part of the team. Both of these studies touch on the sense of emptiness that can arise after an athlete becomes injured, but according to these investigations these feelings are not as strong or prevalent as in the present research. The intensity of this dimension may be greater due to the social-cognitive developmental stage of adolescents during which being part of, and belonging to a peer group, and wanting to contribute to that group, is very important (Brown, 1990). Associated with this stage is peer social acceptance, as it contributes to an adolescent's self-esteem and identity. Consequently, when an injury occurs, an adolescent's sense of emptiness, disorientation, and not being a part of a group may be more significant for this population (Brown, 1990). In addition, having a routine and structure to daily events is desired by adolescents, and having an injury disrupts this aspect of their lives, which may add to the feelings of disorientation (*Parenting Today's Teens*, 1999). Furthermore, it has been noted that having a relationship, being cared about, and staying connected with the coach may be more important for females than for males (Allen & Howe, 1998; Granito, 2002). As a result, gender and the developmental stage of the participants in this research may have exacerbated feelings of disorientation and emptiness as compared to the older athletes involved in previous studies.

The third common theme found in this investigation is a "Sense of Uncertainty and Worry." The participants state concerns about not being able to play at the same level as their teammates when they return to participating, and question every aspect of being injured. The questions are often expressed in terms of "what-if...?" and have a tone of anxiety as there are so many unknowns regarding their injury. This is especially prevalent with the girls who had not experienced a major injury before and had a slow recovery.

These feelings have been well documented in the extant literature; however, once again these emotions may be more prevalent in the current study due to the age of these participants (Brewer et al., 1995; Granito, 2001; Heil, 1993; Johnston & Carroll, 1998; Quinn & Fallon, 1999; Smith et al. 1990; Udry et al. 1997).

Feelings of worry and anxiety are congruent with Brewer et al.'s (1995) findings as they concluded, "age was negatively associated postinjury emotional disturbance" (p.244). Being younger may be related to increased levels of anxiety, as adolescent individuals may not have experienced a major injury; they do not know, therefore, what to expect from this event. This concept is consistent with Johnston and Carroll's (1998) findings that individuals can more accurately appraise and understand the consequences of their injury if they have had a similar injury previously, as compared to those individuals without a previous injury. In addition, these researchers concluded that anxiety was prevalent throughout injury recovery (Johnston & Carroll, 1998). According to their findings, uncertainty begins with not understanding the implications of the injury and it is still prevalent until the return to participation. This result is consistent with the present research findings, as there seems to be worry and uncertainty throughout the recovery period. Moreover, the present research also found that these feelings could also occur even after full return to participation. Udry et al. (1997) discovered feelings of worry, anxiety, and panic as first order themes in their study with skiers who suffered season-ending injuries. In their study, these feelings plus others were placed into a second order category called *emotional agitation*, which 76% of the athletes cited. Furthermore, a sub-theme that emerged during this study was *questioning*, as "approximately 24% of the athletes mentioned that, following their injuries, they reacted by questioning some aspect of the situation" (p.237). These

findings are very similar to those found in the present research study, although uncertainty, worry and questioning developed into an overall theme in the current investigation as it was common to all participants. Interestingly, Granito (2001) states that all participants in his qualitative study, involving college athletes and trainers, described feelings such as isolation, boredom, depression, relief, anger, fear, and confusion associated with their injury. However, there is no further discussion about these feelings. Therefore, it is difficult to ascertain similarities or differences between his study and the current investigation. As well, several quantitative research investigations have employed questionnaires such as the Profile of Mood States scale to assess emotional reactions to injury (Brewer et al., 1995; Quinn & Fallon, 1999; Smith et al., 1990). This psychological assessment tool measures the moods: tension, depression, anger, fatigue, confusion and vigor. Tension may be a part of worry and uncertainty but it cannot be concluded that these emotions are connected. It is also difficult to conclude from the use of this tool the actual issues that the athlete is worried about and how this emotion manifests itself. The participants in the present study implied that uncertainty and worry occurred throughout their injury, and even extended to when they were fully participating, and that these emotions involve the past, present and future. As well, the data generated gives further insight as to what some of the concerns actually are for these participants, such as fear of being left behind, and is detectable through the constant questions they ask themselves and others.

Not accepting being injured is another theme that emerged from this investigation. Components to this theme are not listening, fooling themselves, and playing it down to others, which all involve denying being injured and include the manner that these participants went about refusing to accept the ramifications of their injury. Heil (1993)

contends that, "denial itself is neither good nor bad, but how a person uses it is important" and is "an integral part of the affective cycle of injury" (p.39). There is mixed support for the concept of denial in the sport injury literature (Brewer, 1994; Heil, 1993; Udry et al., 1997; Wiese- Bjornstal et al., 1998). For instance, Udry et al.'s (1997) investigation cites shock/disbelief/denial as a second order theme, but concludes, "results from this investigation provided only minimal support for the [Kubler-Ross or Heil's] denial stage" (p. 244). As well, Granito's (2001) qualitative research did not include a theme concerning non-acceptance of an injury, although there is a category referred to as painkillers. This theme discusses the athlete's use of painkillers to numb the pain so he/she could continue to play despite being injured, which is similar to the sub-themes in this research of not listening and fooling themselves. There is a clear indication from the participants in this study of refusing to accept the status of their injury, and consciously or unintentionally making decisions that are counter-productive to their recovery. The current study also adds to the literature by illustrating the ways an athlete may try to "trick" or "fool" themselves and others about the seriousness of the injury, so that they can continue to participate in their sport.

The themes "Sense of Guilt" and "Seeing Makes It Real" have been unexplored in the present sport injury literature, although each theme has been mentioned in theory-oriented writings (Heil, 1993; Johnston & Carroll, 1998). Heil (1993) put forth that guilt, humiliation, and preoccupation are among some of the emotions that an athlete may feel in response to his/her distress after sustaining an injury. From their grounded theory approach, Johnston and Carroll (1998) also note that guilt might be an emotion experienced under their anxiety/relief memo. Johnston and Carroll (1998) also briefly discuss the visibility of the

injury being a factor in influencing the initial appraisal of the severity of the injury.

However, neither Udry (1997) nor Granito's (2001) qualitative investigations discuss evidence for these themes. Feeling a sense of guilt and wanting visible cues may be a more relevant to adolescents than adults, therefore, the developmental literature may be more helpful in understanding these themes than the sport injury research.

Both Piaget's (1972) cognitive development theory and Elkind's (1985, 1988) concept, egocentrism, provide insight to understand the predominance of guilt and visibility/invisibility that emerged in this investigation. According to Piaget (1972), there is an emergence of formal operational logic in adolescent thinking, wherein an individual can think in more abstract and logical terms rather than just purely in concrete experiences. Consequently, an adolescent can now think in terms of ideal conditions and does so in abundance. An adolescent's idealism may add to his or her sense of guilt as they can envision an idyllic scenario and thus feel guilty that they did not act accordingly. As well, this heightened idealistic thinking may also aid in explaining these participants' intensified sense of anger and amount of questioning found in the previous themes as they can consider unlimited hypothetical possibilities.

Elkind's (1985, 1988) social cognitive concept of adolescent egocentrism furthers the theoretical understanding of the themes a "Sense of Guilt" and "Seeing is Believing." Elkind's (1985, 1988) notion of adolescent egocentrism refers to the increased level self-consciousness during the transition from childhood to adulthood. Two dimensions of adolescent egocentrism are the constructs imaginary audience and personal fable. The construct imaginary audience proposes that adolescents believe that others have the same level of interest in them as they do in themselves. The second construct, the personal fable,

is connected to the imaginary audience in that if others are keenly interested in them, they must be unique and special. This sense of uniqueness results in the belief that they are invulnerable and omnipotent, and that no one can truly understand how they feel. The notion of personal fable can provide a useful framework to understand these themes, as well as the theme "Not Accepting the Injury." The sub-theme of "*letting the team down*", which is associated with feelings of guilt, may be prevalent due to the belief that they are special and provide a unique contribution to the team. Furthermore, the personal fable construct can aid in understanding the desire to have a physically visible symbol (such as a brace or cast). The belief that they are unique also means that other people cannot accurately empathize with how they feel; therefore, they want a concrete indicator to help people understand their situation. Another dynamic may provide a context in which to understand the opposing desire not to have a visible indication of their injury – wanting to belong to their peer group and to be similar to that group (Brown, 1990). These opposing dynamics may help to understand the tension described by the girls in this study between wanting and not wanting to have a visible sign showing that they are injured. The stage of social cognitive development and the construct of the personal fable (and associated belief of invincibility) may also be useful in understanding these girls' decisions not to follow medical advice and seemingly inability to recognize the consequences of not accepting the injury.

There is strong substantiation for the theme "I Feel Supported But Alone" in both the sport injury and developmental literature. An injured athlete's perception of perceived social support is well documented as being an influential factor in his/her emotional reaction and recovery (Brewer et al., 1995; Granito, 2001, 2002; Robbins & Rosenfeld, 2001; Udry, 1997, Udry et al., 1997). Overall, parents, coaches, physiotherapists and teammates are

viewed as supportive in the current study. The girls feel supported when they receive help with daily tasks, are given factual advice, shown they are cared about, and when the person provides a sounding-board for them. From the coach, they particularly appreciate being kept involved with their team, not being pressured, and shown that they are a valued and cared for member of the team. These sentiments are consistent with other sport injury research, although these participants suggest a more positive experience from their coaches and parents than previous studies (Granito, 2001, 2002; Robbins & Rosenfeld, 2001; Udry, 1997; Udry et al., 1997). It has also been recognized that parents and coaches play an important role in an adolescent's subjective experience of participating in athletics (Allen & Howe, 1998; Ryska & Yin, 1999; Van Yperen, 1998). The reliance on both parents and unrelated adults for support is consistent within the developmental research as well (Scales & Gibbons, 1996).

There are indications that there are some differences in the way these female adolescent participants experienced their injury that have not emerged from previous sport injury literature. The girls from this study discuss the desire for autonomy in decision-making (although they also feel overwhelmed at times with this responsibility), as well as the sense of being alone in their experience and listening to those who are similar to themselves. These notions may be understood from a developmental perspective. Striving for increased levels of autonomy from parents is a well-documented and theorized concept that occurs in adolescents, and is prominent in the girls' descriptions (Bowlby, 1998; Erikson, 1968; Neufeld, 2003). As discussed above, the personal fable, wherein adolescents believe that no one can truly understand how they feel, provides a framework with which to understand the aspect described by the participants of feeling very alone during their injury,

despite feeling supported (Elkind, 1985). Lastly, adolescents have a tendency to attach to those that are similar to themselves (Bowlby, 1998; Brown, 1990). This idea is consistent throughout the participants' statements as they comment on feeling more understood, and listen to the advice, of those people who they identified as being similar to themselves in a meaningful way.

The theme "A Coming to 'It's Not All Bad'" reflects the optimistic side that the girls found in being injured, and is indicated by the sub-themes *positives*, *learning* and *a broadened outlook*. These findings are generally comparable with the sports injury literature; that despite the occurrence of a disadvantageous situation, the athletes have generally coped well with their injury and have even identified positive elements in the experience (Brewer, et al., 1995; Udry et al., 1997). Nevertheless, there are significant differences between the positive outcomes from the present research and Udry et al.'s (1997) results. Udry et al. (1997) specifically examine the perceived long-term benefits for athletes after sustaining an injury in a qualitative investigation. From that study, four general dimensions emerged: personal growth benefits, psychologically based performance enhancements, physical/technical development benefits and none. The current research shows similarities to some of Udry's (1997) first and second order themes: gained perspective, personality development, belief that can recover from injury, time to recharge, realistic expectations and learned about body and how to respond to it. However, there was only minimal support for developing aspects of non-skiing life (non-sport life), technically better/smarter and no backing for the learned better time management, improved confidence, mentally tougher, increased motivation, and improved fitness/strength categories. Reasons for this may be because Udry et al.'s (1997) study focuses on the positive aspect of being

injured, and therefore may have generated more data. Furthermore, the participants in the present study are generally younger and not involved at the national level. Therefore, categories such as time management, increased toughness and enhanced motivation may be less relevant to this group.

In summary, the findings from the current study indicate that being injured is a complex experience for female adolescent athletes. The findings also complement much of the sport injury research, as there are several parallels between the present investigation and previous studies. Even so, this study extends the current literature as it has identified that injury for a teenage girl may have some unique qualities, as it is very much experienced from her developmental perspective. In particular, a sense of disorientation, uncertainty, guilt, and aloneness, as well as missing being part of a team, not accepting the injury, questioning, fear of being left behind, and aspects to the visibility of the injury, may all be more salient characteristics for female adolescent athletes than for older, elite athletes.

Implications for Counselling Practice

The findings from this study contribute important insights for counsellors working with injured adolescent athletes. First, the experiences of the girls in this study suggest that the developmental stage of the athlete must be recognized. Despite being competitive athletes, these participants demonstrate that they interpret their experience from the perspective of a teenage girl. Therefore, regardless of the playing level and ability of the athlete, the counsellor should be cognizant of the age of the athlete and be aware of factors that may be relevant to this period of development. Notably, the desire to be autonomous, belong and contribute, as well as feeling more understood by people who are similar to

themselves, needing a routine and feeling a sense of isolation, may all be issues to consider when working with an injured adolescent.

Secondly, counsellors may want to state explicitly how they are similar to the adolescent injured athlete, especially with regard to sports and injuries, as this may help to build rapport, trust and respect with the teenager. As with any therapeutic work, a positive relationship is essential for it to be beneficial. This may be especially true for the female injured athlete, as in this investigation the girls felt displaced and not understood but appreciated feeling cared about by adults. It is valuable for the counsellor to be aware of how long the athlete has been playing on the team and the relationship the young athlete has with important adults (such as coaches and parents) in her life, as these feelings are intensified when the athlete is new to a team and does not have a close bond with the coach. Therefore, ensuring basic counselling skills so that the client feels cared for, attended to, and understood in a genuine manner could prove to be invaluable. Also, if necessary and possible, working on involving the parents and coaches to support the athlete emotionally should be considered. If not already being organized, the counsellor should recommend keeping the athlete involved with the team, without pressuring her. This may also help to keep the established routine that the athlete is used to having.

Third, the girls in this study demonstrate a sense of worry, non-acceptance of the injury, and a need to learn about their body, pain and injuries, as this was generally, their first experience of having a major injury. Thus, discussions about healthy recovery choices by being straight forward, factual and visual (when possible) with information and implications of their injury may be useful in reducing the likelihood of reinjury and in decreasing anxiety. Also, having many questions and ruminating in "what-if's" may alert

the counsellor to the athlete's anxiety, as the teenage athlete may not directly recognize this feeling. It must be kept in mind, however, not to ask too many questions, and allow the adolescent to come to her own conclusions.

A fourth clinical contribution indicated by the findings of this study suggest that counsellors working with an injured teenage athlete should be conscious of the fact that their client may not be forthright with the severity and pain of their injury, and downplay it to others. It is recommended that the counsellor not interpret this behaviour as being intentionally deceitful, but rather take it in context as to the motivation behind these actions. The athlete may be desperately missing participating in what she loves to do, how she has fun, defines herself and socializes. Moreover, the teenager may not be aware that she is acting in this manner because she sincerely does not know how to interpret her experience. This behaviour may be more common for athletes who have not previously sustained a major injury. Exploring, identifying, and validating the athlete's experience may assist the adolescent in understanding what is going on for her, and improve the likelihood of healthy recovery choices.

Finally, findings from the current research imply that female adolescent athletes who have suffered a sport injury experience this event as distressing, but overall, handle it reasonably well. Furthermore, with time, the injured athlete may be able to construct a positive outlook on the event and recognize that she learned about herself, her body and her sport as a result of her experience. It should not be assumed, however, that all athletes will come to attribute positive aspects to being injured, as all the participants in this investigation are still able to participate in sports at the same level of competition. This process of

coming to the conclusion that having an injury was not so bad may not be experienced for athletes who are not able to participate at the same as level as prior to being injured.

Limitations

The author acknowledges several limitations in the present study that warrant discussion. The limitations discussed are inherent to research, particularly phenomenological inquiries, therefore, prudence is suggested in the interpretation of this study's findings.

This study is consistent with the philosophy and strategies of qualitative, hermeneutic phenomenological research, and is therefore subject to the inherent epistemological and ontological issues with this type of inquiry. As discussed in the methodology section, a phenomenological investigation fits the objectives of the study, which is to illuminate the experience of a sport injury for the female adolescents participating in this research. Nonetheless, a particular limitation to phenomenology is the difficulty in expressing, through written language, the essence of an experience. Osborne (1990) contends that phenomenological methodology accepts this difficulty and counters that a "similar problem confronts natural science's use of numerical representations of human experience" (p. 83).

This study is specifically limited by the context within which information was gathered. As it happened, recruitment yielded a fairly small homogenous group of individuals from the same culture and socioeconomic status. Participants were from a West Coast Canadian culture, and therefore interpretations may not resonate with female youth from other places or backgrounds. Furthermore, due to a small number of people interviewed, the findings cannot be generalized to all adolescent athletes who sustain a sport

injury. Rather than strive for statistical generalizability, however, phenomenology aims for “empathetic generalizability”: to gain an understanding of the experience of those who participated in the study (Osborne, 1994, p. 178). As a result, further research will need to be conducted to extend and confirm the findings. Even so, this research will contribute to the body of sport injury literature and provide an initial understanding of the experiences of adolescent athletes with injuries.

As with most studies investigating this area, there are problems standardizing the timing of data collection, nature of a particular sport, and type of injury. Measures, as discussed in the definition section, are an attempt to limit this influence to the essential factors necessary to illuminate the research question.

Finally, it must be recognized that there were limitations due to the time and resources available that affected the depth and breadth of exploration. This is a difficulty that concerns most research work; however, even more so for the graduate student.

Implications for Future Research

This exploratory investigation contributes intriguing findings that provide insights into to the experience of sustaining a major sport injury for female adolescent athletes, and indicates the need for further study in this area. Future research that extends or confirms the present results of this preliminary study is recommended.

Qualitative research provides a thick, comprehensive description in order to understand a phenomenon. As such, the present investigation illuminates a possible structure of being injured as experienced by the six teenage girls who participated in this study. To extend the literature, further research is needed regarding the experience of male adolescent athletes to a major sport injury. Indeed, to expand our understanding of this

experience, further research is needed with a larger research group as well as with more diverse cultural backgrounds. As this experience was interpreted through the perspective of an adolescent, it raises the question of whether a similar experience occurs in other contexts where a teenager cannot suddenly participate in a valued group activity.

A unique contribution of the present research is the range of emotions, implications as to what contributes to these emotions and how these emotions manifest. Future research efforts could further explore some of the emotions (such as guilt, uncertainty, and aloneness) expressed by these participants. Furthermore, it would be worthy to explore the notion of having a visible versus invisible injury for adolescents and adults. It would also be interesting for future research to investigate the experience of suffering enduring consequences to an injury; the psychological differences between short term and chronic injuries for adolescents; as well as differences between those who have been injured for the first time and people who have previously sustained a major injury.

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PARENT CONSENT FORM

Study Title: *"The Experience of a Major Sport Injury For Female Adolescent Athletes"*

Investigator: Tania Wicken (Master of Arts Student); **Supervisor:** Dr. Kim Schonert-Reichl (Associate Professor, UBC)

(KEEP THIS PORTION FOR YOUR RECORDS)

I have read and understand the attached letter regarding the study entitled "*The Experience of a Major Sport Injury For Female Adolescent Athletes.*" I have also kept copies of both the letter describing the study and this permission slip.

_____ Yes, my daughter has my permission to participate.

_____ No, my daughter does not have my permission to participate.

Parent's
Signature _____

Daughter's Name _____

Date _____

✂ ✂ ✂ ✂ ✂ ✂ ✂ ✂ ✂ ✂
 ✂ ✂

(DETACH HERE AND RETURN TO RESEARCHER)

I have read and understand the attached letter regarding the study entitled "*The Experience of a Major Sport Injury For Female Adolescent Athletes.*" I have also kept copies of both the letter describing the study and this permission slip.

_____ Yes, my daughter has my permission to participate.

_____ No, my daughter does not have my permission to participate.

Parent's

Signature _____

—

Daughter's Name _____

Date _____

Appendix C: Student Assent Form

Student Assent Form

A Master's Thesis Research Study on:
**THE EXPERIENCE OF A MAJOR SPORT INJURY FOR FEMALE
 ADOLESCENT ATHLETES**

The **purpose of this study** is to help us learn more about how teenagers your age understand and describe the experience of a major sport injury. The aim of the study is to describe the main ideas from an adolescent's perspective. By taking part in our research project you will help us better understand what is important to teenagers your age after they have been injured playing sports.

Involvement: This study is being organized by Tania Wicken, a Master of Arts student at the University of British Columbia, and is being supervised by Dr. Kim Schonert-Reichl. If you decide to take part in this study, I will ask to meet with you on two separate occasions for a total of approximately 2.5 hours; the first time to ask you about your injury and your feelings afterwards and the second time for a follow up-interview focused on the accuracy of the analysis. The meetings will take place at a quiet location of your choice and will be audiotape recorded. Before the second meeting I will send a summary of the interviews to you and ask you to review the material for accuracy of your experience. Any suggestions you have will be taken into account in the final research report. In this project, the researcher is not, in any sense "testing" you. There are no right or wrong answers – I simply want to know how adolescents experienced their sports injury.

Appendix D: Orienting Statement and Possible Questions

Orienting Statement

My name is Tania Wicken, and I am a Counselling Psychology student in the second year of the masters program at UBC. For my masters thesis I am studying the experience of a major sport injury for adolescent athletes. When we meet, I will be asking you to share with me your own experience of being injured.

I am interested in hearing your own experience of being injured. Please talk me through your experience of being injured and how you felt throughout each situation. To focus our conversation, it may be useful to recall what you felt, what you thought and what you did throughout each event. During the interview I will be asking you questions that will allow me to further understand your experience and reflect on the core ideas you present. Periodically, I will also check my understanding with you.

Possible Questions

- What is the relevance of sports to you and how did the injury affect this?
- How were you affected after the injury?
- What areas in your life were affected because of the injury? You may want to think of your regular routine at the time and the different places people and things in your life before and then after the injury?
- What stands out the most for you when you look back at this experience?

- What was the most positive aspect after the injury? What was the most negative aspect after the injury?
- After the injury, what would have been the best scenario for you?
Describe what it would look like.