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McKnight, Kerbi

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ATHLETIC CAREER TRANSITION AND TRANSFERABLE SKILLS

KERBI MCKNIGHT

BA, University of Lethbridge, 2005

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DEDICATION

To my parents

Patti and Steve McKnight

My brother

Matt McKnight

And my Grandparents

The love and support from all members of my family are strong indicators in my success in all aspects of my life, whether that be in sports or school.

Abstract

This study investigated how active female hockey players at the high school, university/college, and national/elite levels perceive that the skills acquired in sport transfer to another career or other facets of their lives. One hundred and seventeen athletes were surveyed. The Transferable Skills Survey was comprised of four parts. Athletes provided responses that included general information, identity, career transition, and transferable skills. The findings indicate that there is a need for psychologists to be involved in the athletic career transition and that the best way to help female hockey players represented in this study may be to teach their parents the skills to assist their daughters through the career transition. Further, the findings reveal that transferable skills aid in successful career transition out of sport.

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CHAPTER 1: INTRODUCTION

Career retirement of athletes is an important watershed change that is often overlooked. Athletic retirement or transition is inevitable for all athletes (Zaichkowsky, Kane, Blann, & Hawkins, 1993). Baillie and Danish (1992) stated that athletic retirement has been disregarded because this transitional event is equated with the occupational retirement of older adults, and there is a misconception that only a small number of individuals who compete in elite and professional sport are likely to be affected by this transition. Some have argued that research is not worth the effort and that a suitable model for studying athletic retirement is not available.

Athletic career retirement is very different from occupational retirement. The first major difference is the fact that athletes start and finish their athletic careers at a relatively young age (Baillie, 1993; Blinde & Greendorfer, 1985). At the same time that athletes are ending high-level competitive sport, their peers are beginning careers in other nonsporting domains. Nonsporting peers will be married, have children, and a good job at about the same time that an athlete is retiring from sport. This adds to the stress of the situation when athletes are going through the transition required at the end of an athletic career.

A second major difference is that many individuals who undergo career retirement do not experience the same disruption to their identity (Pearson & Petitpas, 1990). Because athletes spend much of their time dedicated to their sport at an early age, this creates a situation in which time has not been allocated to acquiring interests in other areas. This may result in a disruption to normal developmental events such as identity

development, and young athletes will form a foreclosed identity (Brewer, Van Raalte, & Linder, 1993; Pearson & Petitpas, 1990).

Consequently, when athletes retire from sport, they may feel loss and become disillusioned (Pearson & Petitpas, 1990). Athletes often fail to give credit to the lessons and skills acquired through their sporting career. This may result from a tunnelled vision and foreclosed identity in which athletes are incapable of seeing how the same skills that made them successful in sport will make them successful in another career (Petitpas, Danish, McKelvain, & Murphy, 1992). Retirement from sport needs to be considered within the context of other variables and factors that are apparent in life (Coakley, 1983).

Schlossberg's (1981) model of transition suggests that positive adaptation to transition is affected by three factors: the characteristics of the individual, individuals' perceptions of the transition, and the characteristics of the pre-transition and post-transition environments. Considering transitions within the sport domain, Danish, Petitpas, and Hale's (1993) life development interventions (LDI) model also views adaptation to transition as a process and implies that specific types of athletic transitions have their own characteristics. Both models acknowledge that an individual's reaction to transition will vary depending on the context and his or her past experience.

It is because athletic retirement is a transition that understanding transferable skills is important. Transferable skills are the ability of an athlete to apply abstract skills learned in the sporting environment to another facet of life or another career (Mayocchi & Hanrahan, 2000). Based on the work of Schlossberg (1981) and Danish et al. (1993), this thesis proposes a model that views transferable skills as a mediator between the important characteristics of individuals and the environment that contributes to successful

adaptation to transition from sport. Considered within this framework, this thesis focuses exclusively on exploring athletes' perceptions and attitudes towards transferable skills for future retirement from sport.

Intuitively, athletes view learning transferable skills as critical to adjusting to retirement from sport. Sinclair and Orlick (1993) reported that athletes are interested in learning how to transfer their mental skills to another career. Swain (1991) stated that athletes become concerned with the transferability of their skills and knowledge when they think about retirement from sport. Research has shown that athletes respond positively to learning about how specific skills from sport transfer to other nonsport areas of their lives (Petitpas et al., 1992). Further research is required to empirically demonstrate that a relationship exists between personal and environmental transition characteristics and transferable skills, as well as between transferable skills and the adjustment outcomes of retirement from sport.

The purpose of this study was to explore active female hockey players' (at high school, university/college, and national/elite levels) perceptions of transferable skills. Little research to date has been concerned with transferable skills in relation to athletic retirement. Additionally, little research has been conducted to understand the process of athletic retirement for female participants (LaVallee, Wylleman, & Sinclair, 1997). Research on the career-transition needs of athletes at various levels of participation is also needed (Zaichkowsky et al., 1993). This study will add to the understanding of transferable skills among athletes in the context of athletic retirement, especially among female hockey players across levels of participation. The findings will help to guide the counselling profession by describing what athletes understand about transferable skills,

whether they perceive that they have transferable skills, and the potential factors that limit female hockey players' perceptions of transferable skills. The main question guiding this thesis is, how do active female hockey players at the high school, university/college, and national/elite levels perceive transferable skills?

Chapter 1 of this thesis provided an overview of the major issues explored in this study on the career transition of athletes; chapter 2 offers a more in-depth literature review pertaining to this topic; chapter 3 outlines the methods used to conduct the study; chapter 4 provides the results of this investigation; and, finally, chapter 5 discusses the implications of the findings for athletes and effective counselling of these athletes in transition.

CHAPTER 2: REVIEW OF LITERATURE

As noted in Chapter 1, athletes start their athletic careers at a young age and retire relatively young as well. Additionally, the time spent committed to achieving elite levels of athletic skills often leaves young athletes with tunnel vision and a foreclosed identity that limits their ability to realize that they have valuable skills that can be applied in contexts outside of sport (Brewer et al., 1993; Horton & Mack, 2000). This chapter will provide an in-depth literature review of models of transition, athletic career-retirement transition, and the importance of transferable skills for career retirement, particularly as they relate to female hockey players.

Model of Transition

Presenting a general overview of transitions is useful for grounding this research. Schlossberg's (1981) model of transition outlines and explains the factors that impact adaptation during transitional events that individuals experience over the course of their lives. The advantage of using this model is that it views the transition process as unique to the individual (Schlossberg, 1981):

A transition can be said to occur if an event or non-event results in a change in assumptions about oneself and the world and thus requires a corresponding change in one's behavior and relationships. . . . Adaptation to transition is a process during which an individual moves from being totally preoccupied with the transition to integrating the transition into his or her life. (pp. 5-7)

In other words, a transition is something that causes a cognitive shift in the way that individuals view themselves and the world; this shift then creates a change in their behaviour and relationships. Adapting to a transition requires the ability of the individual

to handle the transition and continue on with life, and this adaptation process is the area in which counselling on transferable skills can be most effective. The ability to adapt to a transition depends on the balance of the demands of the transition and personal resources (Schlossberg, 1981). For example, individuals' experiences before and after the transition, well-being, health, and sense of competency will all affect their ability to adapt to the transition (Schlossberg, 1981). To create a better understanding of individuals' transitions, a closer look at some of the variables that encompass a transition is warranted.

Schlossberg (1981) discussed some important variables related to the transition itself that will greatly affect an individual's ability to adapt to the transition. Role change—whether the transition produces a role gain or loss—will create some degree of stress. Transitions often occur with individualized consequences and produce feelings that are either positive or negative. Whether the cause of the transition (e.g., transitional event) is internal or external to the individual will affect the ability of individuals to adapt to the transition. Some transitions come about after a decision made by the individual, whereas other transitions can be forced on people; often when the individual instigates a transition, there is less emotional disruption during the transition. The timing of the transition, which is viewed in relation to whether the event is a normal, peer-related event, will also play a role in the adjustment. Most people judge achievement through age and peers. Whether the onset of the transition is gradual or sudden plays a part in an individual's ability to adapt to the transitional event; transitions that are gradual are easier to adapt to because individuals can prepare and make plans for the upcoming transitional event. The expected duration of the transition will also affect the adaptation process;

individuals often regard transitions that they consider temporary as easier to undertake. Thus, role change, source of transition, timing of transition, onset of transition, and duration of transition are all important factors in a transition that affect the adjustment process.

A second important category of variables that Schlossberg (1981) suggested affect adjustment to transitional events is environmental resources. Interpersonal support systems are crucial to successful adaptation to transition. Schlossberg's model illustrates that intimate relationships, the family unit, and a network of friends are three different types of interpersonal support systems that individuals use during transitional events. Institutional support is the use of outside agencies that provide individuals with the help they need (Schlossberg, 1981). The physical setting, which includes climate, weather, urban or rural location, living arrangements, and workplace, is also important to consider as an environmental resource. Well-being, stress, and general outlook are affected by the physical setting (Schlossberg, 1981). In sum, interpersonal support, institutional support, and physical setting are identified as important environmental resources that affect adaptation to transition.

A third category in Schlossberg's (1981) model that affects adjustment to transition is the individual. Psychosocial competence (aspects of social and psychological behaviour) plays a major role in an individual's ability to adapt. Schlossberg suggested that individuals' attitudes toward self and their sense of responsibility increase their ability to manage the transition. World attitude also plays a role in psychosocial competence. For example, if athletes are optimistic and have hope, the adjustment process may be viewed more positively (Schlossberg, 1981).

Schlossberg's (1981) model also identifies sex (and sex-role identification) as a factor that impacts the adjustment to transition. Males and females are socialized with different attitudes and behaviours, and the extent to which individuals internalize gender norms affects their ability to adjust to transitions. For example, because females may experience pressure to get married and have children, they may not have a difficult transition from the working world into the home. Life stage may affect the ability to adapt to a transitional event. For instance, when individuals retire and realize that they have not achieved as much as they had planned for the current life stage, this can negatively affect the adjustment to the transitional event (Schlossberg, 1981). State of health may also affect transitional adjustment. To illustrate, major illness may produce stress and decrease the ability of the individual to adapt to the transition (Schlossberg, 1981). Because adjustment is tied to value orientation and cultural norms, race and ethnicity also have some effect on the ability to adjust to a transition (Schlossberg, 1981). Ethnic backgrounds that place great importance on extended family may be more supportive of individuals during a transitional event (Schlossberg, 1981). Socioeconomic status research has not always demonstrated a consistent relationship, but there is some evidence that a lower socioeconomic status may increase the amount of stress during a particular transition (e.g., job loss; Schlossberg, 1981). Individual values may affect adjustment to transition, and religious beliefs positively affect grief associated with death because the individuals believe that the event is "God's will" (Schlossberg, 1981, p. 15). Finally, prior transitional experience positively affects transitional adjustment. A similar previous experience will increase the probability of success during a future transition because the individual believes that he or she is capable of handling the demands of the

transition. According to Schlossberg, important individual resources include psychosocial competencies, sex (and sex-role identification), life stage, state of health, race and ethnicity, socioeconomic status, value orientation, and previous experience with a similar transition. In considering Schlossberg's model overall, adaptation to transition is affected by the individual, environmental resources, and the transitional event itself.

Schlossberg's (1981) model may have far-reaching implications for athletic career retirement. Researchers and practitioners need a suitable model in considering the career transition of athletes. Other models that were previously used included social gerontology (study of aging) and thanatology (the study of death and dying; Blinde & Greendorfer, 1985; Greendorfer & Blinde, 1985). The social gerontology model did not accurately outline athletes' response to retirement because athletic retirement is not the same as old-age retirement (Blinde & Greendorfer, 1985; Crook & Robertson, 1991; Greendorfer & Blinde, 1985). The thanatological model had a negative outlook on retirement, which is not appropriate for an athletic population. Thus, neither model was able to account for the spectrum of experience that athletes encounter during retirement (Blinde & Greendorfer, 1985; Crook & Robertson, 1991; Greendorfer & Blinde, 1985). In comparison, the Schlossberg model provides a fuller account of the factors that affect adaptation during transition; however, this model does not consider two major elements of an athlete's retirement: (a) It does not deal with athlete's transferable skills, which can have a great effect on adjustment during the athletic retirement transition and therefore must be considered; and (b) athletes may possess a tunnel vision that makes them unaware that skills developed within the sport context can be effective in other areas of their lives.

Tunnel vision may greatly affect the adaptational outcome of the transition and needs to be considered.

Danish et al.'s (1993) LDI model applies many characteristics similar to those of Schlossberg's (1981) model specifically to athletes. The LDI model recognizes that career retirement of athletes is a transition and incorporates transferable skills. These researchers viewed the skills learned through sport as directly transferable to nonsporting environments (Danish et al., 1993). Elite sport, which requires high volumes of training, gives many participants a greater sport-related self-understanding, but they have trouble seeing how these same skills would be helpful in other domains (Danish et al., 1993). Sport builds the space for the creative expression of values and abilities that might make the transition out of sport more difficult for athletes (Baillie & Danish, 1992). Similar to Schlossberg's model, the LDI model suggests that there are three main elements within transitions that affect adjustment to the transition: the timing of the event, the duration of the event, and the contextual purity of the event (Danish et al., 1993).

The timing of events is related to Schlossberg's (1981) idea of athletes experiencing events off time or on time with their peers. When athletes experience events on time with their peers, they will benefit from informal and formal networks that can help them through the transition (Schlossberg, 1981). An event such as retirement from sport that happens after injury is often off time, and coping can be difficult (Baillie & Danish, 1992). An injury that forces sport retirement before an individual is ready often does not allow for preparation and adaptation, and social support from teammates and coaches is often lacking (Pearson & Petitpas, 1990).

Duration is the perceived length of the event. Transitions can be viewed as temporary, permanent, or uncertain and can be evaluated as positive, negative, or mixed (Schlossberg, 1981). Athletes' interpretation of the transition affects the type and severity of their emotional and behavioural responses. Confusion and anxiety often set in after an injury (Danish et al., 1993), but when athletes realize that they are on the road to recovery and that the injury is temporary, they become goal directed and emotionally more stable (McDonald & Hardy, 1990).

Contextual purity is related to the number of events that occur at once. There are transitions in sport that are unique to athletes, such as coping with injuries, changes in coaches, trades, and early retirement; as well as events that are similar to those that nonathletes experience (Danish et al., 1993). The more events that they experience at once, the more difficult the transition. An athlete's transition out of sport can result in decreased financial resources, more family time, changes in activity levels, changes in self-esteem, changes in contact with teammates, and changes in the amount of free time available (Danish et al., 1993). Even in a single event such as career retirement, many other issues are involved, and successful coping is tied to the ability to deal with the primary event as well as the other events (Danish et al., 1993).

An athlete's reaction to the transition depends on the resources that he or she has prior to the event, the level of preparation, and the past history of dealing with similar events. For example, the ability of athletes to make the jump to university sports is often evident in their ability to adjust to high school sports, obtain support from family and friends, and utilize their psychological skills (Danish et al., 1993). Their transitions have many commonalities, and the ability of athletes to adjust to past transitions and

understand what is needed to cope will increase their confidence and chances of success (Danish et al., 1993). According to the LDI perspective, successful adaptation is best viewed as a challenge and growth that occurs out of the imbalance created before the transitional event; and LDI is focused on optimizing physical or psychological adaptation (Danish et al., 1993).

The LDI model presents an adequate framework for understanding athletic transition. However, the writer feels that two major elements have not been considered in athletic retirement that affect adjustment. The first is that, because athletes put so much energy into sport at a very young age, they often lack interest in other areas. This lack of interest in nonsport roles leads to a restricted vision of themselves and society. The second element is the lack of importance placed on transferable skills that athletes develop through sport experiences and that are effective in successful adaptation during transitions such as athletic retirement. The LDI model is concerned with teaching life skills, but it also identifies skills transfer and presents the elements that athletes need to transfer their skills across various domains. This work will be considered in this thesis.

Like the Schlossberg (1981) and LDI models (Danish et al., 1993), other researchers have also shown that retirement from sport can be a negative experience (Botterill, 1981; Haerle, 1975; McLaughlin, 1981; McPherson, 1980; Mihovilovic, 1968; Werthner & Orlick 1986) or a positive experience (Allison & Meyer, 1988; Blinde & Greendorfer, 1985; Coakley, 1983; Greendorfer & Blinde, 1985; Sinclair & Orlick, 1993). An athlete can view retiring from sport as a positive or a negative transition, which makes sense in light of the two previously discussed transition models. A closer look at the literature on athletes' transition is now required.

Career Transitions in Athletes

As the Schlossberg (1981) and LDI (Danish et al., 1993) models suggest, athletes' adjustment to a transition such as retiring from sport will vary; some will be positive, whereas others will be negative. In a review of the literature on athletes' career retirement, Crook and Robertson (1991) concluded that the adjustment varies depending on the individual. In considering the spectrum of career retirement experiences discussed in the literature, it is important to understand the level of involvement of the athletes and the time frame being studied in relation to the retirement, because they can have very different results (Crook & Robertson, 1991). When researchers studied the retirement of professional and elite-level amateur athletes immediately after retirement, their results supported the fact that retirement from sport is traumatic and requires an adjustment process (Botterill, 1981; Broom, 1981; Haerle, 1975; Hill & Lowe, 1974; Lerch, 1982; McLaughlin, 1981; McPherson, 1980; Mihovilovic, 1968; Orlick, 1980; Rosenberg, 1979, 1981, 1982; Svoboda & Vanek, 1981; Werthner & Orlick, 1981, 1986). In contrast, researchers who examined high school and college athlete retirement retrospectively supported the view that retirement from sport does not create trauma or require adjustment (Blinde & Greendorfer, 1985; Dubois, 1980; Greendorfer & Blinde, 1985; Kleiber, Greendorfer, Blinde, & Samdahl, 1987; Otto & Alwin, 1977; Phillips & Schaffer, 1971; Sands, 1978; Snyder & Barber, 1979). Thus the level of the athletes involved and the time frame of the study are important considerations (Crook & Robertson, 1991).

The literature did not clearly define or directly measure the factors in athletes' ability to adjust, but Crook and Robertson identified several factors are related to their

success in career transition: anticipatory socialization, identity and self-esteem, personal management skills, social support systems, and voluntary versus involuntary retirement. Werthner and Orlick (1986) explained that each athlete will deal with transition in a different way, but that there are common themes among successful career transitions: a new focus, a sense of accomplishment, coaches, injuries/health problems, politics/sport-association problems and culture, finances, and the support of family and friends. These factors and themes create a framework to organize the variables that affect adjustment during athletic career transition. Much of this work is similar to that presented in the more general transitional literature.

Anticipatory socialization is the proactive response of preparing for retirement before it happens (Crook & Robertson, 1991). The lack of attention to preparing for life after sports can negatively affect athletes' ability to adjust (Blinde & Greendorfer, 1985; Crook & Robertson, 1991). Kerr and Dacyshyn (2000) stated that most of the athletes in their study experienced a stage of existential questioning after retirement because they had not taken the time to prepare for retirement and that, without sport, these athletes were left asking, "What is next?" Some athletes do not think about retirement during active involvement in competitive sport because they consider it defeating and admitting to failure (McLaughlin, 1981), whereas athletes who preplan for retirement find the transition out of sport less disruptive. They have a new passion and challenge into which they can channel their energy (Werthner & Orlick, 1986). Allison and Meyer (1988) reported that many of the female tennis professionals that they interviewed considered retirement an opportunity to regain more traditional societal roles and lifestyles. A

positive factor in adjustment is having other interests and participating in other activities after retirement.

Problems in retirement are often associated with a loss of identity and diminished self-esteem (Botterill, 1981). Many athletes end up dependent on sport for identity and gauge their self-worth by their ability as an athlete (Botterill, 1981). When athletes' self-esteem and identity are tied to sport, they often experience negative transition and are confused about their identities (Crook & Robertson, 1991). Many athletes do not feel that they have accomplished everything that they had set out to achieve in the sport if they are plagued by injury or are cut from teams and forced to end their careers, which results in a difficult transition (Werthner & Orlick, 1986). Many of the female gymnasts whom Kerr and Dacyshyn (2000) interviewed were faced with a loss of identity when they retired. Athletes who no longer feel that they can compete at the same skill level and intensity may perceive it as a breakdown in their ability, which could have a great impact on their view of themselves (Sinclair & Orlick, 1993). The degree to which athletes consider alternative role possibilities reflects their role aptitude and is a strong indicator of successful transition out of sport (Blinde & Greendorfer, 1985). The athletic status of interscholastic athletes is often less prominent in the social environment, and their transition out of competitive sport requires less adjustment. Furthermore, their memories of their sporting experience will be less likely to hinder their future growth and development (Coakley, 1983). A sense of accomplishment and of having reached the goals that they set out for themselves in the sporting area often allows athletes to transition easier because they feel that their athletic experience was positive, and they are ready to tackle new challenges (Sinclair & Orlick, 1993; Werthner & Orlick, 1986).

Having good personal management skills is crucial in successful career transition. Athletes may not be prepared for the transition into athletic retirement because they are dependent on others for such factors as personal management (Botterill, 1981). They often have little choice in their training and the competitions in which they participate and thus depend on their coaches for decision making. Athletes might therefore lack the skills in self-management that they need to make alternate career decisions (Crook & Robertson, 1991).

The coaching staff can both teach athletes personal management skills and support them. Werthner and Orlick (1986) reported that coaching has an effect on the transition of athletes. A positive relationship with their coach has a positive effect on their transition, allows them to reach their goals, and contributes to their enjoyment of their sporting experience. However, a negative relationship with the coach may force athletes to leave the sport sooner than they intended, which can lead to a difficult transition. Many athletes feel that the sport associations are responsible for their coaching problems (Werthner & Orlick, 1986). Specifically, they reported feelings of being used (and abused) by the system in terms of funding or being cut off because of their age, and they felt forced to retire because of the politics surrounding the sport organizations (Werthner & Orlick, 1986). Although the system looks after athletes while they compete, they are often offered little support in the retirement process. Support systems, if available, often just help with employment and fail to recognize the need for emotional support (Crook & Robertson, 1991).

The support of family and friends can ease the degree of disruption in the transition out of sport; emotional support helps athletes to adjust to the transition

(Werthner & Orlick, 1986). Athletes who experience a negative transition often cite a loss of a support system when most of their friends actively continue with sport (Mihovilovic, 1968). They believe that support from former athletes, family, and sport helps them to adjust to athletic retirement (Botterill, 1981). In addition to a lack of access to old support systems, they may not have the ability to create a new support system, which can create feelings of being alone and isolated (McLaughlin, 1981). However, Haerle (1975) stated that former major league baseball players missed the contact with teammates but that this did not hinder their search for jobs and adjustment to life after sport.

The literature suggested that problems arise when the career transition is involuntary. Mihovilovic (1968) contended that athletes may have no control over their retirement because of injury, being cut, conflict with management, or family reasons. Injuries and health problems often play a negative role in the career transition of athletes. Those who face injury are often unable to control when and how the retirement process takes shape (Werthner & Orlick, 1986), and career-ending injuries often do not allow athletes to accomplish their goals and plans for life outside of sport. Athletes who are involved in involuntary retirement are often more resistant and less prepared than are those who retire voluntary (McPherson, 1980). When athletes have alternative skills, they may be more likely to voluntarily leave sport and less likely to experience adjustment problems (Blinde & Greendorfer, 1985).

If a decision to retire is prompted by problems with a coach, retirement might be the only solution to a situation that is no longer tolerable (Kerr & Dacyshyn, 2000). Politics and the sport association often have an effect on athletes' transition (Werthner &

Orlick, 1986). Finances are crucial in the transition because funding cuts by sport organizations may lead to retirement if the athlete no longer receives the funds necessary to continue training (Werthner & Orlick, 1986).

Coakley (1983) stated that voluntary retirement can lead to a positive transition and that leaving interscholastic and amateur sport is regarded as part of normal development. However, Kerr and Dacyshyn (2000) warned that the distinction between voluntary and involuntary is sometimes blurred if athletes decide to retire when they are faced with impossible situations. Retirement is actually voluntary only when an athlete has another choice of action.

Whether athletic retirement is viewed as positive or negative (e.g., successful adjustment or maladjustment) depends on a variety of factors (Crook & Robertson, 1991). Thus, it is important to consider a combination of these factors to understand the adjustment process in athletic retirement. Such a model, however, is incomplete because it does not explain *why* the specific factors affect adjustment to the transition. One key variable that links these factors (e.g., anticipatory socialization, identity and self-esteem, personal management skills, social systems, and voluntary versus involuntary retirement) is transferable skills.

Athletes who have a successful transition are able to capitalize on transferable skills (Blinde & Greendorfer, 1985). Successful business persons, like successful athletes, work hard and have the drive and tenacity to follow their goals to achieve excellence. Athletes have experience in dealing with people who try to block their success, and having the ability to adhere to a goal will make them very successful in another career. A prime example of this is Wayne Gretzky, who from a young age had to deal with

“Gretzky-bashing” (the price that he had to pay to be a distinguished player). However, with the support of his parents he was able to weather the storm (Redmond, 1993). In minor hockey in Brantford, Ontario, Gretzky played in Maple Leaf Gardens for “Brantford Day” and was booed as he skated onto the ice (Redmond, 1993). Like many other successful athletes, he continually had to deal with opposition as he strove to reach his goals. Having the ability to persist despite opposition is very effective in helping athletes to succeed in another career. Counselling professionals can give athletes the much-needed support to transfer their skills. If they consider transition from sport a negative experience, it might be because they are unable to see how their skills can transfer. Taking a proactive approach to career transition may increase the likelihood of success in the transition. Retirement is inevitable, but if athletes know that their skills are transferable, regardless of the circumstances surrounding the transition, they will have the tools to be successful (Danish et al., 1993). Whether they are high school, university/college, or national/elite level athletes, they have learned lessons in sport that will be valuable in other settings. The realization that they already have the skills and characteristics (e.g., hard work, tenacity) to make them successful in nonathletic areas can empower them (Petitpas & Schwartz, 1989; Petitpas et al., 1992). A more thorough discussion of transferable skills will follow the next section on a specific group of athletes who may struggle with the adjustment process associated with athletic retirement.

Narrowing the Career Retirement Group

As mentioned earlier, regardless of the athletes’ sport, gender, and environment, the literature suggested that their experiences vary depending on their ability to adjust to

the transition of retiring from sport. Hockey players became my focal point when thinking about the athletes who may be most impacted by athletic retirement in Canada.

Hockey

Hockey has become synonymous with Canada (Dryden & MacGregor, 1989). Hockey players may struggle with athletic retirement because hockey is tied to the Canadian identity, and a large percentage of the Canadian sports community is involved in hockey. Hockey has become the most prominent representation of the country and stands as a symbol of what being Canadian really means (Gruneau & Whitson, 1993). Studying hockey within Canada makes sense because our identity as a country is tied so closely to the sport, and the more that we understand about it, the more that we understand ourselves. Because hockey in Canada is so prominent, the sheer numbers of individuals involved in the sport (Dryden & MacGregor, 1989) make it worthwhile to study; furthermore, the results would directly affect many. Many Canadians have played hockey in some capacity, and many have also retired from the sport. Thus, it may be of particular importance to Canadian athletes to understand the process of retiring from hockey.

The research on career retirement from the National Hockey League (NHL) reveals that players desire programs to help with the transition from the sport while they are still playing and during the process of career transition, that they commonly believe that the players' association should be responsible for providing career transition programs, and that they suggested that group seminars and individual counselling would be the most helpful in career planning (Blann & Zaichkowsky, 1986). In Blann and

Zaichkowsky's study, the athletes described seminars and counselling directed at helping players to understand their personal strengths, interests, and skills as very effective.

All of the research to date on the career transition of hockey players has involved male hockey players. However, female athletes also experience the transition from the sporting environment.

Female Hockey

This study will focus exclusively on female hockey players, a special population in the consideration of transferable skills. Studying female hockey is important for many reasons, which include the large number of females who play the sport, marginalization of female athletes, and the struggle with society to allow women to play hockey.

Traditionally, hockey has been perceived as a masculine sport, and the simple fact is that women's involvement in hockey is different from that of men in the same sport. In Canada since the 1990 World Championships, women's hockey registration has grown by more than 400% (Strougler, 1999). The 1998 Olympics had a tremendous impact on female hockey, and female hockey players have become more accepted (Strougler, 1999). In 1998 Alberta had 112 female minor hockey teams, which was a 50% increase over the previous year (Strougler, 1999).

Historically, female hockey has fought a relentless battle to become recognized. In the early years women in the game used to be more tolerated than respected in the hockey world and society at large (Etue & Williams, 1996). Female players were largely regarded as the 'little sisters' who do not belong in hockey, which was evident in both national and provincial hockey organizations (Etue & Williams, 1996). Team Canada's success, the emerging appearance of female hockey players on television, and the

decision to include women's hockey in the 1998 Olympics suggest that since the 1990s the little sister principle has been losing ground (Etue & Williams, 1996). As respect for female hockey grows, it makes sense that research interest would grow along with it. Female hockey thus becomes a legitimate focus for future research studies.

Hockey is typically perceived as a masculine sport, and women who play hockey may have very different reactions to sports retirement from those of their male counterparts. Young boys' participation in hockey is normal, and they often receive strong encouragement from parents, peers, and societal norms (Messner, 1998), but this is not the case for young girls. Also, the values and ideologies that surround the sport, such as toughness, aggression, and competition, enforce masculinity (Messner & Sabo, 1990). The stereotyping of activities as either masculine or feminine clearly affects participation levels: Most men participate in masculine activities (e.g., hockey), whereas women participate in feminine activities (e.g., figure skating; Holland & Andre, 1994; Howard, 1992; Kane, 1990), and hockey is regarded as masculine (Theberge, 1995). Women face an increased number of constraints in both sports and leisure (Henderson & Bialeschki, 1993; Shaw, 1994), but those who overcome the constraints and actively participate may be motivated and have a personal investment in sport (Wiley, Shaw, & Havitz, 2000). For example, female hockey players report high levels of enjoyment and satisfaction from playing hockey (Wiley et al., 2000). There is no female professional hockey league in North America, and because they cannot make a living playing the game that they love, female hockey players must ensure that they have more balance in their lives. Consequently, these women may have a balanced outlook on their identities in the multiple roles that they pursue (i.e., in addition to hockey). That is, female hockey

players may be able to balance their identity by seeing themselves as having other roles and not tying their identity directly to the sport. If this is the case, then research on female hockey players is crucial. This population may be able to offer insight into a positive adjustment to athletic career retirement that can be applied to potential at-risk populations such as male hockey players. Female hockey players' experiences are very different from those of their male counterparts, and these differences make a closer examination of their athletic retirement valuable. Retirement is an unavoidable part of athletics, but by informing athletes about transferable skills, regardless of the circumstances surrounding the transition, they will have the competencies to be successful (Danish et al., 1993). Whether athletes are at the high school, university/college, or national/elite level, they have learned lessons that will be valuable in other settings. It is empowering when they realize that they already have the skills and characteristics that they need to make them successful in nonathletic areas (Petitpas & Schwartz, 1989; Petitpas et al., 1992).

Why Are Transferable Skills Mediators of the Adjustment to Transition?

Definition of Transferable Skills

Transferable skills are general skills that are context and content free (Wiant, 1977). Transferable skills in terms of athletics are those skills that athletes have acquired through sport that can be applied to other areas of their lives and to other nonsport careers (Mayocchi & Hanrahan, 2000). An example of a transferable skill is tenacity. Hockey players learn tenacity and demonstrate hard work on and off the ice, which they can use in a new career in business when they retire from sport to learn domain-specific skills such as successful negotiating and proper ways to manage employees. Transferable skills very much apply to a second career (Mayocchi & Hanrahan, 2000). Danish et al. (1993)

provided an example of life skills or transferable skills that can be applied across settings, including the ability to perform under pressure, organizational skills, the ability to meet challenges/deadlines, the ability to set and attain goals, adaptability/flexibility, the ability to recognize limitations, dedication and perseverance, patience, and self-motivation (Danish et al., 1993). The following is a discussion of transferable skills that may be developed in the sport context and can assist athletes in their athletic retirement transition.

Impact of Transferable Skills on Adjustment to Retirement From Sport

Anecdotal research reports have been the main source of research on the use of transferable skills among athletes. Athletes who apply transferable skills report better adjustment to career retirement (Petitpas et al., 1992), and many athletes recognize that they have skills that will transfer outside of athletics. According to James F. Molloy, a professor at Northeastern University's College of Business Administration, it is no coincidence that successful athletes often turn into successful entrepreneurs (as cited in Cavanaugh, 1989). Molloy suggested that the two share similar characteristics: "To become a star athlete you need drive and energy and you have to be a risk-taker" (p. 23). Lau (2003) referred to athletes such as Susan Auch, Jim Peplinski, Diane Jones Konihowski, George Reed, and Morgan Knabe, who were able to successfully adjust to athletic retirement by using transferable skills. Diane Jones Konihowski, a former pentathlete, is now the owner-operator of the Calgary franchise of Premiere Executive Suites, a franchise business that rents upscale suites, and is still an all-around competitor. She needs to be able to do a variety of things from cleaning units to making the sale, but it all comes down to hard work (Lau, 2003). High-performance athletes have qualities

such as commitment and the ability to set goals, work in teams, communicate, and deal with both challenges and obstacles that can transfer to the workplace (Lau, 2003).

It is also important to examine the factors that influence skill transfer. Two key characteristics of transferable skills are decreased emotional upheaval and increased level of perceived competency. Susan Auch, a former world-class speed skater, retired after a 14-year career and entered the real estate business. However, she experienced some rocky transitions in working to become a successful real estate agent (Lau, 2003). The ability to transfer skills is not automatic, and it is therefore important to examine the factors that influence it. Athletes' lack of awareness of the skills that they possess and how these skills can be applied to other settings is the main reason for their inability to transfer their skills and for their concern about career planning (Danish et al., 1993). Successful transitioning out of sport involves emotional well-being and a perceived competency in the new situation. The counselling profession can play an instrumental role in both areas to help athletes to achieve successful transition and to cope with the impact or aftermath of the event (Danish, Petitpas, & Hale, 1992). The goal of counselling is to assist individuals and allow them the space to grow from their experiences, and a psychologist can help athletes emotionally through their transition out of sport (Danish et al., 1992). It is important for athletes to acquire knowledge about their transferable skills, but they must also believe that they are competent before the transfer will be possible. Individuals often fear new situations if they feel that they do not have the coping skills to deal with them (Bandura, 1977). However, if they believe that they have adequate skills, they will then become involved (Bandura, 1977). A sense of self-efficacy and capability can result

in a successful transition (Mayocchi & Hanrahan, 1997). It is also the psychologist's role to work with athletes and their perceived competencies.

Increasing transfer for athletes. Danish et al. (1992) identified six important factors in effective skill transfer: (a) the understanding that they have qualities that are valuable in other areas; if they lack this knowledge, then the qualities that they possess are not transferable; (b) the belief that these qualities are skills; without this belief, they cannot transfer their skills; (c) an understanding of how they have learned the skills within the sport context and the ways in which other contexts may be similar; (d) the level of anxiety that is likely to accompany the transition, which can lead to a lack of confidence and make it difficult to transfer their skills; (e) identity, which may be tied to sport in such a way that they lack interest in exploring nonsporting options or lack the confidence to use their skills to be successful in other settings; and (f) social support, because a lack of support to help athletes use their skills in a nonsport context may limit their commitment to positive adjustment to retirement from sport. Athletes have many opportunities to apply their skills outside of the sporting environment, and it is important for parents and coaches to tie their perspective to life development as well as to athletic development (Danish et al., 1992).

Career and education programs for athletes may increase their awareness of their transfer skills and teach them how to use the skills in other contexts. Examples of such programs include Australia's Athlete Career and Education program and Britain's Goldstart program (Mayocchi & Hanrahan, 1997). North America has Canada's Athletes in Transition program and the United States' Career Assistance Program for Athletes and the National Collegiate Athletic Association Life Skills Program (Mayocchi & Hanrahan,

1997). In assisting athletes in using their transferable skills to retire from elite sport, it is important that they be aware of these skills and of how to apply them to other settings.

Two main factors include the transfer of individual characteristics and the work-environment characteristics.

Individual characteristics and skill transfer. Characteristics inherent to a person affect the use of transferable skills. For example, the perceived relevance of skills that are transferable to other contexts as well as the perception of competency in skill transfer affect their use (Mayocchi & Hanrahan, 2000). When individuals are not aware of or do not value the skills that they have developed and do not understand when these skills may be useful in different settings (Yelon, 1992), then skill transfer is unlikely (Mayocchi & Hanrahan, 2000). It is important to help athletes to identify the physical and psychological skills that they have acquired through sport that can be used in other settings (Mayocchi & Hanrahan, 2000) and to recognize the usefulness of the skills that they have learned or the knowledge that they have gained as they relate to other life contexts. For example, George Reed, a former member of the Saskatchewan Roughriders, became a sales consultant in 1977 at McKay Pontiac Buick GMC in Calgary. Reed was able to adjust to athletic retirement with relative ease because he was aware that the skills and abilities that he had developed in football were also valuable in the business environment (Lau, 2003). This awareness leads to better transfer of skills. It is important not only to understand the skills, but also to understand the value of the skills to be able to transfer them. Research has shown that managers who feel strongly about the value of a training session are more likely to apply the skills that they learned in the session to their work environment (Baumgartel, Reynolds, & Pathan, 1984).

Motivation and job enthusiasm also play a role in the ability of athletes to use transferable skills. Mayocchi and Hanrahan (1997) conducted two separate studies and identified the importance of motivation to skill transfer. Retired athletes are more likely to transfer their sporting skills when they find their jobs challenging and interesting and to be motivated to do well in their nonathletic careers. Some of the skills are determination, persistence, and goal setting (Mayocchi & Hanrahan, 1997). Jim Peplinski is an example of an athlete who benefited from motivation and job enthusiasm. He is a former member of the Calgary Flames and entered the business world in 1990 with determination and persistence. Peplinski realized that he was now a rookie in the business world and that doing the same things that he did as a rookie in hockey would make him successful (Lau, 2003): “I put my head down and worked hard and got beat up a little bit” (p. 4). Athletes often find that skills such as determination, persistence, and the ability to set goals are applicable outside of sport (Mayocchi & Hanrahan, 1997).

Research has shown that self-efficacy affects the ability to transfer skills (Mayocchi & Hanrahan, 1997). Many individuals fear that they lack the coping skills to deal with a situation. However, if they perceive that they have the necessary skills to positively manage the demands of the situation, they are more likely to become involved in the activity (Bandura, 1977). Mayocchi and Hanrahan found that athletes with high self-efficacy are more successful at transferring their skills to nonsport settings; conversely, they may not be able to transfer their sport skills if they are not certain of their abilities.

Another example of the influence of self-efficacy is the athlete Morgan Knabe, an elite swimmer who purchased a telecommunications franchise, and he was successful at transferring his skills because he felt capable (Lau, 2003).

Understanding the individual characteristics necessary for skill transfer is important, but completely understanding the whole picture also requires a consideration of the moderators of transferable skills.

Moderators of Transferable Skills

After reviewing the literature on the career retirement of athletes, the researcher created a model for transferable skills that extracts constructs from Schlossberg's (1981) model and the LDI model (Danish et al., 1992; Danish et al., 1993), as well as from the literature on transferable skills and the career retirement of athletes. The impetus to use transferable skills is the transition event, which is retirement from sport. This event is affected by and affects three components: environment factors, the qualities of transition, and transferable skills. Transferable skills are directly affected by person and environment moderators. These factors are labelled in the model that the writer created: transferable skills in the process of transitioning to retirement for sport (Appendix A). A discussion of the environmental factors, individual factors, and person/environment moderators is required to understand transferable skills as described in the model and in this study of female hockey players.

The environmental factors in this model are similar to those in Schlossberg's (1981) model. Interpersonal support is vital to successful transition, and three key elements of this support are intimate relationships, the family unit, and the network of friends and teammates. Institutional support is also important and in athletics this usually

takes the form of governing bodies. The female hockey players who participated in this study received institutional support from Hockey Alberta, Canadian Interuniversity Sport (CIS), the Alberta Colleges Athletic Conference (ACAC), and Hockey Canada. The physical setting is important in the transition and affects well-being, stress, and the general outlook; it can involve climate, weather, urban or rural location, living arrangements, and the workplace. For the athletes who participated in this study, hockey was a major physical setting, and the basic principle of women playing a masculine sport creates a situation that is affected by special factors.

According to Danish et al. (1992), three features of transferable skills affect positive adjustment to transition: (a) awareness of the qualities/skills that can be used in the new environment, (b) awareness of how transferable skills are developed in sport, and (c) the perceived outcome of applying transferable skills to a new setting. An awareness of qualities/skills that can be used in other areas is crucial to skill transfer. For female hockey players to transfer skills, they must understand that they have qualities that are valuable in other areas. Tied to this is the awareness that these valuable qualities *are* skills. The success of skill transfer increases with an awareness of how transferable skills are developed in the sport context. When female hockey players can understand how and in what context they learned these skills, their transfer is enhanced. The perceived outcome of applying transferable skills to a new environment will affect female hockey players' ability to transfer skills as well as the success of the transition.

Person and environment moderators are expected to directly affect transferable skills. These include athletic identity, gender, expertise level, emotional readiness to retire, fear of the unknown, and difficulty in committing to skill transfer because of a lack

of support (Crook & Robertson, 1991; Werthner & Orlick, 1986). Danish et al.'s (1992) LDI model includes athletic identity, fear of the unknown, and difficulty in committing to skill transfer because of a lack of support. Athletic identity greatly affects athletes' ability to transition (or to use transferable skills), and because athletes' identity is tied to sport, often they do not explore nonsporting options or they lack the confidence to be successful in other settings. Gender also plays a role in transition and transferable skills. For female hockey players, their gender might affect the transition because they are playing a traditionally masculine sport. Expertise is closely tied to athletic identity. Elite athletes will invest more time and energy in competing at the highest levels, which may take away from other aspects of their lives and make the transition away from hockey more difficult. Emotional readiness to retire is connected to some of the important variables in Schlossberg's (1981) model. Positive or negative feelings associated with transition depend on whether the transition is internal or external. Gradual transitions are easier because they allow the athlete time to prepare. Fear of the unknown in the new, unfamiliar setting can create a level of anxiety, and when athletes are anxious, their ability to transfer skills decreases. Difficulties with committing to the transfer may arise if sources of support are lacking to assist them in transferring their skills.

Implications

One of the main barriers to using transferable skills may be that athletes are not aware of these skills (Danish et al., 1993), and increasing their ability to transfer skills from sport to other areas of their lives may enhance their adjustment to a career transition (Mayocchi & Hanrahan, 2000). The focus of successful athletes may become so narrow that they do not realize that their skills will also be effective in a nonsporting

environment. When they can no longer participate in elite sport, athletes must believe that their identity extends past the sport. Terence Tootoo and Jason Ricciuti, two athletes who committed suicide when they could no longer play hockey, present dramatic examples of the consequences of a foreclosed sports identity (Owens, 2002; “Parents Wonder Why,” 2002). Terence Tootoo was possibly the first Inuk ever to play professional hockey. He played for the Roanoke Express of the East Coast Hockey League and was preparing for a tryout with the Norfolk Admirals of the American Hockey League (“Parents Wonder Why,” 2002). A week before he was to return to the United States, the 22-year-old was found dead in the Manitoba bush with a 12-gauge shotgun. Tootoo had been charged with drunk driving the day before, and his family wondered whether this was the catalyst because he would not have been able to cross the border to play hockey as a result of the drunk-driving charge. Jason Ricciuti was a 15-year-old hockey player from Kelowna who hanged himself in his hotel room after he was caught with marijuana and threatened with a suspension (Owens, 2002).

These two stories are glaring examples of the need for athletes to understand the use of transferable skills to successfully transition out of sport and increase their confidence in their own ability to start a new career and use their skills in different settings (Petitpas et al., 1992). Athletes may find that becoming aware of their skills improves their athletic career by increasing their understanding of the role of certain skills in athletic performance (Mayocchi & Hanrahan, 2000). Athletes who understand the skills that they have acquired through sport will be better able to explain the skills to future employers and describe how they will be useful in a nonathletic career (Mayocchi & Hanrahan, 2000).

The implication for counsellors is that research in this area will increase the potential not only to determine the types of skills that will transfer, but also to explore the barriers to skill transfer (Mayocchi & Hanrahan, 2000). Teaching athletes strategies such as goal setting and action planning may help counsellors to offer them the support that they need in their transition from sports to overcome the barriers to skill transfer (Mayocchi & Hanrahan, 2000).

Why Study Transferable Skills?

Studying transferable skills is crucial because the same elements that help athletes to be successful in sport will also help them to be successful in nonsporting careers. Successful athletes understand the constant striving for excellence, and counsellors, coaches, and researchers should encourage them to carry this aptitude over into their next career. It is important to examine transferable skills because research has shown that athletes are interested in discovering how to transfer their mental skills to their new careers (Sinclair & Orlick, 1993) and are concerned about their ability to transfer their knowledge and skills when they are thinking about retiring from sport (Swain, 1991). Petitpas et al. (1992) commented that teaching athletes about transferable skills can have a positive effect. They conducted a survey with athletes who had participated in the Olympics or Pan-American Games and found that the athletes preferred to identify transferable skills and prepare for the transition out of active sport rather than learn job-interview strategies or resume preparation. They rated the transferable skill presentation as the most useful content area. Learning about transferable skills seems to increase athletes' confidence that their skills are useful in other situations and challenges some of their doubts about becoming involved in another career (Petitpas et al., 1992).

It is hypothesized that national-team athletes do not consider their skills as transferable as do high school or university/college athletes. It is also important to remember that, because most of the research on career retirement involves male athletes, the findings of this study might be very different from those previously researched. National-team female hockey players are not getting paid only to play hockey, so they might be more aware of how the skills that they learn in sport can be transferred to another career. High school and university/college athletes might view their skills as transferable because they are in an educational setting and are studying to make themselves more employable.

Taking all of these factors into consideration, it becomes evident that there is great value in understanding the process of skill transfer and that it would be of great interest to practitioners who are working with retiring athletes (Mayocchi & Hanrahan, 2000). Therefore, the research goals for this thesis were to determine (a) the perceptions of active female athletes of their transferable skills and (b) ways to improve the process of helping athletes through career transition.

CHAPTER 3:

METHOD

This chapter will discuss the method that was used in conducting the study. It outlines the participants, the procedure, the instrumentation, and the methods that were used to collect and analyze the data.

Participants

The study sample consisted of female hockey players at the high school, university/college, and national/elite levels. The researcher contacted Hockey Alberta to gain access to Albertan hockey players at the high school and elite levels. The operational definition of a high school female hockey player in this study is a female who was enrolled in an Alberta high school and was also a member of a female hockey team affiliated with Hockey Alberta. Elite-level female hockey players who belong to and compete with the Edmonton Chimos or Calgary Oval X-treme elite hockey teams were also eligible to participate in the study. The writer contacted CIS, the governing body, to gain access to university-level players and the ACAC for access to players at the collegiate level. At the university and collegiate level of play, eligible participants were restricted to female hockey players who were attending a Canadian postsecondary institution and represented that institution in competition. Finally, the national team players were accessed through the head coach. To be designated as such, the female athletes had to be current members of the team that represents Canada in international competitions. Approximately 300 athletes participated in the study (140 high school, 100 university/college, and 60 national/elite).

Procedure and Data Collection

Female hockey players who were currently competing at one of the three levels (e.g., high school, university/college, and national/elite) were surveyed. Their participation in the study was completely voluntary, and athletes who did not wish to complete the survey faced no ill effects from not participating. To access the sample, the hockey governing bodies (e.g., ACAC, the CIS, and Hockey Alberta) were contacted via e-mail. Upon receiving the consent of the governing bodies, the writer also contacted the coaches and targeted athletes through e-mail. This procedure was used because the coaches were expected to be more willing to participate with the permission and encouragement of the governing bodies. A sample script of the e-mail letter that was sent to the governing bodies and coaches is presented in Appendices B and C, respectively.

The writer then contacted the coaches who responded positively to the initial interest letter a second time by e-mail and explained the procedures of the study (Appendix D). Concurrently, survey packages were sent to the coaches to administer to their athletes. These packages contained a questionnaire (Appendix E), a self-addressed envelope, and a survey administration script (see appendix F), which the coaches read aloud before the athletes began the survey. Each athlete sealed her completed questionnaire in the envelope before returning it to the coach, and the coaches mailed the completed surveys back to me. The only exceptions to this were the national team, one elite team (Edmonton Chimos), and one college (Mount Royal College) team: The coaches sent the surveys to the athletes because these teams had already disbanded, and the athletes subsequently returned their completed surveys directly to me. The researcher had decided to use mail-out surveys because of the distant locations of the teams from

me. The researcher allowed the coaches three weeks to administer the questionnaire packages, and after four weeks an e-mail reminder was sent to those who had not yet returned the packages. After eight weeks had passed, a second e-mail reminder was sent. The team questionnaire packages were identified only by assigning a number to each participant (see the following section).

Athletes' Survey

The questionnaire consisted of four sections that sought general information and information on athletic identity, career transition, and transferable skills. Because no standard instrument currently exists to study transferable skills, the researcher developed a questionnaire for the purposes of this study. The items of the questionnaire are grounded in empirical descriptive research on transferable skills.

The survey required approximately 20 minutes to complete. Each questionnaire was assigned a participant number and the athletes were asked not to reveal their names. The items of the questionnaire sought to determine athletes' familiarity with and perceptions of transferable skills. A more detailed description follows below (see Appendix E for the questionnaire items).

Part A: General Information

In this section (closed and open questions) the athletes were asked to state their age, level of competition, and selected environmental resources (e.g., financial support systems) that have been identified as factors that influence perceptions of transferable skills for athletic retirement.

Part B: Identity

In this section the seven-item Athletic Identity Measurement Scale (AIMS; Brewer & Cornelius, 2001) was used to assess athletic identity, which is a moderator of athletes' ability to use transferable skills. This questionnaire is based on Brewer et al.'s (1993) original 10-item version. It asked the athletes the degree to which they agree with each item on a 7-point Likert scale anchored by *strongly disagree* and *strongly agree*. The current research modified the scale to a 5-point Likert scale to ensure continuity throughout the survey. Research that uses the 7-item AIMS demonstrates strong evidence of reliability and validity, and norms have been established for athletic populations (Brewer et al., 1993). Cronbach's alpha coefficients of .93, .87, and .81 were reported, and a test-retest reliability coefficient of .89 was reported across a 14-day period (Brewer et al., 1993). Brewer et al., (1993) tested the validity of the AIMS with three different studies. In the first study the convergent validity was supported because the participants' scores on the AIMS were highly positively correlated with scores on the Perceived Importance Profile importance of sports competence scale ($r=.83$; Brewer et al., 1993). The AIMS scores were higher for participants who reported high levels of athletic involvement.

The second study revealed that AIMS scores are related to the Self-Role Scale ($r=.61$) and to the subscales of the Sport Orientation Questionnaire (Brewer et al., 1993). These participants' AIMS scores were not related to their scores on a measure of self-esteem.

In the third study the intercollegiate football players' scores on the AIMS were correlated with the Perceived Importance Profile importance of sports competence scale

($r=.42$), but not with subscales of the Physical Self-Perception Profile (Brewer et al., 1993).

Part C: Career Transition

The following two sections of the survey were created because the researcher was unable to find a suitable survey in the literature. The questions developed were based on the literature on career retirement and transferable skills, and sought information on the athletes' perceptions of the career transition itself, which may moderate the use of transferable skills. In terms of career transition, it was important to look at emotional response, favourable attitude towards retirement, and social resources available for retirement. The questions in this section were both open and closed ended, and the open-ended questions, which were included in Part B of the closed-ended questions, were intended to gain information that could not obtain from the closed-ended questions. Emotional readiness was assessed by asking two independent questions, both rated on a 5-point Likert scale: questions 17 (Do you ever consider what your life would be like once you have stopped playing hockey?) and 18 (How ready are you to enter a full-time career upon career transition from sport?) of the transferable skills questionnaire (Appendix E). The end points for question 17 were 1 (*never*) and 5 (*always*), and for question 18, 1 (*not at all*) and 5 (*extremely*). Favourable attitude was assessed by asking two independent questions rated on a 5-point Likert scale with end points at 1 (*never*) and 5 (*always*): questions 14 (Do you avoid thinking about retirement from sport?) and 15 (Do you view athletic retirement as a negative transition?). Social resources was assessed by asking three independent questions. Question 16 (How satisfied are you with the extent to which teams and coaches have prepared you to enter a full-time career?) was

rated on a 5-point Likert scale with end points at 1 (*not at all*) and 5 (*extremely*).

Questions 19 (Who is responsible for helping athletes make the transition from sport?) and 20 (What resources do you feel would aid you in the transition from being an active athlete to a life with a full-time career?) were categorical questions, and the participants responded by selecting a box, which equalled 1, whereas an unselected box was equal to 0.

Part D: Transferable Skills

In this section both open and closed questions to determine attitudes to and perceptions of transferable skills, and the open-ended questions, which were included in Part B of the closed-ended questions, were intended to gain information that could not obtain from the closed-ended questions. Specifically, the items concerned issues pertaining to athletes' self-efficacy in using transferable skills and awareness of the perceived relevance/value of transferable skills. To assess transferable skill self-efficacy, four independent questions (29, 31, 32, and 33) were asked. All three independent questions were rated on a 5-point Likert scale. The end points for questions 29 (Do you think that becoming aware of transferable skills will make career transition easier?) and 32 (Would learning about transferable skills increase your confidence in having skills that can be used in nonsporting careers?) were 1 (*not at all*) and 5 (*absolutely*). The end points for question 31 (Do you feel confident that your skills will be transferable to a full-time career?) were 1 (*not at all*) and 5 (*extremely*), and for question 33 (Do you have doubts concerning your ability to begin a new career?), 1 (*no*) and 5 (*absolutely*). To assess the athletes' awareness of transferable skills, five independent questions (21, 24, 25, 27, and 28) were asked. Questions 21 (How familiar are you with transferable skills that can be

learned in hockey and that can be useful in nonathletic settings?) and 28 (Have you noticed skill transfer from hockey to another setting in your own life?) were rated on a 5-point Likert scale, with end points for question 21 of 1 (*not at all*) and 5 (*extremely*) and for question 28 of 1 (*never*) and 5 (*always*). Questions 24 (Where did you become more familiar with transferable skills?), 25 (Who helped you become more familiar with transferable skills?) and 27, (Which skill[s] do you feel that you possess that could be transferred to another career?) were categorical questions, were categorical questions, and the participants responded by selecting a box, which equalled 1, whereas an unselected box was equal to 0. To examine relevance/value, five independent questions (22, 23, 26, 30, and 34) were asked. Questions 22 (Do you view yourself as having skills acquired in sport that can be transferred to another career?), 23 (Is transferring skills from hockey to another job or career something you have considered?), 30 (Are you interested in learning more about transferable skills?), and 34 (Is being aware of transferable skills important for successful transition out of sport?) were independent questions rated on a 5-point Likert scale. The end points for questions 22, 23, 30 and 34, were 1 (*not at all*) and 5 (*extremely*). Question 26 (Which skill[s] do you view as being the most transferable to another career?) was categorical, and the participants responded by selecting a box, which equalled 1, whereas an unselected box was equal to 0.

Data Analysis

Two question formats were used in this study: open-ended (e.g., Why have you never considered transferable skills?) and closed-ended (e.g., Are you currently holding another paying job outside of being an athlete?). The closed-ended questions used one of two different scales: a dichotomous or a 5-point Likert scale. Because of these two styles,

The data was analyzed by using two different styles: for the open-ended questions, an analysis of themes; and for the close-ended questions, descriptive statistics and chi-square.

Analysis of the Open-Ended Responses

The themes that emerged from the responses to the open-ended questions were analyzed by using thematic coding and constant comparison. To do this, the responses were coded and separated them into categories that became the basis for themes. The categories were judged by their similarity, which resulted in data in each category that were similar to one another but different from those in the other categories (Smith, 1990). The responses to the survey questions were expected to produce terms and concepts that could be constantly compared to identify themes and categories (Anderson, 1998). Interrater reliability was achieved by seeking agreement on the themes between two parties (myself and a committee member) and then calculated the frequency and percentage of each coded theme and tabulated the results.

Analysis of the Closed-Ended Questions

The general descriptive statistics (e.g., mean, standard deviation, range, frequency, and percentage) were calculated for the closed-ended questions. To determine the between-subject differences of athletes from differing level of competition (e.g., high school and college), chi-square analysis was applied, which revealed whether the form of frequency counts was distributed differently for the different samples (Gall, Gall, & Borg, 2003). All analysis was completed using the SPSS statistical program.

CHAPTER 4:

RESULTS

This study was guided by the following question: How do active female hockey players at the high school, university/college, and national/elite level perceive the skills acquired in sport as transferable to another career or other facets of their lives? In seeking an answer to this question, a four-part survey was developed. This chapter reports the outcomes of the 117 completed surveys. The data was analyzed using descriptive, qualitative, and chi-square methods.

Descriptive and Qualitative Analyses

Part A: General Information

This section addresses age, level of competition, student status, employment status, financial support, and the age at which the athletes planned to leave competitive sport.

Age. The ages of the 117 athletes who responded to this question ranged from 15 to 40 years. The median age is 19.00 years, and the mean age is 20.20 years (Table 1).

Level of competition. Table 2 shows that, of the 117 surveys returned, 23.9% (n = 28) were from the high school competition level, 47.9% (n = 56) from the university/college competition level, and 28.2% (n = 33) from the national team/elite competition level.

Students and nonstudents. Table 3 indicates the number of female hockey players who were also students at the time of completing the survey. Of the 117 athletes who responded to this question, 76.1% (n = 89) were full-time students.

Table 1

Question 1: Age of Participants

| Age | <i>N</i> | % |
|-----------------|----------|---------|
| 15 | 6 | (5.1) |
| 16 | 11 | (9.4) |
| 17 | 8 | (6.8) |
| 18 | 20 | (17.1) |
| 19 | 18 | (15.4) |
| 20 | 14 | (12.0) |
| 21 | 7 | (6.0) |
| 22 | 8 | (6.8) |
| 23 | 7 | (6.0) |
| 24 | 3 | (2.6) |
| 25 | 2 | (1.7) |
| 26 | 3 | (2.6) |
| 27 | 2 | (1.7) |
| 28 | 2 | (1.7) |
| 29 | 1 | (0.9) |
| 30 | 1 | (0.9) |
| 31 | 1 | (0.9) |
| 35 | 1 | (0.9) |
| 40 | 1 | (0.9) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Mean = 20.20, Range = 25, Standard deviation = 4.120

Table 2

Question 2: Level of Competition

| Level | <i>N</i> | (%) |
|---------------------|----------|---------|
| High school | 28 | (23.9) |
| University/college | 56 | (47.9) |
| National team/elite | 33 | (28.2) |
| Total responses | 117 | (100.0) |

Table 3

Question 3: Participants Who Were Students

| Student status | <i>N</i> | (%) |
|-----------------|----------|---------|
| Full-time | 89 | (76.1) |
| Part-time | 2 | (1.7) |
| Not a student | 25 | (21.4) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Employment. Table 4 indicates the number of female hockey players who were also employed at the time of completing the survey. Of the 117 athletes who responded to this question, 21.4% ($n = 25$) of the athletes had full-time jobs and 13.7% ($n = 16$) had part-time jobs.

Table 4

Question 4a: Participants Who Were Working

| Employment | <i>N</i> | (%) |
|-----------------|----------|---------|
| Full-time | 25 | (21.4) |
| Part-time | 16 | (13.7) |
| Not employed | 75 | (64.1) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Table 5 shows the types of jobs that the female hockey players held at the time of completing the survey. The two themes that emerged were sports-related jobs (33.4% of total responses) and non-sports-related jobs (66.6% of total responses). The two most common subthemes that emerged from the non-sports-related theme included jobs in the

service industry (25.6% of total responses) and general-labour jobs (23.1% of total responses). Specific examples of jobs included waitress (participant 22, university competition level) and retail (participant 4, elite competition level). Some examples of jobs in general labour included employment with Encana oil and gas (participant 56, high school competition level) and on the family farm (participant 97, high school competition level).

Table 5

Question 4b: Jobs That Female Athletes Held While Playing Hockey

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|-------------------------------------------|-------------|----------------|-----------------|-------------|------|
| Sports related | | | | | |
| Hockey coach | 0 | 4 | 0 | 4 | 10.3 |
| Referee | 1 | 2 | 0 | 3 | 7.7 |
| Personal trainer | 0 | 0 | 2 | 2 | 5.1 |
| Speaking/appearance | 0 | 0 | 2 | 2 | 5.1 |
| Hockey school owner | 0 | 0 | 1 | 1 | 2.6 |
| Shooter at goalie clinic | 0 | 1 | 0 | 1 | 2.6 |
| Total | | | | 13 | 33.3 |
| Non-sports related | | | | | |
| Service industry (e.g., waitress, retail) | 2 | 4 | 4 | 10 | 25.6 |
| General labor | 2 | 4 | 3 | 9 | 23.1 |
| Clerical | 0 | 2 | 1 | 3 | 7.7 |
| Trained professional | 0 | 0 | 2 | 2 | 5.1 |
| Self-employment | 0 | 0 | 2 | 2 | 5.1 |
| Total | | | | 26 | 66.7 |
| Total frequency of responses | | | | 39 | |

Financial support. Table 6 indicates the number of female hockey players who believed that the sport and governing bodies provided sufficient financial support for

athletes at the time of completing this survey. Of the 117 athletes who responded to this question, 65.8% (n = 77) did not believe that the sport and governing bodies provided sufficient financial support for female hockey players.

Table 6
*Question 5a: Financial Support From Sport
and Governing Bodies*

| Support | <i>N</i> | (%) |
|----------------------|----------|---------|
| Sufficient support | 35 | (29.9) |
| Insufficient support | 77 | (65.8) |
| No responses | 5 | (4.3) |
| Total responses | 117 | (100.0) |

Table 7 shows the reasons that the participants believed or did not believe that the sport and governing bodies provided sufficient funding. For those participants who reported insufficient funding (74.4% of total responses), the most frequently reported reason was “Poor external funding” (22.2% of total responses). Some examples of these responses include “Outside of the Olympic years there is not support from Hockey Canada” (participant 19, national team level) and “Our team gets very little financial support” (participant 61, college level). The second most frequent response was “Training leaves no time for work” (19.7% of total responses; e.g., “I think people don’t understand the time it takes to play hockey and think you can provide for yourself and play” [participant 35, high school level] and “However, the time dedication does not allow for me to earn enough money to life [*sic*]” [participant 7, national team level]).

Table 7

Question 5b: Reasons for Views of Financial Support From Sport and Governing Bodies

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|------------------------------------------------------------|-------------|----------------|-----------------|-------------|------|
| Sufficient | | | | | |
| University scholarships sufficient | 0 | 5 | 1 | 6 | 5.1 |
| Sufficient but could be better | 0 | 0 | 4 | 4 | 3.4 |
| External support (i.e., sponsors) | 3 | 0 | 0 | 3 | 2.6 |
| Equipment and meals covered | 0 | 3 | 0 | 3 | 2.6 |
| Sufficient | 0 | 0 | 1 | 1 | 0.9 |
| Total | | | | 17 | 14.5 |
| Insufficient | | | | | |
| Poor external funding (i.e., government, university) | 4 | 16 | 6 | 26 | 22.2 |
| Training and school leave no time to work | 1 | 18 | 4 | 23 | 19.7 |
| Cost of living (i.e., living, tuition) | 1 | 7 | 13 | 21 | 17.9 |
| Female hockey underfunded | 0 | 3 | 4 | 7 | 6.0 |
| Sport is expensive | 1 | 2 | 3 | 6 | 5.1 |
| Unequal distribution of funds (i.e., no funding for elite) | 0 | 1 | 3 | 4 | 3.4 |
| Total | | | | 87 | 74.4 |
| Unclear response | 3 | 1 | 1 | 5 | 4.3 |
| No responses | | | | 8 | 6.8 |
| Total frequency of responses | | | | 117 | 100 |

Of the participants who reported that funding was sufficient (14.5% of total responses), the most common responses included “University scholarships are sufficient” (5.1% of total responses; e.g., “My scholarship helps to pay for most of my schooling” [participant 51, college level]).

Estimated age of transition. Table 8 indicates the age at which the respondents anticipated leaving competitive hockey at the time of completing this survey. This question appeared to be difficult to answer; many were unable to select an exact

transitional age, and only 91 of the athletes were able to respond to this question. The responses ranged from 18 to 50 years of age. The median age of expected retirement was 25 years (mean age = 27.30; mode = 22).

Table 8

*Question 6a: Age at Which Female Hockey**Players Planned to Transition*

| Age | N | (%) |
|-----------------|-----|---------|
| 18 | 4 | (3.4) |
| 20 | 4 | (3.4) |
| 21 | 5 | (4.3) |
| 22 | 13 | (11.1) |
| 23 | 11 | (9.4) |
| 24 | 4 | (3.4) |
| 25 | 11 | (9.4) |
| 26 | 4 | (3.4) |
| 27 | 2 | (1.7) |
| 28 | 2 | (1.7) |
| 29 | 1 | (0.9) |
| 30 | 7 | (6.0) |
| 31 | 2 | (1.7) |
| 32 | 2 | (1.7) |
| 34 | 1 | (0.9) |
| 35 | 5 | (4.3) |
| 36 | 3 | (2.6) |
| 40 | 7 | (6.0) |
| 41 | 1 | (0.9) |
| 50 | 2 | (1.7) |
| No responses | 26 | (22.2) |
| Total responses | 117 | (100.0) |

Mean = 27.30, Median = 25.00, Mode = 22,
Range = 32, Standard deviation = 7.053

Transitioning out of sport. Table 9 indicates the anticipated time at which the participants believed that they would transition out of sport. The most commonly reported time was “When school is finished” (29.3% of total responses). The second was “I have no plans to leave” (14.3% of the total responses). Their rationales included “I’m always going to play” (participant 112, high school level) and “I always plan to play competitive hockey” (participant 27, college level). It is important to note that there were 133 responses because some participants gave more than one.

Table 9

Question 6b: Times at Which Female Hockey Players Planned to Leave Sport

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|---------------------------------------|-------------|----------------|-----------------|-------------|------|
| When finish school | 8 | 28 | 3 | 39 | 29.3 |
| No plans to leave | 6 | 11 | 2 | 19 | 14.3 |
| Start family/settle down | 3 | 7 | 8 | 18 | 13.5 |
| After the Olympics | 2 | 1 | 12 | 15 | 11.3 |
| When it’s time to start career | 1 | 7 | 6 | 14 | 10.5 |
| As long as physically able | 2 | 2 | 3 | 7 | 5.3 |
| Unclear response | 2 | 2 | 3 | 7 | 5.3 |
| When it interferes with school | 3 | 3 | 0 | 6 | 4.5 |
| Until it is no longer fun/challenging | 0 | 1 | 2 | 3 | 2.3 |
| When my goals are accomplished | 1 | 1 | 1 | 3 | 2.3 |
| As long as financially able | 0 | 1 | 1 | 2 | 1.5 |
| Total frequency of responses | | | | 133 | |

Part B: Identity

This section was comprised of seven questions from the 7-item AIMS (Brewer & Cornelius, 2001) the questions were designed to ascertain the participants' athletic identity. The participants were asked to select the degree to which they agreed with each question on a 5-point scale anchored by 1, *strongly agree* and 5, *strongly disagree*.

Considered an athlete. Table 10 shows the respondents' answers to question 7, which asked to what degree they considered themselves athletes. Of the 117 who responded, 82.1% (n = 96) *strongly agreed* with this statement (scale point 5), and 13.7% (n = 16) selected scale point 4.

Table 10

Question 7: I Consider Myself an Athlete

| Likert scale | N | (%) |
|------------------------|-----|---------|
| 1 Strongly disagree | 3 | (2.6) |
| 2 | 0 | (0) |
| 3 | 1 | (0.9) |
| 4 | 16 | (13.7) |
| 5 Strongly agree | 96 | (82.1) |
| No response | 1 | (0.9) |
| Total response | 117 | (100.0) |

Mean = 4.74, Median = 5.00, Mode = 5, Standard deviation = .724

Goals related to sport. Table 11 shows the respondents' answers to question 8, which asked whether they had many goals related to sport. Of the 117 athletes who responded, 53% (n = 62) strongly agreed with this statement (scale point 5) and 33.3% (n = 39) selected scale point 4.

Table 11

Question 8: I Have Many Goals Related to Sport

| Likert scale | <i>N</i> | (%) |
|---------------------|----------|---------|
| 1 Strongly disagree | 1 | (0.9) |
| 2 | 2 | (1.7) |
| 3 | 13 | (11.1) |
| 4 | 39 | (33.3) |
| 5 Strongly agree | 62 | (53.0) |
| Total responses | 117 | (100.0) |

Mean = 4.36, Median = 5.00, Mode = 5, Standard deviation = .814

Friends who are athletes. Table 12 reveals the respondents' answers to question 9, which asked to what degree they related to the statement "most of my friends are athletes." Of the 117 athletes who responded, 41.9% ($n = 49$) strongly agreed with this statement (scale point 5), and 34.2% ($n = 40$) selected scale point 4.

Table 12

Question 9: Most of My Friends are Athletes

| Likert scale | <i>N</i> | (%) |
|---------------------|----------|---------|
| 1 Strongly disagree | 3 | (2.6) |
| 2 | 2 | (1.7) |
| 3 | 22 | (18.8) |
| 4 | 40 | (34.2.) |
| 5 Strongly agree | 49 | (41.9) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Mean = 4.12, Median = 4.00, Mode = 5, Standard deviation = .952

Importance of sport. Table 13 indicates the respondents' answers to question 10, which asked to what degree they agreed with the statement "Sport is the most important part of my life." Of the 117 athletes who responded, 38.5% (n = 45) selected scale point 4 and 29.9% (n = 35) selected scale point 3.

Table 13

Question 10: Sport Is the Most Important Part of My Life

| Likert scale | N | (%) |
|---------------------|-----|---------|
| 1 Strongly disagree | 4 | (3.4) |
| 2 | 11 | (9.4) |
| 3 | 35 | (29.9) |
| 4 | 45 | (38.5) |
| 5 Strongly agree | 21 | (17.9) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Mean = 3.59, Median = 4.00, Mode = 4, Standard deviation = 1.005

Time spent thinking about sport. Table 14 indicates the respondents' answers to question 11, which asked to what degree they agreed with the statement "I spend more time thinking about sport than anything else." Of the 117 athletes who responded, 37.6% (n = 44) selected scale point 3 and 31.6% (n = 37) selected scale point 4.

Feelings about poor sports performance. Table 15 indicates the respondents' answers to question 12, which asked to what degree they related to the statement "I feel bad about myself when I do poorly in sport." Of the 117 athletes who responded, 72.7% (n = 85) strongly agreed with this statement (scale point 5) or selected scale point 4.

Table 14

Question 11: I Spend More Time Thinking About Sport Than Anything Else

| Likert scale | N | (%) |
|---------------------|-----|---------|
| 1 Strongly disagree | 4 | (3.4) |
| 2 | 15 | (12.8) |
| 3 | 44 | (37.6) |
| 4 | 37 | (31.6) |
| 5 Strongly agree | 17 | (14.5) |
| Total responses | 117 | (100.0) |

Mean = 3.41, Median = 3.00, Mode = 3, Standard deviation = 1.001

Table 15

Question 12: I Feel Bad About Myself When I Do Poorly in Sport

| Likert scale | N | (%) |
|---------------------|-----|---------|
| 1 Strongly disagree | 5 | (4.3) |
| 2 | 5 | (4.3) |
| 3 | 22 | (18.8) |
| 4 | 36 | (30.8) |
| 5 Strongly agree | 49 | (41.9) |
| Total responses | 117 | (100.0) |

Mean = 4.02, Median = 4.00, Mode = 5, Standard deviation = 1.083

Depressed if injured. Table 16 shows the respondents' answers to question 13, which asked to what degree they related to the statement "I would be very depressed if I were injured and could not compete in sport." Of the 117 athletes who responded, 46.2% (n = 54) strongly agreed with this statement (scale point 5), and 33.3% (n = 39) selected scale point 4.

Table 16

Question 13: I Would be Very Depressed if I Were

Injured and Could Not Compete in Sport

| Likert scale | N | (%) |
|---------------------|-----|---------|
| 1 Strongly disagree | 3 | (2.6) |
| 2 | 5 | (4.3) |
| 3 | 16 | (13.7) |
| 4 | 39 | (33.3) |
| 5 Strongly agree | 54 | (46.2) |
| Total responses | 117 | (100.0) |

Mean = 4.16, Median = 4.00, Mode = 5, Standard deviation = .991

Part C: Career Transition

Part C included questions about the respondents' perceptions of the career transition itself.

Avoidance of thinking about retirement. Table 17 reveals the respondents' answers to question 14, which asked to what degree they avoided thinking about retirement from hockey. Of the 117 athletes who responded, 31.6% (n = 37) sometimes (scale point 3) and 25.6.% (n = 30) frequently (scale point 4) avoided thinking about retirement from hockey.

Negative transition. Table 18 highlights the respondents' answers to question 15, which asked to what degree they viewed athletic retirement as a negative transition. Of the 117 athletes who responded, 70.8% (n = 83) sometimes (scale point 3), frequently (scale point 4) or always (scale point 5) viewed athletic retirement as a negative transition.

Table 17

*Question 14: Avoidance of Thinking About**Retirement From Hockey*

| Degree of avoidance | N | (%) |
|---------------------|-----|---------|
| Never (1) | 14 | (12.0) |
| Seldom (2) | 21 | (17.9) |
| Sometimes (3) | 37 | (31.6) |
| Frequently (4) | 30 | (25.6) |
| Always (5) | 13 | (11.1) |
| No response | 2 | (1.7) |
| Total responses | 117 | (100.0) |

Mean = 3.06, Median = 3.00, Mode = 3, Standard deviation = 1.179

Table 18

*Question 15: Athletic Retirement as a Negative**Transition*

| Negative transition | N | (%) |
|---------------------|-----|---------|
| Never (1) | 11 | (9.4) |
| Seldom (2) | 21 | (17.9) |
| Sometimes (3) | 52 | (44.4) |
| Frequently (4) | 21 | (17.9) |
| Always (5) | 10 | (8.5) |
| No responses | 2 | (1.7) |
| Total responses | 117 | (100.0) |

Mean = 2.98, Median = 3.00, Mode = 3, Standard deviation = 1.051

Satisfaction with preparation. Table 19 illustrates the respondents' answers to question 16, which asked to what degree they were satisfied with the extent to which teams and coaches had prepared them to enter a full-time career. Of the 117 athletes who responded, 81.2% (n = 95) were somewhat (scale point 3) or very (scale point 4) satisfied with their preparation.

Table 19

Question 16: Satisfaction With Preparation by Teams and Coaches

| Satisfaction with preparation | N | (%) |
|-------------------------------|-----|---------|
| Not at all (1) | 1 | (0.9) |
| Not very (2) | 14 | (12.0) |
| Somewhat (3) | 50 | (42.7) |
| Very (4) | 45 | (38.5) |
| Extremely | 6 | (5.1) |
| No responses | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Mean = 3.35, Median = 3.00, Mode = 3, Standard deviation = .794

Consideration of life after hockey. Table 20 reveals the respondents' answers to question 17, which asked to what degree they had considered what life would be like once they stopped playing hockey. Of the 117 athletes who responded, 44.4% (n = 52) sometimes considered (scale point 3) and 26.5% (n = 31) frequently (scale point 4) considered what life would be like once they stopped playing hockey.

Further clarification of consideration of life after hockey. Table 21 shows the participants' answers to question 17, which asked whether they had considered or not considered what life would be like once they stopped playing hockey. For the participants

who considered what life would be like (60.6% of total responses), the most frequent explanations included “Wondering what I will do with extra time” (21.2% of total responses; e.g., “Hockey had been a big part of my life for a long time, and

Table 20

Question 17a: Consideration of Life After Hockey

| Consideration | N | (%) |
|-----------------|-----|---------|
| Never (1) | 6 | (5.1) |
| Seldom (2) | 20 | (17.1) |
| Sometimes (3) | 52 | (44.4) |
| Frequently (4) | 31 | (26.5) |
| Always (5) | 8 | (6.8) |
| Total responses | 117 | (100.0) |

Mean = 3.13, Median = 3.00, Mode = 3, Standard deviation = .952

Table 21

Question 17b: Reasons for Considering Life After Hockey

| Reason | High school | Univ./ college | National/ elite | Total freq. | % |
|----------------------------------------------------------------------------------|-------------|----------------|-----------------|-------------|------|
| Have considered | | | | | |
| Wondering what I will do with extra time | 2 | 18 | 8 | 28 | 21.2 |
| I need to start preparing for my future | 3 | 6 | 10 | 19 | 14.4 |
| Plan to start career/family after hockey | 2 | 7 | 3 | 12 | 9.1 |
| Realize it will end soon | 2 | 2 | 5 | 9 | 6.8 |
| Realize that I need to create a balance in life (i.e., hockey is not everything) | 2 | 2 | 2 | 6 | 4.5 |
| I plan to retire soon | 0 | 0 | 3 | 3 | 2.3 |
| Plan to leave when hockey is no longer going well | 1 | 1 | 0 | 2 | 1.5 |
| I will enjoy the free time | 0 | 2 | 0 | 2 | 1.5 |
| I will benefit from what I have learned from hockey | 0 | 1 | 1 | 1 | 0.8 |
| Because I feel that I am not prepared (i.e., not enough schooling) | 0 | 0 | 1 | 1 | 0.8 |
| Total | | | | 83 | 62.9 |

(table continues)

Table 21 (continued)

| Reason | High school | Univ./ college | National/ elite | Total freq. | % |
|------------------------------------------------|-------------|----------------|-----------------|-------------|------|
| Have not considered | | | | | |
| In denial (i.e., scared) | 0 | 10 | 6 | 16 | 12.1 |
| Retirement long way away or always involved | 5 | 5 | 2 | 12 | 9.1 |
| Too much a part of my identity | 1 | 4 | 2 | 7 | 5.3 |
| Will miss social support (i.e., team) | 0 | 5 | 0 | 5 | 3.8 |
| Will miss it (i.e., avoidance) | 0 | 3 | 1 | 4 | 3.0 |
| Hockey is my job | 0 | 1 | 0 | 1 | 0.8 |
| Because I already have education and new goals | 1 | 0 | 0 | 1 | 0.8 |
| Total | | | | 46 | 34.8 |
| Unclear response | 2 | 0 | 1 | 3 | 2.3 |
| Total frequency of responses | | | | 132 | |

I end up wondering what it will be like without it” [participant 98, high school level] and “Hockey takes up so much of my time so I wonder what I will keep busy with” [participant 88, university level]). The second most frequent reason was “I need to start preparing for my future” (14.4% of total responses; e.g., “I like to prepare myself, to have some options” [participant 23, national team level] and “Then the real life begins” [participant 17, elite level]).

Of the participants who did not consider what life would be like once they stopped playing hockey (34.8% of total responses), the most frequently reported explanations included “In denial” (12.1% of total responses; e.g., “I can’t imagine life without hockey since I have played for most of my life” [participant 49, college level] and “Because I’m too busy right now and don’t really like to think about it”

[participant 84, university level]). It is important to note that there were 132 responses because some participants gave more than one.

Readiness to enter a full-time career. Table 22 shows the respondents' answers to question 18, which asked to what degree they felt ready to enter a full-time career upon transitioning from sport. Of the 117 athletes who responded, 46.2% (n = 54) felt somewhat ready (scale point 3) and 23.9% (n = 28) felt very ready (scale point 4) to enter a full-time career.

Table 22

Question 18a: Readiness to Enter Full-Time Career

| Readiness | n | (%) |
|-----------------|-----|---------|
| Not at all (1) | 10 | (8.5) |
| Not very (2) | 21 | (17.9) |
| Somewhat (3) | 54 | (46.2) |
| Very (4) | 28 | (23.9) |
| Extremely (5) | 4 | (3.4) |
| Total responses | 117 | (100.0) |

Mean = 2.96, Median = 3.00, Mode = 3, Standard deviation = 0.950

Further clarification of readiness to enter a full-time career. Table 23 reveals the reasons that the participants felt ready or did not feel ready to enter a full-time career upon transition from sport. For those participants who were ready (42.7% of total responses), the most frequently reported explanations included “School (practicum) prepared me” (11.1% of total responses; e.g., “Because I have a good education...”) [participant 9, elite level] and “I have a plan in place as well as a degree I am working on” [participant 26, national team level]); and “Hockey teaches skills” (11.1% of total

responses; e.g., “Because hockey teaches the commitment needed when you start working full-time” [participant 35, high school level]).

Table 23

Question 18b: Reasons for Readiness or Lack of Readiness to Enter Full-Time Career

| Reason | High school | Univ./ college | National/ elite | Total freq. | % |
|----------------------------------------------------|-------------|----------------|-----------------|-------------|--------------|
| Ready | | | | | |
| School (practicum) prepared me | 1 | 7 | 5 | 13 | 11.1 |
| Hockey teaches skills | 3 | 10 | 0 | 13 | 11.1 |
| I'm already working | 0 | 1 | 4 | 5 | 4.3 |
| I have been preparing | 2 | 0 | 3 | 5 | 4.3 |
| I'm ready and confident | 1 | 2 | 1 | 4 | 3.4 |
| I'm excited by the idea of change | 1 | 2 | 1 | 3 | 2.6 |
| Entering a new career is my goal | 2 | 0 | 0 | 2 | 1.7 |
| I will have more time for extracurricular and work | 0 | 1 | 1 | 2 | 1.7 |
| Like the idea of financial security | 0 | 1 | 1 | 2 | 1.7 |
| I realize that hockey will end | 0 | 1 | 0 | 1 | 0.9 |
| Total | | | | 50 | 42.7 |
| Not ready | | | | | |
| Retirement far away/will always be involved | 5 | 7 | 2 | 14 | 12.0 |
| Lack experience/education/career path | 1 | 5 | 4 | 10 | 8.5 |
| Want to play longer | 0 | 3 | 5 | 8 | 6.8 |
| I have skills but am not emotionally ready | 2 | 3 | 2 | 7 | 6.0 |
| Avoiding the working world | 0 | 4 | 2 | 6 | 5.1 |
| Change/starting a career will be hard | 1 | 3 | 2 | 4 | 3.4 |
| Not finished school yet | 0 | 1 | 1 | 2 | 1.7 |
| Total | | | | 51 | 43.6 |
| Unclear response | 0 | 2 | 1 | 3 | 2.6 |
| No response | | | | 13 | 11.1 |
| Total frequency of responses | | | | 117 | 100.0 |

Of those participants who reported that they were not ready to enter a full-time career upon transitioning from sport (43.6% of total responses), the most frequently reported explanations included “Retirement far away/will always be involved” (12.0% of total responses). For example, “I’m still fairly [*sic*] young and don’t want to transfer” (participant 14, elite level).

Responsible for assisting in transition. Table 24 shows how the female hockey players responded to the categorical question “who is responsible for helping athletes make the transition from sport?”(Question 19). Of the 117 athletes who responded, 74.4% (n = 87) reported “Families” and 67.5% (n= 79) reported the “Athletes” themselves as being the most responsible for helping athletes make the transition from sport. The least responsible for helping athletes make the transition from sport were the “Sport or Governing Bodies” 23.1% (n = 27) and “Counsellors” 27.4% (n = 32).

Clarification of “other” in question 19. The participants who selected the Other box for the question “Who is responsible for helping athletes make the transition from sport?” (question 19) explained their responses (Table 25).

Table 26 shows the female hockey players’ responses to the categorical question “What resources do you feel would aid you in the transition from being an active athlete to a life with a full-time career?” (question 20). Of the 117 athletes who responded, 70.9% (n = 83) chose “Support from families,” and 64.1% (n = 75) chose “Job shadowing/job experience” as resources that would most help them in the transition to a full-time career. The items that were checked the least were “Counselling” (17.9%; n = 21), “Support from sporting agencies” (24.4%; n = 32) and “Support from friends” (24.4%; n = 32).

Table 24

Question 19a: Responsible for Helping Athletes to Make the Transition From Sport

| Responsible | Yes/no | N | (%) |
|----------------------------|--------|-----|---------|
| Coaches | Yes | 61 | (52.1) |
| | No | 54 | (46.2) |
| Athletes | Yes | 79 | (67.5) |
| | No | 36 | (30.8) |
| Counsellors | Yes | 32 | (27.4) |
| | No | 83 | (70.9) |
| Families | Yes | 87 | (74.4) |
| | No | 28 | (23.9) |
| Friends | Yes | 63 | (53.8) |
| | No | 52 | (44.4) |
| Sport and governing bodies | Yes | 27 | (23.1) |
| | No | 88 | (75.2) |
| Other | Yes | 18 | (15.4) |
| | No | 97 | (82.9) |
| No response | | 2 | (1.7) |
| Total | | 117 | (100.0) |

Table 25

Question 19b: Responses to the Category of "Others"

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|------------------------------|-------------|----------------|-----------------|-------------|------|
| Yourself | 0 | 2 | 3 | 5 | 33.3 |
| Teachers | 2 | 1 | 0 | 3 | 22.0 |
| Olympic committee | 0 | 0 | 2 | 2 | 13.3 |
| National sport centers | 0 | 0 | 1 | 1 | 6.7 |
| Educational institutions | 0 | 1 | 0 | 1 | 6.7 |
| Hockey Canada | 0 | 0 | 1 | 1 | 6.7 |
| Themselves | 0 | 1 | 0 | 1 | 6.7 |
| A combination of all choices | 0 | 0 | 1 | 1 | 6.7 |
| Total frequency of responses | | | | 15 | |

Table 26

Question 20a: Resources That Aid in the Transition out of Sport

| Resources | Yes/no | N | (%) |
|------------------------------------|--------|-----|---------|
| Counselling | Yes | 21 | (17.9) |
| | No | 93 | (79.5) |
| Support from family | Yes | 83 | (70.9) |
| | No | 31 | (26.5) |
| Support from friends | Yes | 32 | (27.4) |
| | No | 83 | (70.9) |
| Support from sporting Agencies | Yes | 32 | (27.4) |
| | No | 82 | (70.1) |
| Career planning Workshops | Yes | 49 | (41.9) |
| | No | 65 | (55.6) |
| Job shadowing/ Job experience | Yes | 75 | (64.1) |
| | No | 39 | (33.3) |
| Information on transferable skills | Yes | 40 | (34.2) |
| | No | 74 | (63.2) |
| Other | Yes | 7 | (6) |
| | No | 107 | (91.5) |
| No response | | 4 | (3.4) |
| Total | | 117 | (100.0) |

Clarification of “other” in question 20. The participants who selected the Other box for the question “What resources do you feel would aid you in the transition from being an active athlete to a like with a full-time career?” (question 20) explained their responses (Table 27).

Table 27

Question 20b: Responses to the Category of “Other”

| Response | High school | College | National/ elite | Total freq. | % |
|----------------------------------------|-------------|---------|-----------------|-------------|------|
| Combination of choices | 0 | 0 | 1 | 1 | 25.0 |
| Sport/ fitness programs in work place | 0 | 1 | 0 | 1 | 25.0 |
| The right education | 0 | 1 | 0 | 1 | 25.0 |
| Financial support to go back to school | 0 | 0 | 1 | 1 | 25.0 |
| Total frequency of responses | | | | 4 | |

Part D: Transferable Skills

This section addresses the questions on attitudes toward and perceptions of transferable skills.

Familiarity with transferable skills. Table 28 indicates the respondents’ answers to question 21, which asked to what degree they were familiar with transferable skills that can be learned in hockey and are useful in nonathletic settings. Of the 117 athletes who responded, 61.6% (n = 72) were very (scale point 4) familiar or somewhat (scale point 3) familiar with transferable skills.

Perception of transferable skills. Table 29 highlights the respondents’ answers to question 22, which asked to what degree they viewed themselves as having skills acquired in sport that can be transferred to another career. Of the 117 athletes who responded, 59.0% (n = 69) frequently viewed (scale point 4) and 21.4% (n = 25) somewhat viewed (scale point 3) themselves as having skills acquired in sport that can be transferred.

Table 28

Question 21: Familiarity With Transferable Skills

| Familiarity | N | (%) |
|-----------------|-----|---------|
| Not at all (1) | 1 | (0.9) |
| Not very (2) | 8 | (6.8) |
| Somewhat (3) | 34 | (29.1) |
| Very (4) | 56 | (47.9) |
| Extremely (5) | 16 | (13.7) |
| No response | 2 | (1.7) |
| Total responses | 117 | (100.0) |

Mean = 3.68, Median = 4.00, Mode = 4, Standard deviation = 0.833

Table 29

*Question 22: Perception of Skills From Sport**That Can Be Transferred*

| Perception | N | (%) |
|-----------------|-----|---------|
| Never (1) | 0 | (0) |
| Seldom (2) | 1 | (0.9) |
| Somewhat (3) | 25 | (21.4) |
| Frequently (4) | 69 | (59.0) |
| Always (5) | 21 | (17.9) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Mean = 3.95, Median = 4.00, Mode = 4, Standard deviation = 0.657

Consideration of skills transfer. Table 30 illustrates the respondents' answers to question 23, which asked to what degree they had considered transferring skills from hockey to another job or career. Of the 117 athletes who responded, 70.1% (n = 82) had frequently (scale point 4) or sometimes (scale point 3) considered transferring skills from hockey to a career.

Table 30

*Question 23a: Consideration of Skill Transfer
to Sport*

| Consideration | N | (%) |
|-----------------|-----|---------|
| Never (1) | 3 | (2.6) |
| Seldom (2) | 10 | (8.5) |
| Sometimes (3) | 32 | (27.4) |
| Frequently (4) | 50 | (42.7) |
| Always (5) | 21 | (17.9) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Mean = 3.66, Median = 4.00, Mode = 4, Standard deviation = 0.961

Further clarification of considering skill transfer. Table 31 reports the participants' reasons for having considered or not considered transferring skills from hockey to another job. For those participants who had considered transferring skills (60.7% of total responses), the most frequently reported explanations included "Skills/assets will transfer to the working world" (24.8% of total responses; e.g., "Leadership, drive, goal setting are all things that can be transferred to a job" [participant 48, college level] and "Because the leadership, and comitment [*sic*] skills that you aquire [*sic*] in hockey would transfer good to the work place" [participant 54, college level]); and "Especially if work is similar" (9.4% of total responses; e.g., "Because I could be a hockey coach considering I know a lot about hockey" [participant 114, high school level] and "I could use them to coach" [participant 52, college level]).

Table 31

*Question 23b: Reasons for Consideration or Lack of Consideration of Skill Transfer to**Sport*

| Reason | High school | Univ./college | National/elite | Total freq. | % |
|----------------------------------------------------------------------------------------------------------|-------------|---------------|----------------|-------------|--------------|
| Consideration | | | | | |
| Skills/assets will transfer to the working world (i.e., hard work, communication) | 2 | 18 | 9 | 29 | 24.8 |
| Especially if work is similar (i.e., personal trainer) | 2 | 7 | 2 | 11 | 9.4 |
| Think work/life and hockey are related | 2 | 5 | 3 | 10 | 8.5 |
| Discovered/realize that my skills/ strengths are all that I have | 1 | 2 | 3 | 6 | 5.1 |
| Skills will benefit me during the transition | 2 | 1 | 2 | 5 | 4.3 |
| Already have experience and exposure to transferable skills (i.e., through education and support system) | 0 | 1 | 3 | 4 | 3.4 |
| Hockey opens doors | 1 | 3 | 0 | 4 | 3.4 |
| Use hockey as schema for understanding life (i.e., relate everything to hockey) | 0 | 1 | 1 | 2 | 1.7 |
| Total | | | | 71 | 60.7 |
| No Consideration | | | | | |
| Have not thought about skills for the future | 4 | 4 | 0 | 8 | 6.8 |
| Think that working world and hockey are separate | 0 | 1 | 0 | 1 | 0.9 |
| Don't think skills will apply | 0 | 1 | 0 | 1 | 0.9 |
| Total | | | | 10 | 8.5 |
| Unclear response | 2 | 0 | 2 | 4 | 3.4 |
| No response | | | | 32 | 27.4 |
| Total frequency of responses | | | | 117 | 100.0 |

Of the participants who had not considered transferring skills from hockey to another career (8.5% of total responses), the most frequent explanation included “Have not thought about skills for the future” (6.8% of total responses; e.g., “I am not ready yet” [participant 35, high school level]) and “I haven’t thought about skills I have from hockey or a future career” [participant 61, college level]).

Where familiarity with transferable skills increased. Table 32 shows the female hockey players’ responses to the categorical question “Where did you become more familiar with transferable skills?” (question 24) Of the 117 athletes who responded, 70.1% (n = 82) checked “Sport” as being where they became more familiar with transferable skills. The items that were least selected were “None” of the choices 1.7% (n = 2) and “Home” 36.8% (n = 43).

Table 32

Question 24a: Where Respondents Became More

Familiar With Transferable Skills

| Increase familiarity | Yes/no | N | (%) |
|----------------------|--------|-----|---------|
| Home | Yes | 43 | (36.8) |
| | No | 71 | (60.7) |
| High school | Yes | 47 | (40.2) |
| | No | 67 | (57.3) |
| College/university | Yes | 56 | (47.9) |
| | No | 58 | (49.6) |
| Sport | Yes | 82 | (70.1) |
| | No | 32 | (27.4) |
| None | Yes | 2 | (1.7) |
| | No | 112 | (95.7) |
| Other | Yes | 4 | (3.4) |
| | No | 110 | (94) |
| No response | | 3 | (2.6) |
| Total | | 117 | (100.0) |

Clarification of “other,” question 24. The participants who selected the Other box for the question “Where did you become more familiar with transferable skills?” (question 24) explained their responses (Table 33).

Table 33

Question 24b: Responses to the Category of “Other”

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|------------------------------|-------------|----------------|-----------------|-------------|------|
| Work | 0 | 0 | 2 | 2 | 50.0 |
| Meeting business people | 0 | 0 | 1 | 1 | 25.0 |
| Hockey Alberta coach | 0 | 1 | 0 | 1 | 25.0 |
| Total frequency of responses | | | | 4 | |

Individuals who assisted in increasing athletes’ familiarity with transferable skills. Table 34 shows the female hockey players’ responses to the categorical question “Who helped you become more familiar with transferable skills?” (question 25). Of the 117 athletes who responded, 60.7% (n = 71) selected “Yourself” and 59% (n = 69) selected “Coach.” The items that were perceived as not assisting the respondents in becoming more familiar with transferable skills and were selected the least were “None” (0.9%; n = 1) and “Counsellor” (13.7%; n = 16).

Clarification of “other,” question 25. The participants who selected the Other box for the question “Who helped you become more familiar with transferable skills?” (question 25) explained their responses (Table 35).

Table 34

*Question 25a: Who Helped Respondents Became**More Familiar With Transferable Skills*

| Resources | Yes/no | N | (%) |
|-------------|--------|-----|---------|
| Family | Yes | 68 | (58.1) |
| | No | 45 | (38.5) |
| Friends | Yes | 51 | (43.6) |
| | No | 62 | (53) |
| Counsellor | Yes | 16 | (13.7) |
| | No | 97 | (82.9) |
| Coach | Yes | 69 | (59) |
| | No | 44 | (37.6) |
| None | Yes | 1 | (0.9) |
| | No | 112 | (95.7) |
| Yourself | Yes | 71 | (60.7) |
| | No | 42 | (35.9) |
| Teammates | Yes | 49 | (41.9) |
| | No | 64 | (54.7) |
| Other | Yes | 6 | (5.1) |
| | No | 107 | (91.5) |
| No response | | 4 | (3.4) |
| Total | | 117 | (100.0) |

Table 35

Question 25b: Responses to the Category of "Other"

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|---------------------------------|-------------|----------------|-----------------|-------------|------|
| 1. Teachers | 1 | 1 | 0 | 2 | 28.6 |
| 2. Teacher/prof | 0 | 1 | 0 | 1 | 14.3 |
| 3. Co-worker | 0 | 0 | 1 | 1 | 14.3 |
| 4. Work coordinator | 0 | 1 | 0 | 1 | 14.3 |
| 5. Boss | 0 | 1 | 0 | 1 | 14.3 |
| 6. People in business community | 0 | 0 | 1 | 1 | 14.3 |
| Total frequency of responses | | | | 7 | |

Skills that are the most transferable. Table 36 portrays the female hockey players' responses to the categorical question "Which skill(s) do you view as being the most transferable to another career?" (question 26). Of the 117 athletes who responded, 89.7% (n = 105) chose "Team work" and 76.9% (n = 90) chose "Dedication and perseverance" as skills that they saw as the most transferable. The items that were selected the least were "Ability to recognize one's limitations" (27.4%; n = 32) and "Problem-solving skills" (35.9%; n = 42).

Table 36

Question 26a: Skills Transferable to Another Career

| Resources | Yes/no | N | (%) |
|--------------------------------------|--------|-----|--------|
| Ability to perform under pressure | Yes | 78 | (66.7) |
| | No | 37 | (31.6) |
| Problem-solving skills | Yes | 42 | (35.9) |
| | No | 73 | (62.4) |
| Team work | Yes | 105 | (89.7) |
| | No | 10 | (8.5) |
| Organizational skills | Yes | 49 | (41.9) |
| | No | 66 | (56.4) |
| Ability to set and attain goals | Yes | 76 | (65) |
| | No | 39 | (33.3) |
| Ability to meet deadlines/challenges | Yes | 54 | (46.2) |
| | No | 61 | (52.1) |
| Dedication and perseverance | Yes | 90 | (76.9) |
| | No | 25 | (21.4) |
| Self-motivation | Yes | 80 | (68.4) |
| | No | 35 | (29.9) |
| Patience | Yes | 46 | (39.3) |
| | No | 69 | (59) |

(table continues)

Table 36 (continued)

| Resources | Yes/no | N | (%) |
|----------------------------------------|--------|-----|---------|
| Adaptability/flexibility | Yes | 62 | (53) |
| | No | 53 | (45.3) |
| Ability to recognize one's limitations | Yes | 32 | (27.4) |
| | No | 83 | (70.9) |
| Other | Yes | 10 | (8.5) |
| | No | 105 | (89.7) |
| No response | | 2 | (1.7) |
| Total responses | | 117 | (100.0) |

Clarification of “other,” question 26. The participants who selected the Other box for the question “Which skills do you view as being the most transferable to another career?” (question 26) explained their responses (Table 37).

Table 37

Question 26b: Responses to the Category of “Other”

| Response | High school | Univ./college | National/elite | Total freq. | % |
|------------------------------|-------------|---------------|----------------|-------------|------|
| Time management | 1 | 1 | 1 | 3 | 27.3 |
| Leadership | 0 | 3 | 0 | 3 | 27.3 |
| Confidence | 0 | 1 | 0 | 1 | 9.1 |
| They all will help | 0 | 0 | 1 | 1 | 9.1 |
| Competitiveness | 0 | 0 | 1 | 1 | 9.1 |
| Respect | 0 | 0 | 1 | 1 | 9.1 |
| Resiliency | 0 | 1 | 0 | 1 | 9.1 |
| Total frequency of responses | | | | 11 | |

Possession of skills. Table 38 shows the female hockey players' responses to the categorical question “Which skill(s) do you feel that you possess that could be transferred to another career?” (question 27). In analyzing the results, the researcher realized that team work was not one of the choices in this question but that it should have been

because, according to the responses shown in Table 36, it may be assumed that it would have been a popular choice. Of the 117 athletes who responded to this question, 80.3% (n = 94) selected “Dedication and perseverance” and 70.9% (n = 83) selected “Self-motivation” as skills that they saw themselves possessing and that they could transfer. The items that were selected the least were “Problem-solving skills” (43.6%; n = 51) and “Ability to recognize one’s limitations” (27.4%; n = 32).

Table 38

Question 27a: Skills That Can be Transferred From Sport to Another Career

| Skills | Yes/no | N | (%) |
|----------------------------------------|--------|-----|---------|
| Ability to perform under pressure | Yes | 78 | (66.7) |
| | No | 38 | (32.5) |
| Problem-solving skills | Yes | 51 | (43.6) |
| | No | 65 | (55.6) |
| Organizational skills | Yes | 59 | (50.4) |
| | No | 57 | (48.7) |
| Ability to set and attain goals | Yes | 75 | (64.1) |
| | No | 41 | (35) |
| Ability to meet deadlines/challenges | Yes | 62 | (53) |
| | No | 54 | (46.2) |
| Dedication and perseverance | Yes | 94 | (80.3) |
| | No | 22 | (18.8) |
| Self-motivation | Yes | 83 | (70.9) |
| | No | 33 | (28.2) |
| Patience | Yes | 55 | (47) |
| | No | 61 | (52.1) |
| Adaptability/flexibility | Yes | 69 | (59) |
| | No | 47 | (40.2) |
| Ability to recognize one’s limitations | Yes | 32 | (27.4) |
| | No | 84 | (71.8) |
| Other | Yes | 15 | (12.8) |
| | No | 101 | (86.3) |
| No response | | 1 | (0.9) |
| Total | | 117 | (100.0) |

Clarification of “other,” question 27. The participants who selected the Other box for the question “Which skills do you feel that you possess that could be transferred to another career?” (question 27) explained their responses (Table 39).

Table 39

Question 27b: Responses to the Category of “Other”

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|------------------------------|-------------|----------------|-----------------|-------------|------|
| Team work | 1 | 3 | 2 | 6 | 33.3 |
| Leadership | 0 | 3 | 0 | 3 | 16.6 |
| Time management | 1 | 0 | 1 | 2 | 11.1 |
| Hard work | 0 | 1 | 0 | 1 | 5.6 |
| Respect | 0 | 0 | 1 | 1 | 5.6 |
| Competitiveness | 0 | 0 | 1 | 1 | 5.6 |
| Communication | 0 | 1 | 0 | 1 | 5.6 |
| Tenacity | 0 | 1 | 0 | 1 | 5.6 |
| Commitment | 0 | 1 | 0 | 1 | 5.6 |
| All of above | 0 | 0 | 1 | 1 | 5.6 |
| Total frequency of responses | | | | 18 | |

Noticing skills transfer. Table 40 indicates the respondents’ answers to question 28, which asked to what degree they had noticed skill transfer from hockey to another setting. Of the 117 athletes who responded, 53.8% (n = 63) had frequently (scale point 4) and 20.5% (n = 24) had somewhat (scale point 3) noticed skills transfer in their own lives.

Table 40

*Question 28a: Noticed Skill Transfer From
Hockey to Another Setting*

| Noticed | N | (%) |
|------------------------|------------|----------------|
| Never (1) | 1 | (0.9) |
| Seldom (2) | 4 | (3.4) |
| Sometimes (3) | 24 | (20.5) |
| Frequently (4) | 63 | (53.8) |
| Always (5) | 22 | (18.8) |
| No response | 3 | (2.6) |
| Total responses | 117 | (100.0) |

Mean = 3.89, Median = 4.00, Mode = 4, Standard deviation = 0.784

Further clarification of the observance of skills transfer. Table 41 cites times or situations in which female hockey players have transferred skills from hockey to another situation. The six major themes that emerged were “Work based” (13.6% of total responses), “School based” (20.9% of total responses), “Relationships” (21.5% of total responses), “Personal/cognitive skills” (38.4% of total responses), “Other sports/physical abilities” (6.2% of total responses), and “No example” (1.1% of total responses). Out of these six major themes, the most common subtheme emerged from the theme of “School related” (20.9% of total responses): “Group/team work at school” (8.5% of total responses; e.g., “When interacting with others in a school setting and through school activities, workshops and group project” [participant 60, college level] and “Team work with group projects in school” [participant 69, college level]). The second most frequent subtheme emerged from “Personal/cognitive skills”: “Dealing with stress/pressure” (7.3% of total responses; e.g., “Performing [*sic*] under pressure” [participant 66, college

level]). It is important to note that there were 177 responses because some participants gave more than one.

Table 41

Question 28b: Description of Skills Transferred From Hockey to Another Situation

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|-------------------------------------------|-------------|----------------|-----------------|-------------|------|
| Work based | | | | | |
| Evidence of team work at work | 2 | 4 | 2 | 8 | 4.5 |
| Dealing with business situations | 0 | 0 | 3 | 3 | 1.7 |
| Evidence at work | 0 | 0 | 3 | 3 | 1.7 |
| Patience at work | 0 | 2 | 1 | 3 | 1.7 |
| Organization at work | 0 | 1 | 1 | 2 | 1.1 |
| Dealing with people at work | 0 | 2 | 0 | 2 | 1.1 |
| Meeting deadlines at work | 0 | 2 | 0 | 2 | 1.1 |
| Never quitting a job | 0 | 0 | 1 | 1 | 0.60 |
| Total | | | | 24 | 13.6 |
| School related | | | | | |
| Group/team work at school | 3 | 11 | 1 | 15 | 8.5 |
| Deadlines/due dates/challenges at school | 4 | 0 | 2 | 6 | 3.4 |
| Hard work at school | 2 | 2 | 0 | 4 | 2.3 |
| Organization at school | 0 | 1 | 2 | 3 | 1.7 |
| Taking tests and writing papers at school | 0 | 1 | 2 | 3 | 1.7 |
| Time management at school | 0 | 1 | 1 | 2 | 1.1 |
| Demanding excellence at school | 0 | 0 | 1 | 1 | 0.6 |
| Dedication at school | 0 | 0 | 1 | 1 | 0.6 |
| School | 0 | 1 | 0 | 1 | 0.6 |
| Total | | | | 37 | 20.9 |

(table continues)

Table 41 (continued)

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|---------------------------------------------------------------------|-------------|----------------|-----------------|-------------|------|
| Relationships | | | | | |
| Interpersonal skills (i.e., deal/work with different people) | 2 | 5 | 5 | 12 | 6.8 |
| Communications skills | 0 | 5 | 2 | 7 | 4.0 |
| Motivational skills (i.e., motivating others) | 0 | 2 | 3 | 5 | 2.8 |
| Patience and/or adaptability in relationships | 1 | 2 | 2 | 5 | 2.8 |
| Cooperation/team work | 2 | 2 | 0 | 4 | 2.3 |
| Trust/understanding for team work | 1 | 0 | 1 | 2 | 1.7 |
| Supporting others | 1 | 0 | 0 | 1 | 0.6 |
| Family | 0 | 0 | 1 | 1 | 0.6 |
| Organizing others | 0 | 0 | 1 | 1 | 0.6 |
| Total | | | | 38 | 21.5 |
| Personal/ Cognitive Skills | | | | | |
| Dealing with stress/pressure | 1 | 9 | 3 | 13 | 7.3 |
| Dedication | 3 | 2 | 2 | 7 | 4.0 |
| Self motivation | 1 | 4 | 2 | 7 | 4.0 |
| Resilience/flexibility for change (i.e., adapting to re-scheduling) | 1 | 4 | 2 | 7 | 4.0 |
| Setting goals | 2 | 3 | 1 | 6 | 3.4 |
| Being a leader | 1 | 5 | 0 | 6 | 3.4 |
| Time-management | 0 | 2 | 1 | 3 | 1.7 |
| Ability to problem solve | 0 | 3 | 0 | 3 | 1.7 |
| Working hard to achieve goals | 0 | 2 | 1 | 3 | 1.7 |
| Working hard | 0 | 1 | 1 | 2 | 1.1 |
| Completing things to the best of my ability | 1 | 0 | 1 | 2 | 1.1 |
| Perseverance | 1 | 0 | 1 | 2 | 1.1 |
| Ability to see work and do it (i.e., getting the job done) | 0 | 1 | 1 | 2 | 1.1 |
| Breaking skills down for teaching | 0 | 2 | 0 | 2 | 1.1 |
| Commitment | 0 | 1 | 0 | 1 | 0.6 |
| Willingness to try new things | 0 | 0 | 1 | 1 | 0.6 |
| Determination | 0 | 1 | 0 | 1 | 0.6 |
| Total | | | | 68 | 38.4 |

(table continues)

Table 41 (continued)

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|-------------------------------------------------------|-------------|----------------|-----------------|-------------|------------|
| Other Sports/Physical Abilities | | | | | |
| Physical abilities (i.e., fitness level) | 0 | 2 | 2 | 4 | 2.3 |
| When I begin coaching knowing hockey skills will help | 1 | 1 | 0 | 2 | 1.1 |
| Team work transfers to other sports | 1 | 0 | 0 | 1 | 0.6 |
| Skills transfer to other sports | 0 | 1 | 0 | 1 | 0.6 |
| Transfer of visualization skills | 0 | 1 | 0 | 1 | 0.6 |
| Total | | | | 11 | 6.2 |
| No example | | | | | |
| Can't think of an example | 0 | 2 | 0 | 2 | 1.1 |
| Total | | | | 2 | 1.1 |
| Total frequency of responses | | | | 177 | |

The effect of awareness on transition. Table 42 reveals the respondents' answers to question 29, which asked to what degree the participant believed that becoming aware of transferable skills would make career transition easier. Of the 117 athletes who responded, 54.7% (n = 64) felt that it would be "Very much easier" (scale point 4) and 29.9% (n = 35) that it would be "Somewhat easier" (scale point 3) to transition after becoming aware of transferable skills. The athletes were not asked to explain why or why not; therefore this question did not have a Part B, which was an error on the researcher's part because the responses to this question would have been richer with a Part B.

Interest in learning about transferable skills. Table 43 reports the respondents' answers to question 30, which asked to what degree they were interested in learning more about transferable skills. Of the 117 athletes who responded, 49.6% (n = 58) were "Somewhat interested" (scale point 3) and 22.2% (n = 26) were "Very interested" (scale point 4) in learning more about transferable skills.

Table 42

Question 29: Effect of Increased Awareness of Transferable Skills on Career Transition

| Awareness | N | (%) |
|-----------------------|-----|---------|
| Not at all easier | 0 | (0) |
| Not much easier (2) | 1 | (0.9) |
| Somewhat easier (3) | 35 | (29.9) |
| Very much easier (4) | 64 | (54.7) |
| Absolutely easier (5) | 15 | (12.8) |
| No response | 2 | (1.7) |
| Total responses | 117 | (100.0) |

Mean = 3.81, Median = 4.00, Mode = 4, Standard deviation = 0.661

Table 43

Question 30a: Interest in Learning More About Transferable Skills

| Interest | N | (%) |
|---------------------------|-----|---------|
| Not al all interested (1) | 3 | (2.6) |
| Not very interested (2) | 23 | (19.7) |
| Somewhat interested (3) | 58 | (49.6) |
| Very interested (4) | 26 | (22.2) |
| Extremely interested (5) | 6 | (5.1) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Mean = 3.08, Median = 3.00, Mode = 3, Standard deviation = 0.856

Of the participants who were not interested in learning more about transferable skills (27.4% of total responses), the most frequent explanation included “Already have a clear perception” (10.3% of total responses; e.g., “It seems rather self explanatory, you either get the transition or you don’t” [participant 77, university level]).

Further clarification of interest in learning about transferable skills. Table 44 reveals the participants' reasons for their interest or lack of interest in learning more about transferable skills. For those who were interested (27.4% of total responses), the most frequent explanations included "It would be helpful" (7.7% of total responses; e.g., "When you become more aware of the tools you have, you use them more" [participant 44, college level]) and "Would help for a more successful/happier career/life" (7.7% of total responses; e.g., "Will understand that I do possess skills that are relevant to workforce" [participant 78, university level] and "Because I would know more going into the work field" [participant 80, university level]).

Table 44

Question 30b: Reasons for Interest or Noninterest in Learning About Transferable Skills

| Reason | High school | Univ./college | National/elite | Total freq. | % |
|------------------------------------------------------|-------------|---------------|----------------|-------------|------|
| Interested | | | | | |
| It would be helpful | 1 | 3 | 5 | 9 | 7.7 |
| Would help for a more successful/happier career/life | 5 | 4 | 0 | 9 | 7.7 |
| Can always can learn more | 0 | 2 | 5 | 7 | 6.0 |
| Learning about choices is helpful | 2 | 3 | 0 | 5 | 4.3 |
| I need more help planning my future | 0 | 1 | 1 | 2 | 1.7 |
| Total | | | | 32 | 27.4 |

(table continues)

Table 44 (continued)

| Reason | High school | Univ./college | National/elite | Total freq. | % |
|---------------------------------------------------------|-------------|---------------|----------------|-------------|-------|
| Somewhat interested | | | | | |
| Handy but not an asset | 0 | 3 | 1 | 4 | 3.4 |
| May help find/ with career | 0 | 3 | 0 | 3 | 2.6 |
| It may help | 0 | 2 | 1 | 3 | 2.6 |
| But not interested if I need to take a class | 0 | 0 | 1 | 1 | 0.9 |
| But I've already had some exposure (i.e., school) | 0 | 0 | 1 | 1 | 0.9 |
| Could be beneficial but not if it is time consuming | 0 | 1 | 0 | 1 | 0.9 |
| Total | | | | 13 | 11.1 |
| Not interested | | | | | |
| Already have a clear perception | 2 | 9 | 1 | 12 | 10.3 |
| Already know them | 2 | 5 | 3 | 10 | 8.5 |
| Not looking for career/don't have career | 1 | 1 | 2 | 4 | 3.4 |
| Boring/ don't care | 0 | 2 | 0 | 2 | 1.7 |
| Aware of skills but does not mean good transition | 1 | 0 | 1 | 2 | 1.7 |
| Experience is more important (i.e., education and work) | 0 | 1 | 0 | 1 | 0.9 |
| Don't want think about it | 1 | 0 | 0 | 1 | 0.9 |
| Total | | | | 32 | 27.4 |
| Unclear response | 0 | 2 | 1 | 3 | 2.6 |
| No response | | | | 37 | 31.6 |
| Total frequency of responses | | | | 117 | 100.0 |

Confidence in skills transfer. Table 45 shows the respondents' answers to question 31, which asked to what degree they felt confident that their skills would be transferable to a full-time career. Of the 117 athletes who responded, 49.6% (n = 58) were "Very confident" (scale point 4) and 37.6% (n = 44) were "Somewhat confident" (scale point 3) in their abilities to transfer their skills to a full-time career.

Table 45

*Question 31a: Confidence That Skills Are Transferable
to a Full-Time Career*

| Confidence | N | (%) |
|--------------------------|-----|---------|
| Not at all confident (1) | 1 | (0.9) |
| Not very confident (2) | 0 | (0) |
| Somewhat confident (3) | 44 | (37.6) |
| Very confident (4) | 58 | (49.6) |
| Extremely confident (5) | 13 | (11.1) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Mean = 3.72, Median = 4.00, Mode = 4, Standard deviation = 0.670

Further clarification of confidence in skills transfer. Table 46 reports the reasons for the participants' confidence or lack of confidence that their skills would be transferable to a full-time career. For those who felt confident (56.4% of total responses), the most frequent explanations included "Confident with specific/general skills" (10.3% of total responses; e.g., "I am confident in my skills" [participant 67, college level] and "I can learn fast and adapt quickly" [participant 88, university level]); and "Evidence that I'm currently transferring to work/school/life" (8.5% of total responses; e.g., "I see transferable skills at work everyday in the office" [participant 1, elite level]).

Table 46

*Question 31b: Reasons for Confidence or Lack of Confidence That Skills Are**Transferable to a Full-Time Career*

| Reason | High school | Univ./college | National/elite | Total freq. | % |
|----------------------------------------------------------------------------------------------------|-------------|---------------|----------------|-------------|-------------|
| Confident | | | | | |
| Confident with specific/general skills | 1 | 7 | 4 | 12 | 10.3 |
| Evidence that I'm currently transferring to work/school/life (i.e., positive feedback from others) | 2 | 5 | 3 | 10 | 8.5 |
| Think school/work/life and hockey are related | 1 | 4 | 3 | 8 | 6.8 |
| I'm self confident (i.e., learn fast) | 2 | 5 | 0 | 7 | 6.0 |
| Skill are innate | 1 | 4 | 2 | 7 | 6.0 |
| I'm well prepared (i.e., confident in skills) | 0 | 4 | 2 | 6 | 5.1 |
| Transferability will depend on the career | 2 | 2 | 1 | 5 | 4.3 |
| They will help later on but not there yet | 2 | 1 | 0 | 3 | 2.6 |
| Social support/teacher have pointed out ability to transfer | 2 | 1 | 0 | 3 | 2.6 |
| Skill equals success | 0 | 1 | 1 | 2 | 1.7 |
| The sport made me who I am | 1 | 0 | 1 | 2 | 1.7 |
| Employers look for those skills | 0 | 0 | 1 | 1 | 0.9 |
| Total | | | | 66 | 56.4 |

(table continues)

Table 46 (continued)

| Reason | High school | Univ./college | National/elite | Total freq. | % |
|----------------------------------------------------|---------------|---------------|----------------|-------------|-------|
| | Not confident | | | | |
| Unsure of my future career | 0 | 4 | 1 | 5 | 4.3 |
| Education and not hockey will be the most helpful | 0 | 2 | 0 | 2 | 1.7 |
| Not sure | 0 | 0 | 1 | 1 | 0.9 |
| Useful but not deal breakers | 0 | 0 | 1 | 1 | 0.9 |
| Ability to transfer my skills has yet to be tested | 1 | 0 | 0 | 1 | 0.9 |
| Total | | | | 10 | 8.5 |
| Unclear response | 0 | 1 | 1 | 2 | 1.7 |
| No response | | | | 39 | 33.3 |
| Total frequency of responses | | | | 117 | 100.0 |

Of the participants who did not feel confident that their skills would be transferable to a full-time career (8.5% of total responses), the most frequent explanation was “Unsure of my future career” (4.3% of total responses; e.g., “I am still not sure what I want to do” [participant 28, elite level]).

Learning about skills increases confidence in their use. Table 47 illustrates the respondents’ answers to question 32, which asked to what degree they felt that learning about transferable skills would increase their confidence in having skills that can be used in nonsporting environments. Of the 117 athletes who responded, 77% (n = 90) stated that it would “Somewhat increase” (scale point 3) or “Really increase” (scale point 4) their confidence in having skills that they could use in nonsporting careers.

Table 47

*Question 32a: Learning About Transferable**Skills to Increase Confidence in Using Them in**Nonsporting Careers*

| Increase | N | (%) |
|-------------------------|-----|---------|
| Not all increase (1) | 4 | (3.4) |
| Not really increase (2) | 11 | (9.4) |
| Somewhat increase (3) | 45 | (38.5) |
| Really increase (4) | 45 | (38.5) |
| Absolutely increase (5) | 11 | (9.4) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Mean = 3.41, Median = 3.00, Mode = 3 and 4, Standard deviation = 0.914

Further clarification of learning about skills to increase confidence. Table 48 shows the participants' reasons for thinking that learning about transferable skills would or would not increase their confidence in having skills that they could use in nonsporting careers. For those who felt that learning about transferable skills would increase their confidence (30.8% of total responses), the most frequent explanation included "Increased confidence equal increased success" (6.8% of total responses; e.g., "It would tell me that I have the tools to have a successful career" [participant 35, high school level] and "You'd feel more employable" [participant 32, national team level]).

Of the participants who did not believe that learning about transferable skills would increase their confidence in having skills that could be used in nonsporting careers (14.5% of total responses), the most frequent explanation included "Experience equals confidence" (3.4% of total responses; e.g., "My confidence comes more from gaining experience" [participant 105, university level]).

Table 48

Question 32b: Reasons That Learning About Transferable Skills Increases or Does Not Increase Confidence in Using Them in Nonsporting Careers

| Response | High school | Univ./ college | National/ elite | Total freq. | % |
|------------------------------------------------------------------|-------------|----------------|-----------------|-------------|--------------|
| Increase confidence | | | | | |
| Increased confidence equals increased success | 1 | 5 | 3 | 8 | 6.8 |
| Increased awareness equals increased applicability | 0 | 5 | 1 | 6 | 5.1 |
| Increased knowledge equals increased success | 3 | 3 | 0 | 6 | 5.1 |
| Interested because I need help with life/sport | 0 | 3 | 1 | 4 | 3.4 |
| It would help with transition/ preparation | 0 | 3 | 1 | 4 | 3.4 |
| I need to learn more about possible careers | 3 | 0 | 0 | 3 | 2.6 |
| I need to learn more about myself | 0 | 1 | 1 | 2 | 1.7 |
| General sports skills transferable (i.e., respect and team work) | 1 | 0 | 1 | 2 | 1.7 |
| Already evidence in part-time job | 0 | 0 | 1 | 1 | 0.9 |
| Total | | | | 36 | 30.8 |
| Not increase confidence | | | | | |
| Experience equals confidence | 1 | 0 | 3 | 4 | 3.4 |
| I already know | 2 | 2 | 0 | 4 | 3.4 |
| Work experience/education are more important | 0 | 2 | 1 | 3 | 2.6 |
| I don't care | 1 | 1 | 0 | 2 | 1.7 |
| Confident to start any career | 1 | 0 | 1 | 2 | 1.7 |
| I don't know | 0 | 1 | 0 | 1 | 0.9 |
| Between sports and school, I'm already prepared | 0 | 1 | 0 | 1 | 0.9 |
| Total | | | | 17 | 14.5 |
| Unclear response | 0 | 1 | 0 | 1 | 0.9 |
| No response | | | | 63 | 53.8 |
| Total frequency of responses | | | | 117 | 100.0 |

Doubts when beginning a new career. Table 49 indicates the respondents' answers to question 33, which asked to what degree they had doubts concerning their ability to begin a new career. Of the 117 athletes who responded, 41.9% (n = 49) had "Some doubt" (scale point 3) and 31.6% (n = 37) had "Few doubts" (scale point 2) about their ability to begin a new career.

Table 49

Question 33a: Doubts About Ability to Begin a New Career

| Doubts | N | (%) |
|-------------------------|-----|---------|
| No doubts (1) | 16 | (13.7) |
| Very few doubts (2) | 37 | (31.6) |
| Some doubts (3) | 49 | (41.9) |
| A lot of doubts (4) | 10 | (8.5) |
| Absolutely doubtful (5) | 4 | (3.4) |
| No response | 1 | (0.9) |
| Total responses | 117 | (100.0) |

Mean = 2.56, Median = 3.00, Mode = 4, Standard deviation = 0.954

Further clarification of doubts about beginning a new career. Table 50 shows the participants' reasons for their doubts or lack of doubt about their ability to begin a new career. For those participants who had doubts (42.7% of total responses), the most frequent explanation included "Worried about a new situation/environment" (15.4% of total responses; e.g., "A little timid because thus far hockey had been my whole life" [participant 4, elite level]). Of those participants who did not have doubts concerning their ability to begin a new career (26.5% of total responses), the most frequent explanation was "Confidence in abilities/skills equals decreased doubts" (11.1% of total

responses; e.g., “I am confident I can do fine in a career” [participant 18, elite level] and “I know I possess skills that employers would see as desirable in an employee” [participant 11, elite level]).

Table 50

Question 33b: Reasons for Doubts About Ability to Begin a New Career

| Reason | High school | Univ./college | National/elite | Total freq. | % |
|-----------------------------------------------------------------|-------------|---------------|----------------|-------------|------|
| Doubts | | | | | |
| Worried about new situation/environment (i.e., fear of unknown) | 2 | 12 | 4 | 18 | 15.4 |
| Increased doubts because haven't picked a career | 2 | 6 | 0 | 8 | 6.8 |
| I need more experience | 0 | 3 | 2 | 5 | 4.3 |
| Doubts that I will find something I love | 0 | 0 | 5 | 5 | 4.3 |
| Self-doubt/maybe I'm not prepared | 0 | 2 | 3 | 5 | 4.3 |
| I've never had job (i.e., not thought about it; too young) | 3 | 1 | 0 | 4 | 3.4 |
| Need more education | 0 | 0 | 2 | 2 | 1.7 |
| I'll miss my social support | 0 | 0 | 1 | 1 | 0.9 |
| I have doubts because I'm afraid to be independent | 0 | 1 | 0 | 1 | 0.9 |
| I have doubts because don't want the transition | 0 | 0 | 1 | 1 | 0.9 |
| Total | | | | 50 | 42.7 |

(table continues)

Table 50 (continued)

| Reason | High school | Univ./college | National/elite | Total freq. | % |
|--------------------------------------------------------------------------------|-------------|---------------|----------------|-------------|-------|
| | No doubts | | | | |
| Confidence in abilities/skills equals decreased doubts | 2 | 6 | 5 | 13 | 11.1 |
| Confident because I'll persevere until I achieve what I want (i.e., hard work) | 2 | 3 | 0 | 5 | 4.3 |
| Preparation equals decreased doubts | 0 | 1 | 2 | 3 | 2.6 |
| My experiences in sport will help in work and school | 1 | 0 | 1 | 2 | 1.7 |
| I've successfully transitioned in the past | 0 | 2 | 0 | 2 | 1.7 |
| I think that my doubts are normal | 2 | 0 | 0 | 2 | 1.7 |
| If career is similar I have decreased doubts (i.e., coaching) | 0 | 0 | 1 | 1 | 0.9 |
| Confident because I have work experience | 0 | 0 | 1 | 1 | 0.9 |
| I have sought after skills | 1 | 0 | 0 | 1 | 0.9 |
| There are many careers that I could be good at | 1 | 0 | 0 | 1 | 0.9 |
| Total | | | | 31 | 26.5 |
| Unclear response | 0 | 3 | 0 | 3 | 2.6 |
| No response | | | | 33 | 28.2 |
| Total frequency of responses | | | | 177 | 100.0 |

The importance of awareness of transferable skills. Table 51 shows the respondents' answers to question 34, which asked to what degree they believed that being aware of transferable skills is important for successful transition out of sport. Of the 117 athletes who responded, 41.0% (n = 48) thought that it is "Somewhat important" (scale

point 3) and 37.6% (n = 44) “Really important” (scale point 4) to be aware of transferable skills to successfully transition out of sport.

Table 51

Question 34a: Importance of Awareness of Transferable Skills to Successful Transition

| Awareness | N | (%) |
|--------------------------|-----|---------|
| Not at all important (1) | 1 | (0.9) |
| Not really important (2) | 7 | (6.0) |
| Somewhat important (3) | 48 | (41.0) |
| Really important (4) | 44 | (37.6) |
| Extremely important (5) | 15 | (12.8) |
| No response | 2 | (1.7) |
| Total responses | 117 | (100.0) |

Mean = 3.57 Median = 4.00, Mode = 3, Standard deviation = 0.829

Further clarification surrounding the importance of awareness of transferable skills. Table 52 reports the participants’ reasons for believing or not believing that being aware of transferable skills is important for successful transition out of sport. For the participants who considered it important (47.0% of total responses), the most frequent explanation was “Helps with confidence/preparation/success” (9.4% of total responses; e.g., “I think it’s mostly important for confidence and preparation [*sic*]” [participant 24, college level]). Of the participants who did not think that being aware of transferable skills is important for successful transition out of sport (14.5% of total responses), the most frequent explanation was “Not necessary” (3.4% of total responses; e.g., “I don’t think it’s necessary” [participant 88, university level]).

Table 52

*Question 34b: Reasons for Considering or Not Considering Awareness of Transferable**Skills Important to Successful Transition*

| Reason | High school | Univ./college | National/ elite | Total freq. | % |
|--------------------------------------------------------------------|-------------|---------------|-----------------|-------------|------|
| Aware | | | | | |
| Helps with confidence/preparation/ success | 1 | 4 | 6 | 11 | 9.4 |
| The same skills can make one successful in both hockey and life | 2 | 7 | 2 | 11 | 9.4 |
| It makes the transition easier | 2 | 7 | 2 | 7 | 6.0 |
| Awareness equals increased applicability | 0 | 4 | 2 | 6 | 5.1 |
| Increased awareness equals increased | 1 | 2 | 2 | 5 | 4.3 |
| Confidence | | | | | |
| Important for people who are unaware | 0 | 2 | 3 | 5 | 4.3 |
| One should know their own strengths | 1 | 2 | 1 | 4 | 3.4 |
| It's important to remember what I learned from hockey | 0 | 1 | 2 | 3 | 2.6 |
| Awareness of skills equals good career choices | 1 | 1 | 0 | 2 | 1.7 |
| Need to be aware as some skills are not obvious | 0 | 1 | 0 | 1 | 0.9 |
| Total | | | | 55 | 47.0 |
| Not Aware | | | | | |
| Not necessary | 0 | 3 | 1 | 4 | 3.4 |
| Sometimes people are not aware of skills and do well | 1 | 3 | 0 | 4 | 3.4 |
| Doesn't apply (i.e., don't think there is transition out of sport) | 2 | 0 | 1 | 3 | 2.6 |
| Awareness is not enough—also need to improve on skills | 0 | 2 | 0 | 2 | 1.7 |
| Skills are obvious | 0 | 1 | 0 | 1 | 0.9 |
| University is more important | 0 | 1 | 0 | 1 | 0.9 |

(table continues)

Table 52 (continued)

| Reason | High school | Univ./college | National/ elite | Total freq. | % |
|--------------------------------------------------------|-------------|---------------|-----------------|-------------|-------|
| Most athletes aware that they are building life skills | 0 | 0 | 1 | 1 | 0.9 |
| Awareness is not the key; finding a new passion is key | 0 | 0 | 1 | 1 | 0.9 |
| Total | | | | 17 | 14.5 |
| Unclear response | 3 | 1 | 2 | 6 | 5.1 |
| No response | | | | 39 | 33.3 |
| Total frequency of responses | | | | 117 | 100.0 |

Chi-Square Analyses

Chi-square tests for independence (Spearman's r) were conducted to determine the differences between the levels of competition (i.e., high school, university/college, national/elite) for all of the Likert-scale survey questions. Only three analyses were significant ($p < .05$).

The results show that university/college respondents disagreed significantly more often than did their high school and national/elite counterparts that they “spend more time thinking about sport than anything else” ($\chi^2(8, N = 117) = 17.55, p = .02$).

When asked “How ready are you to enter a full-time career upon career transition from sport?” significantly more university/college respondents than their high school and national/elite counterparts reported being “very” ready ($\chi^2(8, N = 117) = 15.72, p = .04$).

Finally, when asked the respondents whether they had ever considered “transferring skills from hockey to another job or career,” significantly more university/college respondents than their high school and national/elite counterparts chose “Frequently” ($\chi^2(8, N = 117) = 21.07, p = .00$).

This concludes the reporting of the results of this study. Chapter 5 discusses the implications of Chapter 4, present suggestions to improve the process of helping athletes through career transition, offer suggestions for future research, and discuss the limitations of the study.

CHAPTER 5: DISCUSSION

This research has examined how active female hockey players at the high school, university/college, and national/elite levels perceive their acquired sport skills as transferring to another career or other facets of their lives. Ultimately, the intention of this study was to determine how active female athletes perceive their transferable skills and to improve the process of helping athletes through career transition. This chapter summarizes the results, discuss the implications of the findings presented in Chapter 4, make suggestions for improving the process of helping athletes through career transition, offer suggestions for future research, and identify the strengths and weaknesses of this study.

Summary of the Results

The results of each part of the Transferable Skills Survey will be summarized.

Part A: General Information

The athletes ranged from 15 to 40 years old, with a mean of 20.20. A total of 117 surveys were returned, of which 23.9% (n = 28) were from the high school competition level, 47.9% (n = 56) were from the university/college competition level, and 28.2% (n = 33) were from the national/elite competition level. The analysis of the results revealed that 76.1% (n = 89) of the athletes were also full-time students and that 65.8% (n = 77) of the athletes believed that the sport and governing body did not provide sufficient financial support for female hockey players. Only 77.7% (n = 91) of the athletes responded to this question, which indicates that they had trouble choosing an exact age of career transition. Almost one third of the respondents (29.3%) reported that

they intended to leave sport at a particular age because of the completion of their schooling. When athletes have alternative skills, they may be more likely to leave sport voluntarily and less likely to experience adjustment problems (Blinde & Greendorfer, 1985). Coakley (1983) stated that athletes who retire voluntarily can experience a positive transition. Retirement from sport can often be voluntary, and leaving interscholastic and amateur sport is regarded as part of normal development (Coakley, 1983).

Part B: Identity

Regardless of competition level, 82.1% of the respondents strongly agreed (scale point 5) with the statement “I consider myself an athlete.” When athletes’ self-esteem and identity are tied to sport, they often experience negative transition and confusion about their identities (Crook & Robertson, 1991). The only significant difference amongst the competition groups in the Identity section of the survey was in their responses to the statement “I spend more time thinking about sport than anything else.” The results show that the university/college respondents disagreed significantly more often than did their high school and national/elite counterparts with this statement, which makes sense because student athletes must be able to balance the time that they spend thinking about both school and athletics to succeed at both and, in many cases, to remain eligible to participate in sport. Often interscholastic athletes have an athletic status that is a less prominent part of the social environment than that of professional athletes. Therefore, the transition out of competitive sport requires less adjustment for interscholastic athletes. Coakley (1983) suggested that interscholastic athletes may find that they have less

trouble leaving sport because their memories of their sporting experience are less likely to hinder their future growth and development.

Part C: Career Transition

Of the athletes who responded, 37% indicated that they “Frequently” (scale point 4) or “Always” (scale point 5) avoided thinking about retirement from hockey, which fits well with McLaughlin’s (1981) explanation that athletes do not think about retirement during active involvement in competitive sport because they consider thinking about it as defeating and admitting to failure. Blinde and Greendorfer (1985) and Crook and Robertson (1991) cautioned that the lack of attention paid to preparing for life after sports can negatively affect athletes’ ability to adjust. Kerr and Dacyshyn (2000) reported that most of the athletes in their study experienced a stage of existential questioning after retirement because they had not taken the time to prepare for retirement, and without sport, these athletes were left asking, “What is next?” The role of the counselling profession in athletic retirement will be to expose athletes to the very thing that many of them avoid, which is thinking about retirement from sport.

Of the athletes who responded, 26.4% indicated that they “Frequently” (scale point 4) or “Always” (scale point 5) viewed athletic transition as a negative event. It is expected that athletes would avoid thinking about retirement from hockey because they view it as a negative transition. If this is the case, then it would also be expected that the 37% of the respondents who “Frequently” or “Always” avoided thinking about retirement from hockey would also “Frequently” or “Always” view athletic transition as a negative event. In actuality, 26.4% indicated that they “Frequently” or “Always” viewed athletic transition as a negative event. Allison and Meyer (1988) noted that many of the female

tennis professionals whom they interviewed considered retirement an opportunity to regain more traditional societal roles and lifestyles. A positive factor in adjustment is having other interests and activities after retirement. It may actually be that 37% of the female hockey players avoided thinking about retirement from sport, but that they did not always view it as a negative transition because it would allow them the opportunity to engage in more traditional societal roles and lifestyles (e.g., getting married or starting a family).

Of the athletes who responded, 81.2% reported that they were “Somewhat” (scale point 3) or “Very” (scale point 4) satisfied with the extent to which their coaches and teams had prepared them to enter a full-time career. These results fit with Werthner and Orlick’s (1986) research that found that coaching has an effect on the transition of athletes. When athletes have a positive relationship with their coach, this in turn has a positive effect on their transition. A good relationship with a coach allows athletes to reach their goals and enjoy their sporting experience. When the relationship with the coach is negative, athletes may leave the sport sooner than they would have wanted, which can create a difficult transition.

Of the athletes who responded, 70.9% “Sometimes” (scale point 3) or “Frequently” (scale point 4) considered what life would be like once they stopped playing hockey; the open-ended questions allowed them to explain more fully how they pictured their lives after hockey. For the participants who thought about what their lives would be like, the most frequent explanation was “Wondering what I will do with extra time” (21.2%; e.g., “Hockey had been a big part of my life for a long time, and I end up wondering what it will be like without it” [participant 98, high school level]) and

“Hockey takes up so much of my time so I wonder what I will keep busy with” [participant 88, university level]). The second most frequent explanation was “I need to start preparing for my future” (14.4%; e.g., “I like to prepare myself, to have some options” [participant 23, national team level] and “Then the real life begins” [participant 17, elite level]). Voluntary career transition requires that athletes consider what life will be like once they stop playing hockey. Coakley (1983) supported the fact that voluntary retirement from university/college sport may be more positive because it *is* voluntary. Retirement from sport is often voluntary, and leaving interscholastic and amateur sport is regarded as part of normal development (Coakley, 1983). When athletes have alternative skills, they may be more likely to leave sport voluntarily and less likely to experience adjustment problems (Blinde & Greendorfer, 1985). Coakley stated that athletes who retire voluntarily can experience a positive transition.

Of the responding athletes, 22.2% indicated that they “Seldom” (scale point 2) or “Never” (scale point 1) considered what life would be like once they stopped playing hockey; the open-ended questions allowed them to explain more fully why they did not consider what life will be like after hockey. Of the participants who did not consider life after hockey, the most frequent explanations included “In denial” (12.1%; e.g., “I can’t imagine life without hockey since I have played for most of my life” [participant 49, college level] and “Because I’m too busy right now and don’t really like to think about it” [participant 84, university level]). Athletes who are in denial and do not consider what life will be like once they stop playing, may experience a less gradual and more involuntary transition out of sport. Both involuntary and quick transitions out of sport contribute to a more negative experience. Athletes who are involved in involuntary

retirement are often more resistant and less prepared than are those who retire voluntarily (McPherson, 1980). Transitions that are gradual are easier to adapt to because athletes can prepare and make plans for the upcoming transitional event (Schlossberg, 1981).

The only significant difference amongst the competition groups in the Career Transition section of the survey was in the question “How ready are you to enter a full-time career upon career transition from sport?” Of the athletes who responded, 46.2% (n = 54) felt “Somewhat” (scale point 3) and 23.9% (n = 28) felt “Very” ready (scale point 4) to enter a full-time career upon transition from sport. Significantly more university/college respondents were “Very” (scale point 4) ready than were their high school and national/elite counterparts. These results support the literature that identified having other interests and activities after retirement as a positive factor in the adjustment, which also reveals the need for athletes to maintain balance in their lives while competing (Sinclair & Orlick, 1993). University/college athletes create more of a balance in their lives by getting an education at the same time that they participate in sport. It is because they are also acquiring domain-specific skills in other areas that they feel ready to leave sport. The open-ended question allowed the participants to more fully explain why they did or did not feel ready to enter a full-time career upon career transition from sport. For the participants who were ready, the most frequent explanations included “School (practicum) prepared me” (11.1%; e.g., “Because I have a good education...” [participant 9, elite level] and “I have a plan in place as well as a degree I am working on” [participant 26, national team level]); and “Hockey teaches skills” (11.1% of total responses; e.g., “Because hockey teaches the commitment needed when you start working full-time” [participant 35, high school level]).

Of the participants who were not ready to enter a full-time career upon transitioning from sport, the most frequent explanation was “Retirement far away/will always be involved” (12.0%; e.g., “I’m still fairly [*sic*] young and don’t want to transfer” [participant 14, elite level]). Those athletes who were less ready to enter a full-time career upon leaving sport had not taken a balanced approach: They had not acquired domain-specific skills in other areas and were in denial that retirement would ever arrive.

When the writer asked who was responsible for helping the athletes to make the transition out of sport, 74.4% (n = 87) responded “Families” and 67.5% (n = 79) selected “Athletes,” which reveals their opinion that individual athletes are responsible for assisting in their own transition from sport. The attitude that families are responsible for helping with the transition ties in directly with Botterill’s (1981) research. He reported that athletes believe that support from former athletes, family, and sport helps them to adjust to athletic retirement. The support of family and friends can ease the degree of disruption that the transition may cause, and emotional support helps in the adjustment to the transition (Werthner & Orlick, 1986). Athletes who experience a negative transition often cite a loss of support system if most of their friends actively continue with sport (Mihovilovic, 1968). The items on the survey that the participants selected least as supports in career transition were “Sport or Governing Bodies” (24.4%; n = 32) and “Counsellors” (17.9%; n = 21). The literature identified sport or governing bodies as having an effect on athletes’ transition from sport (Werthner & Orlick, 1986). However, this is likely a result of the athletes’ having received money from governing bodies. The athletes in this study did not view governing bodies as having helped in their career transitions probably because most were not receiving funding from a governing body.

According to the literature, politics/sport associations often have an effect on athletes' transition (Werthner & Orlick, 1986). Finances are crucial to the effect of the transition on the athlete. Funding cuts from the sport organizations may force retirement because the athlete no longer receives the funds necessary to continue training (Werthner & Orlick, 1986).

When the researcher asked what resources would aid in the transition from sport, of the responding athletes, 83 selected "Support from families" and 75 "Job shadowing/job experience" as resources that would aid them in the transition to a full-time career. Again, the family emerges as a valuable resource in the transition from sport. This supports Werthner and Orlick's (1986) findings that the support of family and friends can ease the degree of disruption that the transition may cause and that emotional support helps in the adjustment to the transition. The resources that the athletes selected the least as helping them to make the transition from sport included "Counselling" (17.9%; n = 21), "Support from sporting agencies" (24.4%; n = 32) and "Support from friends" (24.4%; n = 32). It can be assumed that support from sporting agencies would apply only to athletes who are part of the national team, which may indicate the reason that the athletes who participated in this survey tended not to see the sporting agencies as a helpful resource.

The fact that most of the athletes did not see counselling as helpful in the transition out of sport is interesting. Sport psychology is a growing field, but it is important to recognize that many athletes still do not view it as an acceptable resource. Sport psychologists would actually be the most appropriate resources to successfully assist athletes in the transition out of sport, but because they consider family the most

accessible support, it may be beneficial for sport psychologists to assist parents in helping their daughters to transition out of sport.

Part D: Transferable Skills

Of the athletes who responded, 61.6% were “Very” (scale point 4) or “Extremely” (scale point 5) familiar with transferable skills. Furthermore, 60.6% reported that they had “Frequently” (scale point 4) or “Always” (scale point 5) considered transferring skills from hockey to a career. The only significant difference among the competition groups in the Transferable Skills section of the survey was in the question “Is transferring skills from hockey to another job or career something you have considered?” Significantly more university/college respondents than their high school and national/elite counterparts chose “Frequently.” University/college athletes create more of a balance in their lives by getting an education at the same time that they participate in sport. It is because they were also acquiring domain-specific skills in other areas that they had considered transferring skills. Allowing female hockey players to excel on the ice and in the classroom at the same time has important implications for parents as well as governing bodies. With online education opportunities, hockey players at any level should have the tools to advance their education regardless of the travel and training requirements involved. It is interesting that a similar percentage of the group who was familiar with transferable skills had also considered transferring skills from hockey to another career. The open-ended question allowed the athletes to more fully explain their reasons for considering transferring skills from hockey to another career. For the participants who had considered transferring skills from hockey to another career, the most frequent explanations followed the theme “Skills/assets will transfer to the working world” (24.8%); e.g., “Leadership,

drive, goal setting are all things that can be transferred to a job” [participant 48, college level] and “Because the leadership, and comitment [*sic*] skills that you aquire [*sic*] in hockey would transfer good to the work place” [participant 54, college level]).

Of the responding athletes, 76.9% “Frequently” (scale point 4) or “Always” viewed (scale point 5) themselves as having skills that they acquired in sport that could be transferred. This is very interesting because becoming aware of transferable skills increases the percentage of athletes who view themselves as having skills that can be transferred. There are many examples of athletes who recognize that they have skills that will transfer outside of athletics. According to James F. Molloy, a professor at Northeastern University’s College of Business Administration, it is no coincidence that successful athletes often turn into successful entrepreneurs (as cited in Cavanaugh, 1989). Molloy suggested that the two share similar characteristics: “To become a star athlete you need drive and energy and you have to be a risk-taker” (p. 23).

When asked where they became familiar with transferable skills, 70.1% ($n = 82$) of the responding athletes selected “Sport.” The success of the skill transfer increases with an awareness of how transferable skills are developed in the sport context (Danish et al., 1992). When female hockey players understand how they learned these skills and in what context they were learned, skill transfer is enhanced. The item that the respondents selected the least for the question about where they became aware of their transferable skills was “Home” (36.8%; $n = 43$). This information is also valuable to sport psychologists because female hockey players do not become familiar with transferable skills at home but view their families as the most helpful support in their

career transition. It may be beneficial for sport psychologists to educate parents on the importance of transferable skills.

When the writer asked who had helped the athletes increase their familiarity with transferable skills, of the athletes who responded, 60.7% (n = 71) selected “Yourself” and 59% (n = 69) selected “Coach.” The counsellor was the least selected helper (13.7%; n = 16), which suggests that athletes are not accessing counsellors concerning transferable skills.

When the researcher asked the athletes which skill(s) they viewed as the most transferable to another career, and, of those who responded, 89.7% (n = 105) selected “Team work” and 76.9% (n = 90) selected “Dedication and perseverance.” High-performance athletes have qualities such as commitment and the ability to set goals, work as a team, communicate, and deal with both challenges and obstacles that can transfer to the workplace (Lau, 2003). Danish et al. (1993) gave an example of life skills or transferable skills that can be applied across settings; they include organizational skills, dedication and perseverance, patience, adaptability/flexibility, and self-motivation, as well as the ability to perform under pressure, meet challenges/deadlines, set and attain goals, and recognize limitations (Danish et al., 1993).

When the writer asked which skill(s) the athletes possess that could be transferred to another career, of those who responded to this question, 80.3% (n = 94) selected “Dedication and perseverance” and 70.9% (n = 83) selected “Self-motivation.” In analyzing the results, the researcher realized that team work was not one of the choices in this question but that it should have been because, based on the responses shown in Table 36, it may be assumed that it would have been a popular choice. It is interesting that the

participants believed that they possess the very skills that they viewed as being most transferable, which suggests that many of these athletes possess the needed skills, but only through increased awareness and confidence will skills transfer.

Of the athletes who responded, 72.6% “Frequently” (scale point 4) or “Always” (scale point 5) noticed skills transfer in their own lives. The open-ended question “Describe a time or situation when you have transferred skills from your hockey to another situation” allowed further clarification. The six major themes that emerged were “Work based,” “School based,” “Relationships,” “Personal/cognitive skills,” “Other sports/physical abilities,” and “No example.” Subthemes began to emerge from these six major themes, the most common of which (8.5% of the total responses) were from the theme “School related”: “Group/team work at school” (e.g., “When interacting with others in a school setting and through school activities, workshops and group project” [participant 60, college level] and “Team work with group projects in school” [participant 69, college level]). The participants viewed team work as the most transferable, and the most common situation in which they noticed skills transfer was in group/team work at school. As the writer collated the team work–related subthemes across the various domains and found that 17.6% of the responses were tied in some way to team work.

Of the responding athletes, 67.5% reported that the transition would be “Very much easier” (scale point 4) or “Absolutely easier” (scale point 5) after becoming aware of transferable skills. The athletes’ lack of awareness of the skills that they possess and of how they can apply their skills to other settings is the main reason for the lack of skill transfer and is a concern for athletes in career planning (Danish et al., 1993). If

individuals are not aware of or do not value the skills that they have developed and do not understand when these skills may be useful in different settings (Yelon, 1992), then skill transfer is unlikely (Mayocchi & Hanrahan, 2000). According to Danish et al., three qualities of transferable skills are relevant to a positive adjustment to transition: (a) awareness of qualities/skills that can be used in the new environment, (b) awareness of how transferable skills are developed in sport, and (c) the perceived outcome of applying transferable skills in a new setting.

Of the responding athletes, 49.6% (n = 58) were “Somewhat interested” (scale point 3) and 22.2% (n = 26) were “Very interested” (scale point 4) in learning more about transferable skills. The open-ended question allowed further clarification, which revealed that, of those participants who were not interested in learning more about transferable skills, the most frequent explanations included “Already have a clear perception” (10.3%) (e.g., “It seems rather self explanatory, you either get the transition or you don’t” [participant 77, university level]). Thus it is not that athletes do not want to learn about transferable skills, but rather that they believe that they already understand transferable skills.

Of the responding athletes, 49.6% were “Very confident” (scale point 4) about their ability to transfer their skills to a full-time career. The respondents’ perceived outcome of applying transferable skills to a new environment affects their ability to transfer their skills and the success of their transition out of sport (Danish et al., 1992). The respondents were confident in their ability to transfer their skills to a full-time career, which should make their transition out of sport easier, and the open-ended question (31b) helped to further clarify their reasons for their confidence. For those who were confident,

the most frequent explanations included “Confident with specific/general skills” (10.3%; e.g., “I am confident in my skills” [participant 67, college level] and “I can learn fast and adapt quickly” [participant 88, university level]); and “Evidence that I’m currently transferring to work/school/life” (8.5% of total responses; e.g., “I see transferable skills at work everyday in the office” [participant 1, elite level]).

Of the responding athletes, 38.9% thought that learning about transferable skills would “Really increase” (scale point 4) their confidence if they had skills that they could use in nonsporting careers. Further clarification of the open-ended question (32b) revealed that those who believed that learning about transferable skills would increase their confidence, the most frequent explanation included “Increased confidence equals increased success” (6.8%; e.g., “It would tell me that I have the tools to have a successful career” [participant 35, high school level] and “You’d feel more employable” [participant 32, national team level]). The most cited response was that increased confidence leads to increased success. At first this seems to contradict the athletes’ responses to the previous question, but further examination reveals that it does not. In fact, the respondents were confident that their skills would be transferable, but they also understood that learning about transferable skills makes them more confident.

Of the responding athletes, 41.9% had “Some doubt” (scale point 3) about their ability to begin a new career. Further clarification of the open-ended question (33b) revealed that, of those who had doubts, the most frequent explanation included “Worried about a new situation/environment” (15.4%); e.g., “A little timid because thus far hockey had been my whole life” [participant 4, elite level]). Individuals often fear situations if they feel that they do not have the coping skills to deal with them; however, if they feel

that they do have adequate skills, they will then become involved (Bandura, 1977). When athletes have high self-efficacy and feel that they are capable, the result may be a successful transition (Mayocchi & Hanrahan, 1997). It is interesting to note the discrepancy in the survey responses. The participants were confident that their skills would be transferable, but 41.4% felt some doubt about their ability to transition to another career. The role of the sport psychologist is to work with athletes on their perceived competency. Athletes would benefit from the use of psycho-educational interventions that increase their knowledge, awareness, and confidence about transferable skills.

Of the participants who did not have doubts about their ability to begin a new career, the most frequent explanation included “Confidence in abilities/skills equals decreased doubts” (11.1%; e.g., “I am confident I can do fine in a career” [participant 18, elite level] and “I know I possess skills that employers would see as desirable in an employee” [participant 11, elite level]). These results support those of the previously identified literature that suggest that the perceived outcome of applying transferable skills to a new environment will affect the ability of the participants to transfer skills as well as the success of the transition (Danish et al., 1992). When athletes are confident in their ability to transfer their skills to a full-time career, their doubts linked to their ability to start a new career diminish.

Of the responding athletes, 41.0% believed that it is “Somewhat important” (scale point 3) to be aware of transferable skills to make a successful transition out of sport. The open-ended question (34b) allowed the athletes to more fully explain their reasons for their responses. Of those who saw being aware of transferable skills as important for

successful transition out of sport, the most frequent explanation included “Helps with confidence/preparation/success” (9.4%; e.g., “I think it’s mostly important for confidence and preparation [*sic*]” [participant 24, college level]). As indicated previously, skill transfer is unlikely (Mayocchi & Hanrahan, 2000) when individuals are not aware of or do not value the skills that they have developed and do not understand when these skills may be useful in different settings (Yelon, 1992). Athletes’ lack of awareness of their skills and of how they can apply these skills to other settings is the main reason for the lack of skill transfer (Danish et al., 1993).

Implications

The implications of this study focus on the need to determine ways to improve the process of helping athletes through career transition. Both the current literature and the results of this study reveal a gap that needs to be addressed. There are five main implications from this study: (a) Student athletes find transitioning from sport easier than athletes who are not students, which implies that other athletes who have not acquired job-specific skills may have an increasingly hard time with career transition; (b) female hockey players may create a model for other transitioning athletes because they are more prepared and aware that their athletic career is going to end than their male counterparts are; (c) it may be more beneficial for sport psychologists to teach parents the skills that they need to support their daughters through their career transitions; (d) this research supports previous literature that concludes that transferable skills are helpful in career transition; and (e) after athletes gain an understanding of transferable skills, they also need to deal with the emotionality of the issue.

Most of the athletes (76.1%) in this study were students and had been taking some steps towards preparing for career transition. Gaining an education at the same time that they participated in sport helped them to develop some competencies outside of the sport and create more options for themselves when they left the sport.

There are two ways to look at this participant group, the first of which is to use female athletes as a model for their male counterparts. Most of the participants were aware that they would be transitioning out of sport once they had completed their postsecondary education. These athletes were forced to recognize their looming career transition because of the societal pressure to settle down (e.g., to get a job and start a family) as well as the fact that there is no league in which they could continue to play. This tied in directly with Schlossberg's (1981) model, which suggests that males and females are socialized with different attitudes and behaviour and that the extent to which individuals internalize gender norms affects their ability to adjust to transitions. For example, because females may experience pressure to get married and have children, they may not have as difficult a transition from the working world into the home. In chapter 2 it was surmised that female hockey players might become role models for other athletes who are transitioning because there is no female professional hockey league in North America. Also, because they cannot make a living playing the game they love, female hockey players may be forced to create more balance in their lives. Consequently, these women may have a more balanced outlook on their identities because of the multiple roles that they play in addition to hockey players. That is, female hockey players may be able to balance their identity, see themselves as having other roles, and not tie their identity directly to the sport. However, when the writer analyzed the survey results, it

became apparent that female hockey players do see themselves as athletes and do tie their identity to sport. The difference is that they are faced with strong societal pressure to transition as well as the looming reality that once their postsecondary education is finished, many of their athletic careers would also be finished.

The second way to look at this participant group is to realize that, even though many of the female hockey players in this study, most of whom were students, had been acquiring competencies outside of sport and were taking the necessary steps to acquire job-specific skills, a large number were still experiencing a negative transition out of sport. Athletes in other sports who have not been preparing may also be expected to have an increasingly negative transition. In this study 21.4% (n = 25) of the participants were not part-time or full-time students. When the researcher asked, “Do you avoid thinking about retirement from hockey?” 37.4% (n = 43) “Frequently” (scale point 4) or “Always” (scale point 5) avoided thinking about retirement. This result aligns with McLaughlin’s (1981) findings that athletes do not think about retirement during active involvement in competitive sport because they consider thinking about it as defeating and admitting to failure. The researcher asked, “Do you view athletic retirement as a negative transition?” and 27% (n = 31) of the participants “Frequently” (scale point 4) or “Always” (scale point 5) viewed athletic retirement as a negative transition. To put these results into context with the literature on transferable skills, the level of anxiety that is likely to accompany the transition can affect an athlete’s ability to transition, and this fear can lead to a lack of confidence, which makes transferring skills difficult (Danish et al., 1992). The argument can be made that most of the individuals in this study did not view athletic retirement as a negative transition; hence, most of them would probably transition easily

out of sport. The counterargument that strikes me is that 26.5% ($n = 31$) of the participants viewed the transition as negative, which implies that a large percentage of athletes need support when they leave sport.

Sports psychologists are likely the individuals who are the most qualified and competent in supporting transitioning athletes. It should be noted that the researcher used the term *sports psychologist* to mean a professional who is qualified to intervene with plagued athletes and has the skills necessary to enhance athletic performance. These individuals have appropriate clinical and/or counselling training along with knowledge and/or experience in the sport. The barrier to accessing counselling that the writer has discussed is that the majority of the athletes in this study were not likely to view counsellors as individuals who could aid them in the transition out of sport. When the researcher asked, “Who is responsible for helping athletes make the transition from sport?” only 27.4% ($n = 32$) selected counsellors, whereas 74.4% ($n = 87$) selected families. In response to the question “What resources do you feel would aid you in the transition from being an active athlete to a life with a full-time career?” only 17.9% ($n = 21$) of the athletes selected counsellors, and 70.9% ($n = 83$) selected support from family.

Two points strike me from these results. First, because the participant group was comprised mainly of students, these athletes are likely not at a level of competition where they would come into constant contact with sport psychologists. Their view of counsellors might not be that of individuals who are capable of understanding or handling their issues because the only contact that they might have with counsellors would be in school.

Second, families were the most frequently selected response for both of the above questions, and this creates an interesting window of opportunity for sport psychologists. To tie these results to the literature on transferable skills, it is important to remember that athletes have many opportunities to apply their skills outside of the sporting environment. It is important for parents and coaches to develop a perspective that is tied to an individual's life development rather than only athletic development (Danish et al., 1992). The participants were looking to their families for support, which means that sport psychologists should be targeting parents to give them the skills that they need to help their daughters transition from sport. Career research has shown similar findings that students go to their parents first for career-related issues and recommends that career counselling should target parents to give them the necessary skills to help their children through career-counselling issues (Bardick, Bernes, Magnusson, & Witko, 2004; Bardick, Bernes, Magnusson, Gunn, & Witko, in press; Witko, Bernes, Magnusson, & Bardick, 2005). It might be that because this participant group were mostly student athletes, they were readily supported through their career transition by their parents. Sport psychologists might in fact actually help these athletes by increasing their parents' awareness of transferable skills.

The current study supports the importance of acquiring transferable skills in retiring from sport. The participants viewed transferable skills as aiding in their career retirement. When asked, "Do you think that becoming aware of transferable skills will make career transition easier?" 67.5% replied "Very much easier" (scale point 4) or "Absolutely easier" (scale point 5), which is consistent with previous research that found that athletes respond positively to learning about how specific skills from sport transfer to

nonsport areas of their lives (Petitpas et al., 1992). To the question “Is being aware of transferable skills important for successful transition out of sport?” 50.4% of the athletes chose “Really important” (scale point 4) or “Extremely important” (scale point 5). To tie these results to the literature on transferable skills, it is important to emphasize that when individuals are not aware of or do not value the skills that they have developed and do not understand when these skills may be useful in different settings (Yelon, 1992), skill transfer is unlikely (Mayocchi & Hanrahan, 2000). According to Danish et al. (1992), three aspects of transferable skills are relevant to positive adjustment to transition: (a) awareness of qualities/skills that can be used in the new environment, (b) awareness of how transferable skills are developed in sport, and (c) the perceived outcome of applying transferable skills in a new setting. Awareness of qualities or skills that can be used in other areas is crucial to skill transfer. The participants’ responses on this survey fall into line with the research on transferable skills. Not only did they recognize the value of becoming aware of transferable skills for successful transition out of sport, but some of their long-answer responses also highlighted the importance of dealing with the emotionality of career transition.

Some of the long-answer responses led to my conclusion that female hockey players are aware of transferable skills and agree that it aids in their transition out of sport. It also became evident from these answers that the participants were also concerned about their ability to deal with the emotionality of the issue and felt that this was important for successful transition. Retiring from sport will likely not be easy for these women. Some tied their identity to the sport and were concerned that leaving would be the hardest transition of their lives. They also felt that they needed to deal with the

emotionality of retirement. After gaining an understanding of transferable skills, the next logical step for some of these athletes is, in fact, dealing with the emotionality of leaving sport. Counselling interventions can assist athletes as they cope with the impact or the aftermath of the event (Danish et al., 1992). The goal of counselling is to assist individuals and allow them the space to grow from their experiences. A sport psychologist has the skills to help athletes emotionally through their transition out of sport (Danish et al., 1992).

The sport psychologist has the needed skills to assist athletes through career transition whether that be targeting transferable skills or dealing with the emotionality of the issue. According to the survey results it may be beneficial for the sport psychologist to target parents and teach them skills to assist their daughters through career transition.

Need for Further Research

It became evident from the results of this study that athletes who have not yet retired from their athletic careers view transferable skills as helpful in their transition from sport. Further research is needed to continue to flesh out this phenomenon. It is important to gain a better understanding of how useful transferable skills can be to individuals who are not also acquiring job-specific skills as student athletes are. It may be presumed that athletes who have not acquired job-specific skills would find transferable skills more powerful, critical, and valuable because acquiring them would lead to a powerful cognitive shift that would allow them to consider themselves useful to an employer because they already have some skills that employers find valuable. Because these athletes have spent their whole lives involved in sport, it is helpful for them to realize that they can transfer their sport skills to other situations. This is evident in the

chi-square comparison across groups when the respondents were asked whether they had considered transferring their skills from hockey to another job or career. Significantly more university/college respondents selected “Frequently” than did their high school and national/elite counterparts ($\chi^2(8, N = 117) = 21.07, p = .00$).

To explore the issues further, it is also important to consider how useful transferable skills are to athletes who are currently transitioning from their athletic careers. The participant group in this study consisted of active athletes, but it is also important to discover whether their view of transferable skills will change during the actual transition. To best understand how athletes view transferable skills during transition, a more qualitative and longitudinal approach that allows comparison across ages and competition groups is needed.

Conducting research on different sporting groups and on male athletes is also important to gain a greater understanding of how transferable skills affect all athletes and how athletes involved in different sports view transferable skills. It may be beneficial to study female athletes who are involved in individual sports. Furthermore, female hockey players may experience circumstances that do not apply to males or to other sports. Some research has been conducted on the career transition of NHL hockey players that demonstrated that they desire programs during and after their hockey careers to help with the transition from the sport (Blann & Zaichkowsky, 1986). NHL players commonly believe that the players’ association should be responsible for providing career transition programs and that group seminars and individual counselling would be the most helpful with their career planning (Blann & Zaichkowsky, 1986). The athletes in Blann and Zaichkowsky’s study described seminars and counselling directed at helping players to

understand their personal strengths, interests, and skills as very effective. Further research is needed in terms of transferable skills to create a clearer picture.

Strengths and Limitations of this Study

The main strengths of this study were the comprehensive questionnaire, the large group of participants in each of the competition levels, and the addition of female athletes' perspectives to the literature on career transition and transferable skills. Previous literature informed the identity, career transition, and transferable skills sections of the survey. The writer gave the coaches a script to read that ensured proper and consistent administration of the surveys to all athletes.

The researcher was able to obtain a large number of participants for this study. The 117 participants came from three respective competition levels: 23.9% (n = 28) from high school, 47.9% (n = 56) from university/college, and 28.2% (n = 33) from national/elite. The wide spectrum of competition levels helped me to gain a better understanding of the issue of career transition out of sport. The writer also surveyed a wide spectrum of ages. The youngest participants were 15 years of age, and the oldest was 40 years of age, and my ability to generalize the results increased with the wide age and competition level spectrum.

The final strength of this research was the fact that it has shed light on female athletes' perspectives. There is little research on transferable skills in sport to date; moreover, the voice of the female hockey player is nonexistent. Discussions of the challenges that female athletes face in playing a traditionally and stereotypically male sport and the transition experience of female athletes are missing from the literature.

Hockey is very much a part of Canadian society, and the findings of this study can therefore be generalized to the large number of female hockey players across the country.

The weaknesses of the study include my clerical mistake of not including a long-answer response to question 29, “Do you think that becoming aware of transferable skills will make career transition easier?” This oversight meant that the researcher did not ask the athletes to explain why or why not. The responses to this question would have been richer if it had given the participants a chance to provide more detail.

Another weakness is that most of the participants in this study were student athletes. Some were in high school; others were in postsecondary schools. It is important to remember in generalizing the results of this study that 76.1% of the respondents were students, which may mean that the results will not apply to other female athletes who are not competing and acquiring job-specific skills at the same time (i.e., athletes who have completed school).

A final limitation is that most of the participants in this study were from Alberta. The researcher acquired all of the high school participants through Hockey Alberta. The university/college group was comprised mostly from Albertan universities and colleges; the one exception was York University in Ontario. The elite participants were all playing for Alberta teams (Edmonton Chimos and Oval X-treme). The one main exception was the national team members, whom were surveyed from all over Canada. Therefore, the results may not be generalizable to other sports or to female hockey players outside of Alberta.

Conclusion

This study investigated how active female hockey players (high school, university/college, and national/elite levels) perceive their transferable skills. The research has added to the understanding of the transferable skills of female hockey players across levels of participation in the context of athletic retirement. The findings will help to guide the counselling profession by revealing athletes' understanding of transferable skills, their perceptions of their transferable skills, and the factors that limit female hockey players' perceptions of transferable skills.

The results appear to be consistent with those of previous research on athletic career transition and transferable skills, and this study has added to the research in this area. Overall, the conclusion of this study is that active athletes do perceive transferable skills as helpful during athletic career transition. Many of the student athletes were familiar with transferable skills, and most of the participants were student athletes who had been acquiring job-specific skills, which presented an opportunity for them to see the evidence of transferable skills in their own life.

However, many athletes in this study considered athletic career transition a negative experience, which validates the role of the sport psychologist in helping athletes to better prepare for career transition. Thus, although there is a significant need, there appears to be no one willing or knowledgeable enough to develop a program for female hockey players who are transitioning out of sport. It also appears that the national team group would be more comfortable in accessing a sport psychologist for support through athletic transition, whereas the university/college and high school groups would prefer to access support from their families during the transition. It might be beneficial to target

these student athletes by educating their parents and giving them the skills that they need to support their daughters through their athletic career transitions.

Further research is also recommended to investigate how useful transferable skills are to athletes who are currently experiencing athletic career transition and to individuals who are not acquiring job-specific skills at the same time that they are playing, as student athletes are. Understanding how athletic career transition and transferable skills will affect all athletes would be best achieved by studying different sporting groups as well as male athletes.

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APPENDIX A:

TRANSFERABLE SKILLS IN THE PROCESS OF TRANSITIONING

TO RETIREMENT FROM SPORT

A review of the literature on the career retirement of athletes and transferable skills resulted in a model that extracts constructs from Schlossberg's (1981) model and the LDI model (Danish et al., 1993), as well as from the literature on transferable skills and the career retirement of athletes.

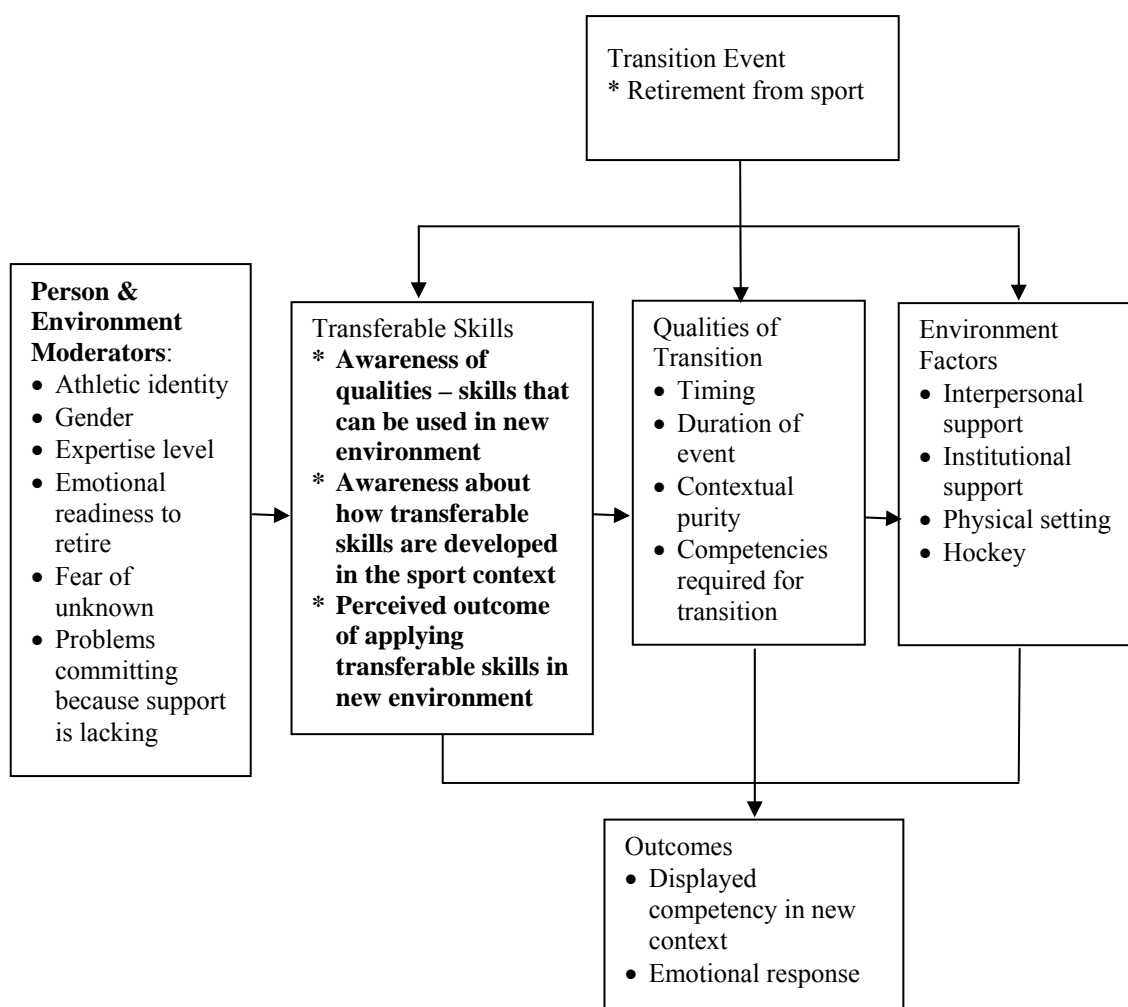


Figure A. Transferable skills in the process of the transition to retirement from sport.

APPENDIX B:**SAMPLE SCRIPT OUTLINING LETTER TO BOARD OF GOVERNORS**

Dear Members of the Board,

My name is Kerbi McKnight and I am a graduate student at the University of Lethbridge. I am working on my thesis under the supervision of Dr. Kerry Bernes, titled "Athletic Career Transition and Transferable Skills."

My area of interest is sports psychology, particularly in relation to female athletes. A lot of what I am today can be attributed to the lessons I learned while competing in sports. I am currently a track and field athlete at the U of L, and previously played ACAC basketball at Augustana University College. Through school I was actively involved in all sports, but hockey was my first sports experience. I started in grade three where I was lucky enough to be taught power skating from Mel Davidson in the cold Castor arena.

I believe in female sport and the empowerment it gives young women. Just the sheer number of female hockey players across the country denotes the positive experience it provides. However, current research states that athletes have many transferable skills but because they learned them in a different environment they have trouble seeing that these skills can be transferred.

Upon permission of the necessary governing bodies (Hockey Alberta, Canadian Interuniversity Sport (CIS) and Alberta Colleges Athletic Conference (ACAC)) the head coaches will be contacted by e-mail to request their team's support of the study.

Participation is completely voluntary and athletes are free to withdraw from the study without question for two weeks after the data has been collected. After the two week period the data will have been entered into a data base where it is logistically impossible to remove an individual participant. Prior to filling out the survey, participants will fill out a consent letter that will be attached to the survey. Participant's anonymity is complete protected once the survey is complete. The personal information of participants is replaced with a code and the survey never asks for a name. Therefore, is no way to trace the personal information to the raw data. Participant's confidentiality and the confidentiality of the data will be protected by only allowing the researcher and the supervisor to have access to the raw data. An envelope is attached to each survey. Each athletes should seal their survey in the envelope immediately after they are finished filling out the survey. The content of this thesis may be published and reported to scientific groups while strictly following the conditions of confidentiality and anonymity already explained.

If there are any further questions, please contact Kerbi McKnight at (403) 327-1538 and Dr. Kerry Bernes (supervisor) at (403) 329-2447, or the Chair of the Faculty of Education Human Subjects Research Committee at the University of Lethbridge, Dr. Rick Mrazek (403-329-2425).

Sincerely,

Kerbi McKnight

APPENDIX C:

SAMPLE SCRIPT OUTLINING E-MAIL TO COACHES

Hello, my name is Kerbi McKnight and I am currently enrolled in the MEd Counseling Psychology program at the University of Lethbridge. My area of interest is sports psychology, particularly in relation to female athletes. My thesis concerns career transition for female athletes in hockey.

How do athletes deal with life after their sport?
 What skills did they learn while actively involved?
 What characteristics developed while they were competing?
 How are these skills transferable to life after sport?
 Do these skills continue in other careers?

A lot of what I am today can be attributed to the lessons I learned while competing in sports. I am currently a track and field athlete at the U of L, and previously played ACAC basketball at Augustana University College. Through school I was actively involved in all sports, but hockey was my first sports experience. I started in grade three where I was lucky enough to be taught power skating from Mel Davidson in the cold Castor arena.

I believe in female sport and the empowerment it gives young women. Just the sheer number of female hockey players across the country denotes the positive experience it provides. However, current research states that athletes have many transferable skills but because they learned them in a different environment they have trouble seeing that these skills can be transferred.

This leads directly to one aspect of my thesis: How do active athletes view their transferable skills?

To do this I am in the process of creating a survey, which will be sent out to high school, university/college and national/elite level female hockey players in February or March of 2006.

This letter is just to touch base with the coaches of the respective teams in order to allow some lead-time so together we can identify the transferable life skills created in the sporting experience.

Thank you for your time now, and I look forward to your team's responses in the future.

Kerbi McKnight

APPENDIX D:**SAMPLE SCRIPT OUTLINING PROCEDURE TO COACHES**

Hello, thanks so much for expressing interest in my research. I am writing now to give you a clear picture of what is involved. I am currently in the process of creating a survey, which will be sent out to high school, university/college and national team female hockey players sometime in March.

The governing bodies of these athletes namely Hockey Alberta, ACAC, CIS as well as the Women's National Team are supportive of this study. From the leagues and teams I would need their cooperation and support to gain access to their athletes. It would take the athletes about 20 minutes to complete the survey. Participation is completely voluntary and athletes are free to withdraw from the study without question for two weeks after the data has been collected. After the two week period the data will have been entered into a data base where it is logistically impossible to remove an individual participant. Prior to filling out the survey, participants will fill out a consent letter that will be attached to the survey. Participant's anonymity is complete protected once the survey is complete. The personal information of participants is replaced with a code and the survey never asks for a name. Therefore, is no way to trace the personal information to the raw data. Participant's confidentiality and the confidentiality of the data will be protected by only allowing the researcher and the supervisor to have access to the raw data. An envelope is attached to each survey. Each athletes should seal their survey in the envelope immediately after they are finished filling out the survey.

The content of this thesis may be published and reported to scientific groups while strictly following the conditions of confidentiality and anonymity already explained. The findings from the study will be made accessible in the form of presentations to any willing governing body, coaches and athletes to help assist with skill transfer and personal growth. The study is crucial to better understand the hockey experience and what is needed to create a positive learning experience.

Thanks for your time.

Kerbi McKnight
Contact information
kerbi.mcknight@uleth.ca
(403) 327-1538

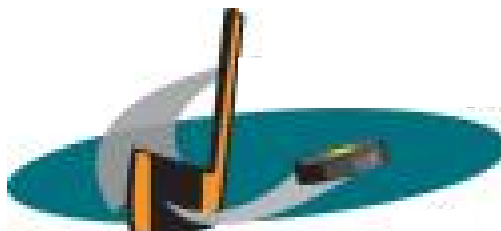
APPENDIX E:**HOW FEMALE HOCKEY PLAYERS PERCEIVE THEIR SKILLS**

Participant _____



How Female Hockey Players Perceive Their Skills

Thank you for taking part in this study. In this booklet is a set of questions for you to complete. It is very important that you **answer EVERY question**. Evaluate the statements honestly and without over-thinking your answers. Please keep in mind that there are not right or wrong answers and that all of your responses will be kept private. Please return questionnaire to envelope and seal it before giving it to your coach.



Part A: G I

Instructions: Please select the box or boxes that best answer each question for you.

- 1) Age _____
- 2) Level of Competition: choose the one that best fits
- High School: currently enrolled in high school and playing hockey
 - University: currently competing for a university that is part of CIS
 - College: currently competing for a college that is part of the ACAC
 - National Team: currently a member of national team
 - Elite: currently a member of Edmonton Chimos or Calgary Oval X-treme
- 3) Are you currently a student?
- Yes
 - No
 - Part-time
- 4) a) Are you currently holding a paying job outside of being an athlete?
- Yes
 - No
 - Part-time
- b) What is it? _____
- 5) a) Does the sport and governing bodies provide sufficient financial support for athletes?
- Yes
 - No
- b) why or why not? _____
- _____
- _____
- 6) a) At what age do you see yourself leaving competitive hockey?
_____ years of age.
- b) Explain your answer _____
- _____
- _____

Part B: I

Instructions: Read each of the following statements and indicate **the degree to which to you agree** with an “x” through the appropriate circle.

| | Strongly Disagree | | Strongly Agree | | |
|---------------------------------------------------------------------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | (1) | (2) | (3) | (4) | (5) |
| 7) I consider myself an athlete. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8) I have many goals related to sport. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9) Most of my friends are athletes. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10) Sport is the most important part of my life. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11) I spend more time thinking about sport than anything else. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12) I feel bad about myself when I do poorly in sport. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13) I would be very depressed if I were injured and could not compete in sport. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Part C: C T

Instructions: Please circle the number that best answers the question for you.

14) Do you avoid thinking about retirement from hockey?

1-Never 2-Seldom 3-Sometimes 4-Frequently 5-Always

15) Do you view athletic retirement as a negative transition?

1-Never 2-Seldom 3-Sometimes 4-Frequently 5-Always

16) How satisfied are you with the extent to which teams and coaches have prepared you to enter a full-time career?

1-Not at all 2-Not Very 3-Somewhat 4-Very 5-Extremely

17) a) Do you ever consider what your life will be like once you have to stop playing hockey?

1-Never 2-Seldom 3-Sometimes 4-Frequently 5-Always

b) Why or why not? _____

18) a) How ready are you to enter a full-time career upon career transition from sport?

1-Not at all 2-Not Very 3-Somewhat 4-Very 5-Extremely

b) Why or why not? _____

Instructions: Please select the box or boxes that apply to you.

- 19) Who is responsible for helping athletes make the transition from sport?
- | | |
|--------------------------------------|--------------------------------------------------------------------------------------------|
| <input type="checkbox"/> Coaches | <input type="checkbox"/> Sport Governing Bodies (Hockey Alberta, CIS, ACAC, Hockey Canada) |
| <input type="checkbox"/> Athletes | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Counsellors | |
| <input type="checkbox"/> Families | |
| <input type="checkbox"/> Friends | |
- 20) What resources do you feel would aid you in the transition from being an active athlete to a life with a full-time career?
- | | |
|---------------------------------------------------------|-------------------------------------------------------------|
| <input type="checkbox"/> Counselling | <input type="checkbox"/> Career planning workshops |
| <input type="checkbox"/> Support from family | <input type="checkbox"/> Job shadowing/job experience |
| <input type="checkbox"/> Support from friends | <input type="checkbox"/> Information on transferable skills |
| <input type="checkbox"/> Support from sporting agencies | <input type="checkbox"/> Other: _____ |
-

Part D: T S

It may be assumed that transferable skills in terms of sport are those skills that athletes have acquired through sport that can be applied to other areas of their life and other careers. For example when a hockey player exhibits tenacity and hard work on and off the ice she may be able to apply those same skills in other areas of her life or to other careers.

Instructions: Please circle the number that best answers the question for you.

- 21) How familiar are you with transferable skills that can be learned in hockey and that can be useful in non-athletic settings?
- 1-Not at all 2-Not Very 3-Somewhat 4-Very 5-Extremely**
- 22) Do you view yourself as having skills acquired in sport that can be transferred to another career?
- 1-Not at all 2-Not Very 3-Somewhat 4-Very 5-Extremely**
- 23) a) Is transferring skills from hockey to another job or career something you have considered?
- 1-Not at all 2-Not Very 3-Somewhat 4-Very 5-Extremely**

b) Why or why not?

Instructions: Please select the box or boxes that apply for you.

24) Where did you become more familiar with transferable skills?

- | | |
|---------------------------------------------|---------------------------------------|
| <input type="checkbox"/> Home | <input type="checkbox"/> Sport |
| <input type="checkbox"/> High school | <input type="checkbox"/> None |
| <input type="checkbox"/> College/university | <input type="checkbox"/> Other: _____ |

25) Who helped you become more familiar with transferable skills?

- | | |
|-------------------------------------|---------------------------------------|
| <input type="checkbox"/> Family | <input type="checkbox"/> None |
| <input type="checkbox"/> Friends | <input type="checkbox"/> Yourself |
| <input type="checkbox"/> Counsellor | <input type="checkbox"/> Teammates |
| <input type="checkbox"/> Coach | <input type="checkbox"/> Other: _____ |

26) Which skill(s) do you view as being the **most transferable** to another career? Ability to perform under pressure

- | | |
|---------------------------------------------------------------|-----------------------------------------------------------------|
| <input type="checkbox"/> Problem-solving skills | <input type="checkbox"/> Dedication and Perseverance |
| <input type="checkbox"/> Team work | <input type="checkbox"/> Self-motivation |
| <input type="checkbox"/> Organizational skills | <input type="checkbox"/> Patience |
| <input type="checkbox"/> Ability to set and attain goals | <input type="checkbox"/> Adaptability/flexibility |
| <input type="checkbox"/> Ability to meet deadlines/challenges | <input type="checkbox"/> Ability to recognize one's limitations |
| | <input type="checkbox"/> Other: _____ |

27) Which skill(s) do you feel that **you possess** that could be transferred to another career?

- | | |
|---------------------------------------------------------------|-----------------------------------------------------------------|
| <input type="checkbox"/> Ability to perform under pressure | <input type="checkbox"/> Dedication and perseverance |
| <input type="checkbox"/> Problem-solving skills | <input type="checkbox"/> Self-motivation |
| <input type="checkbox"/> Organizational skills | <input type="checkbox"/> Patience |
| <input type="checkbox"/> Ability to set and attain goals | <input type="checkbox"/> Adaptability/ flexibility |
| <input type="checkbox"/> Ability to meet deadlines/challenges | <input type="checkbox"/> Ability to recognize one's limitations |
| | <input type="checkbox"/> Other: _____ |

Instructions: Please circle the number that best answers the question for you.

28) a) Have you noticed skill transfer from hockey to another setting in your own life?

1- Never 2-Seldom 3-Somewhat 4-Frequently 5-Always

b) Describe a time or situation when you have transferred skills from your hockey to another situation?

29) Do you think that becoming aware of transferable skills will make career transition easier?

1-Not at all easier **2-Not much easier** **3-Somewhat easier** **4-Very much easier** **5-Absolutely easier**

30) a) Are you interested in learning more about transferable skills?

1- Not at all interested **2-Not very interested** **3-Somewhat interested** **4-Very interested** **5-Extremely interested**

b) why or why not?: _____

31) a) Do you feel confident that your skills will be transferable to a full-time career?

1- Not at all confident **2-Not very confident** **3-Somewhat confident** **4-Very confident** **5-Extremely confident**

b) why or why not?: _____

32) a) Would learning about transferable skills increase your confidence in having skills that can be used in non-sporting careers?

1- Not at all increase **2-Not really increase** **3-Somewhat increase** **4-Really increase** **5-Absolutely increase**

b) why or why not?: _____

33) a) Do you have doubts concerning your ability to begin a new career?

1- No doubts **2-Very few doubts** **3-Some doubts** **4-A lot of doubts** **5-Absolutely doubtful**

b) why or why not?: _____

34) a) Is being aware of transferable skills important for successful transition out of sport?

**1- Not at all
important**

**2-Not really
important**

**3-Somewhat
important**

**4-Really
important**

**5-Extremely
important**

b) why or why not?: _____

35) Any additional comments/ideas: _____

APPENDIX F:
SCRIPT FOR COACHES

Please Read Aloud to Athletes

Hi, I wanted to give you a quick overview of what this is all about. Through the survey I am intending to create a better understanding of skills you have learned from sport and how they might be applied to a new career or other areas of your life. Before starting the survey remove the envelope and the first four pages. The four pages that you are removing are the participation consent forms (child and adult). These pages are for you and your parent, guardian, or billet to keep.

Directions For Athletes 16 yrs or younger

- If you are 16 yrs or younger, before you to fill out the survey you need to have a billet, parent or guardian sign the **CHILD** consent form still attached to the survey.
- The **ADULT** consent form should be signed by you.

Directions For Athletes Over 16 yrs

- If you are over 16 yrs of age, only your signature is needed before starting the survey.
- The **ADULT** consent form should be signed by you.

Directions For All

The survey needs to be placed in the envelope after you are finished and before you return it to your coach. The signed copies of the participation consent form should remain attached to the survey. Please read and sign the participation consent form before starting the survey. The survey should take about 20 minutes. Thanks for your help. It is greatly appreciated.



Kerbi McKnight (Researcher)
MEd Counselling Psychology Student



Dr. Kerry Bernes (Supervisor)
Associate Professor
Chartered Psychologist