

# **University of Alberta**

## **Exploring Social Relationships and Children with Disabilities' Motivation to Participate in Sledge Hockey**

by

**Katrina E. Wynnyk**

**A thesis submitted to the Faculty of Graduate Studies and Research  
in partial fulfillment of the requirements for the degree of**

**Master of Arts**

**Faculty of Physical Education and Recreation**

**©Katrina E. Wynnyk**

**Spring 2013**

**Edmonton, Alberta**

Permission is hereby granted to the University of Alberta Libraries to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only. Where the thesis is converted to, or otherwise made available in digital form, the University of Alberta will advise potential users of the thesis of these terms.

The author reserves all other publication and other rights in association with the copyright in the thesis and, except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatsoever without the author's prior written permission.



Library and Archives  
Canada

Published Heritage  
Branch

395 Wellington Street  
Ottawa ON K1A 0N4  
Canada

Bibliothèque et  
Archives Canada

Direction du  
Patrimoine de l'édition

395, rue Wellington  
Ottawa ON K1A 0N4  
Canada

*Your file Votre référence*

*ISBN: 978-0-494-96407-1*

*Our file Notre référence*

*ISBN: 978-0-494-96407-1*

#### NOTICE:

The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

#### AVIS:

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque et Archives Canada de reproduire, publier, archiver, sauvegarder, conserver, transmettre au public par télécommunication ou par l'Internet, prêter, distribuer et vendre des thèses partout dans le monde, à des fins commerciales ou autres, sur support microforme, papier, électronique et/ou autres formats.

L'auteur conserve la propriété du droit d'auteur et des droits moraux qui protègent cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

---

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.

Conformément à la loi canadienne sur la protection de la vie privée, quelques formulaires secondaires ont été enlevés de cette thèse.

Bien que ces formulaires aient inclus dans la pagination, il n'y aura aucun contenu manquant.

Canada

## **Dedication**

This work is dedicated to my friends and family who have always valued my pursuit of further education and supported me in reaching my goal. To my mom Eileen, who is my greatest inspiration and role model, thank you for instilling in me a sense of courage and determination to never be complacent with the status quo, to keep pushing, seeking and creating different approaches to problems others deemed too big to conquer. To my sisters, my partners in crime, Terenia and Mikhayla, you are both the reason I became interested in this field in the first place having influenced and shaped my experiences tremendously. Thank you for the coffee runs, the dance parties and the hugs. And to Chris, thank you for your love and support throughout the twists and turns of this journey; I look forward to a lifetime of adventures together.

## **Abstract**

Rarely have the experiences of children in specialized sport been the focus of researchers (Martin, 2006). This study's purpose was to understand the role of social relationships and competence in children's motivation to participate in the disability sport of sledge hockey. Harter's theory of Competence Motivation (1978) was used as this qualitative case study's conceptual framework. Sledge hockey players, one girl and nine boys, ages 11-16 participated. Data were collected through observations, field notes, semi-structured interviews, photographs, reflective notes and document analysis. Four themes emerged: 1) "Cause the coach tells ya'," 2) "They think it's right for me," 3) "I keep playing sledge hockey to keep relationships with them," and 4) "I like how everyone can play it." Interactions and relationships with coaches, parents and peers contributed significantly and mostly positively to the participant's perceptions of competence and motivation to play sledge hockey as did the competitive nature of the sport.

## **Acknowledgements**

I would first like to thank Sport4All, the organization who agreed to and helped facilitate to my involvement in their sledge hockey program. Conducting this research would not have been possible had it not been for the enthusiasm of parents who agreed wholeheartedly to assist in this project and scheduled me in to their busy lives so I could interview their children. And to the SledgeHammers themselves, thank you for sharing your experiences passion and dedication to sledge hockey with me- without your help I would not have had a thesis to complete! I would like to thank the members of my committee Dr. Clive Hickson and Dr. Janice Causgrove Dunn for their guidance; especially Dr. Nancy Spencer-Cavaliere for her endless encouragement throughout my degree- even when I felt I could not finish you always believed I could. And lastly, thanks to the entire crew at the Pat Austin Lab for their advice, extensive collection of resources which were loaned freely, and unwavering support.

## Table of Contents

CHAPTER 1: INTRODUCTION.....	1
Personal Background.....	1
Background and Study Significance.....	3
The importance of physical activity for children.....	3
Sport and activity participation.....	4
Significance of coaches, parents and siblings, and peers.....	6
Purpose and Research Questions.....	7
Definitions.....	8
Disability.....	8
Segregation.....	8
Integration.....	8
Inclusion.....	9
Specialized sport.....	9
Motivation.....	9
Competence.....	10
CHAPTER 2: REVIEW OF LITERATURE.....	11
Sport Participation for Children with Disabilities.....	11
Inclusive opportunities.....	12
Specialized sport.....	15
Summary of Sport Participation for Children with Disabilities.....	18
Significance of Relationships in Physical Activity Settings.....	19
Coaches.....	19
Parents and siblings.....	21

Peer relationships.....	22
Summary of Significant Relationships in Physical Activity.....	27
Competence Motivation Theory.....	27
The significance of motivation in sport participation.....	28
Domains of competency.....	29
Self perceptions.....	30
Competence Motivation Theory conceptual framework.....	31
Significance of athletic domain.....	32
Summary of Competence Motivation Theory in the Athletic Domain.....	35
 CHAPTER 3: METHOD.....	 36
Methodology.....	36
Context and Participants.....	37
Sampling.....	39
Data Collection.....	43
Observations and field notes.....	43
Semi-structured interviews and photographs.....	45
Reflective notes.....	52
Document analysis.....	52
Data Analysis.....	52
Trustworthiness.....	60
Observations.....	61
Data triangulation.....	61
Member checking.....	62

Audit trail.....	62
Multiple coders.....	62
Ethics and Ethical Concerns.....	63
Informed consent.....	64
Confidentiality and protection of data.....	64
CHAPTER 4: RESULTS.....	66
“Cause the Coach Tells Ya’,”.....	66
“They Think It’s Right for Me”.....	73
“I Keep Playing Sledge Hockey to Keep Relationships With Them”.....	81
“I Like How Everyone Can Play It” .....	87
CHAPTER 5: DISCUSSION.....	95
The Role of Coaches.....	96
The Role of Parents.....	101
The Role of Peers.....	105
The Role of Sledge Hockey.....	110
Implications.....	114
CHAPTER 6: CONCLUSION.....	119
Summary.....	119
Limitations.....	121
Future Directions.....	124
Personal Reflection.....	126



REFERENCES .....	132
APPENDICIES.....	154
Appendix 1.0: Interview Guide, Interview #1.....	154
Appendix 2.0: Interview Guide, Interview #2.....	159
Appendix 3.0: Letter to Sport4All.....	161
Appendix 4.0: Participant Assent Form.....	163
Appendix 5.0: Parent Consent Form.....	164
Appendix 6.0: Photograph Waiver.....	166
Appendix 7.0: Coach Photograph Waiver.....	167
Appendix 8.0: Participant Demographic Information Sheet.....	168

## **List of Tables**

Table 1: Participant demographic information..... 42

Table 2: Steps in analyses employing thematic networks..... 58

## **List of Figures**

Figure 1: Thematic analysis chart.....	54
Figure 2: “Cause the coach tells ‘ya’.....	56
Figure 3: “They think it’s right for me”.....	57
Figure 4: “I keep playing sledge hockey to keep relationships with them”.....	58
Figure 5: “I like how everyone can play it”.....	59

## **CHAPTER 1:**

### **Introduction**

#### **Personal Background**

My interest in the field of Adapted Physical Activity (APA) came about quite organically as my youngest sister was born with severe developmental disabilities. We were, and still are, a very active family engaging in numerous community activities. In going about these activities, I began noticing a lack of opportunities, not only for children with disabilities to be physically active, but for their families, my family, as well. This frustrating reality sat with me until I entered the University of Alberta in the fall of 2005 in the Faculty of Science. It was at this time when I began volunteering at the C.A.G.E program (now Free2BMe) at the Steadward Centre, a program for children and youth who have disabilities that emphasizes participation in physical and fitness activities in a fun and social environment. This opportunity, the children I volunteered with, as well as the coordinating staff at the time, acted as a catalyst in my move to the Faculty of Physical Education and Recreation the following year, where I obtained my Bachelor of Science in Kinesiology in 2010.

My decision to pursue Graduate studies was heavily influenced by a course I took titled PERLS 370: Assessment and Service Delivery for Special Populations. Throughout the duration of the course we had the opportunity to discuss and critique various academic papers in the field of APA. I realized my experience both as an individual with a keen interest in the field and as a family

member of a person with a disability left me with a unique perspective from which to examine issues of inclusion.

I was fortunate to act as the Regional Program Coordinator for a program called Bridging the Gap - Getting Physically Active from 2008 to 2011. The aim of this program was to expose individuals who had recently experienced a life changing injury, as well as other community members, to wheelchair sports. The goal was to increase awareness and opportunities for alternative sport and recreation engagement. While I enjoyed watching people try out the basketball chairs and marvel in amazement at the freedom they experienced while playing sport, the most significant portion of my job was facilitating the opportunity to develop relationships with peers. People who had common life experiences were brought together by a desire to be physically active and to grow their interpersonal relationships through sport. After a typical program, it wasn't uncommon for the discussion to turn to transfer boards, stump care and prosthetic maintenance. These discussions and the learning and understanding that accompanied them would not have happened had it not been for this gathering around specialized sport.

The APA literature is firmly focused on inclusion, and the principle of having individuals with disabilities participate in physical activities alongside individuals who do not have disabilities. While I strongly believe in inclusion and advocate on behalf of my sister for inclusion, I also feel that specialized sporting environments are a valuable alternative for physical activity engagement for people with disabilities. I have seen my sister benefit greatly from the careful

instruction of dedicated and trained adapted coaches and flourish from relationships she's built with other children who also experience disabilities. It is a combination of these personal experiences, my belief in the importance of inclusion and opportunities for all people to be physical active, coupled with a limited body of research exploring the experiences of children in specialized sport, that has led me pursue this topic for my Master's thesis.

### **Background and Study Significance**

**The importance of physical activity for children.** The health benefits associated with physical activity for children are well established. For example, physical activity has been shown to help reduce adiposity, lower total cholesterol (Aguilar, et al., 2010) and promote psychological well being (World Health Organization [WHO], 2002). There is evidence to suggest that these benefits of physical activity can be similarly extended to children with disabilities. Children with disabilities experience increased mobility from participating in physical activity by showing improvements in gait speed, strength, and cardiovascular fitness (Johnson, 2009). Some research indicates that children with disabilities generally view physical activity participation as positive and see themselves as gleaning similar benefits from participation as their peers without disability, such as acquiring new skills and strengthening social ties (Taub & Greer, 2000). Conversely, a study by King, Law, Hurley, Petrenchik, & Schwellnus (2010) demonstrated that children with disabilities are less likely to enjoy active physical activity, take part in fewer and less diverse activities and take part in fewer social and skill based activities than their peers without disabilities.

Despite the potential benefits of physical activity, 88% of Canadian children do not meet the national physical activity guidelines of accumulating a minimum of 60 minutes of moderate to vigorous daily physical activity (Canadian Fitness and Lifestyle Research, 2009; Canadian Society for Exercise Physiology, 2011). Children with disabilities in Canada are less likely to engage in physical activity, participate less often in exercise and watch a significantly higher amount of television compared to their peers who do not have disabilities (Steele, et al., 1996).

The potential health risks attributable to obesity and inactivity in children include an increased likelihood of type 2 diabetes mellitus, respiratory disorders and orthopaedic problems (Canadian Pediatrics Society [CPS], 2002). Furthermore, children who are inactive are more likely to report more negative self perceptions (Daley & Leahy, 2003) and rate themselves lower on perceived appearance (Dunton, Jamner, & Cooper, 2003).

**Sport and activity participation.** Sport is regarded as an appropriate means by which children can engage in moderate to vigorous physical activity (CPS, 2002). Subsequently, in response to the concerns about children's physical inactivity, researchers from a variety of disciplines, including health, rehabilitation, education, kinesiology and physical education (PE) are focused on learning more about children's participation in sport. Regular sport participation has been shown to be advantageous in improving a child's fitness (Faude, et al., 2010). In addition to the physical benefits of sport, participants also enjoy psychological benefits, such as fewer problems with peer relationships and

inattentive/hyperactive behaviours, as well as developing strong pro-social behaviours (Griffiths, Dowda, Dezateux, & Pate, 2010).

While sport participation for children with disabilities can provide critical opportunities to improve physical skills, it also very importantly, affords opportunities to “enhance social capabilities” (Taub & Greer, 2000). The experience of sport participation for children with disabilities can be an opportunity to exert independence in their lives, be a freeing and normalizing experience, and a chance to “...feel just like anyone else” (Bedini & Anderson, 2005). Contrastingly, inclusive opportunities may also be seen as constraining to participants with disabilities who feel the need to conform to a set of standards or perform a skill in a way similar to a peer without a disability in order to gain acceptance in the setting (Devine & Lashua, 2002). These conflicting perspectives led Block (1999) to speculate about whether or not an environment of inclusion, where children with and without disabilities take part in activity together, is the appropriate context for all children with disabilities, questioning whether the unique needs of a child with a disability can be fully met in these settings.

The options for children with disabilities to participate in physical activity are numerous, ranging from swimming to cycling and soccer, both in inclusive environments or specialized settings (Zwier, et al., 2010). Specialized settings were, for the purpose of this paper, defined as opportunities for children to take part in physical activity solely or primarily with other children who have disabilities. The opportunities for specialized sport involvement are expanding to include a broader range of activities in response to the various barriers that exist



in community sports programming which prohibit children with disabilities from full participation (Fragala-Pinkham, Dumas, Boyce, Peters, & Haley, 2009). Examples of these barriers include negative attitudes and discrimination from other participants and their parents and staff who are unwilling to modify programs to include children with disabilities (Tsai & Fung, 2009).

### **Significance of Coaches, Parents and Siblings, and Peers.**

The need to approach children's participation in physical activity from a holistic perspective, taking into account "parents (and peers) [as they] have a major influence on children's physical, emotional, and psychological development" has been identified (Welk, Wood, & Morss, 2003, p. 19). Limitations to family free and recreational time has been discussed in reference to having a child with a disability (Burke, 2010), though the impact of siblings without disabilities on their sibling with a disability's sport participation has not been examined at length. Parents have a large influence on their child's physical activity engagement. Primarily, they act as gatekeepers to engagement by directly providing rides to games and practices, though their involvement can also be seen as indirect, by providing encouragement which can positively influence children's perceptions of competence and affect towards participation (Welk, et al., 2003). Parents of children with disabilities actively seek out knowledgeable instructors for their children who can accommodate and facilitate their full and meaningful participation (Goodwin, Fitzpatrick, Thurmier, & Hall, 2006); however the role of coaches in motivating a child's continued participation has not been explored from the perspective of children with disabilities. Lastly, the athletic domain is

one where peer approval and support are of great significance to children (Harter & Whitesell, 1996). For children with disabilities who take part in specialized sport, little is known about the influence of these context-specific peer relationships and the role they play in motivating continued engagement in these settings.

### **Purpose and Research Questions**

The purpose of this qualitative case study was to perform an in-depth exploration of the role that social relationships with coaches, parents and siblings, and peers play in the experiences of children with disabilities in specialized sport. Harter's Competence Motivation Theory (1978) was used as a conceptual framework for the study as it acknowledges the impact that feedback from significant others can have on perceptions of competence, particularly in the peer valued domain of athletics (Harter, 1999; Harter & Whitesell, 1996). Three research questions guided this study:

1. What are the experiences of children with disabilities in specialized sport?
2. What is the nature of the social relationships between children, their coaches, parents and teammates in specialized sport?
3. How do these experiences and relationships contribute to children's motivation to participate and engage in specialized sport?

Understanding the role of social relationships in children with disabilities' motivation to take part in specialized sport is critical to providing sporting

experiences that are positive and have the potential to lead to continued participation at recreational, competitive and elite disability sport levels.

### **Definitions**

**Disability.** “A complex phenomenon reflecting an interaction between features of a person’s body and features of the society in which he or she lives” (WHO, 2001, p.10). The term disability is used to encompass impairments, defined as “problems in body function or structure,” activity limitations, or “difficulties an individual may encounter while executing a task or action,” and participation restrictions which “are problems an individual may experience in involvement in life situations” (WHO, 2001, p. 10).

**Segregation.** An allusion to the practice of institutionalization which effectively removed individuals with disabilities from any meaningful interaction with society, segregation assumed the needs of people with disabilities were fundamentally different from that of society and as such ought to be provided for in separate spaces (Reid, 2003). Segregation is the exclusion and separation of an individual based on an observable difference which does not coincide with the standards of norm (Karagiannis, Stainback, & Stainback, 1996). Segregation can occur in contexts where children with disabilities and children without disabilities interact, as both groups can be separated from one another in terms of physical space, a term known as ‘segregated inclusion’ (Place & Hodge, 2001).

**Integration.** “The most general sense of having people with disabilities learn, work, and recreate among peers without disabilities” (Reid, 2003, p.132).

“The process of having students with disabilities (who have been excluded) become an integral part of the mainstream in their schools” (Stainback & Stainback, 1990, p. 4).

**Inclusion.** Originating in the field of education, inclusion was initially understood as the instruction of children with and without disabilities in a single class room (Winnick, 2005). However, true inclusion is far more encompassing than the physical placement of children. The concept of inclusion has been reconceptualised as both an attitude and a process as opposed to the sole physical placement of individuals with disabilities in spaces with individuals who do not have disabilities (DePauw & Doll-Tepper, 2000). Inclusive environments are ones of belonging, in which an individual feels supported and accepted by their peers in the environment (Stainback & Stainback, 1990).

**Specialized sport.** The use of the term specialized sport is often used interchangeably with adapted sport. However, specialized sport as used in the context of this study will refer to sport participated primarily in or solely by individuals with disabilities. Specialized sport can be defined as “sport modified or created to meet the unique needs of individuals with disabilities” (Winnick, 2005, p.5). These programs offer individuals a choice of what environment they wish to participate in “based on their goals, needs, and abilities to pursue their active living aspirations” (Gringras, 2003, p. 408).

**Motivation.** “What energizes, directs and sustains actions” (Shaw, Gorely, & Corban, 2005, p. 91). The construct of motivation is understood as the force

which drives an individual to become involved in a situation and continue their engagement in that scenario (Swanson, Colwell & Zhao, 2008).

**Competence.** “An organism’s capacity to interact effectively with its environment” (White, 1959, p.297). Competence is an urge determined by an individual’s motivation (White, 1959).

## **Chapter 2:**

### **Review of Literature**

#### **Sport Participation for Children with Disabilities**

The benefits of sport participation for children are typically presented as multifactorial, encompassing both physical and psychological health (Aguillar, et al., 2010; WHO, 2002). Research has indicated that children with disabilities perceive positive benefits of sport participation and see involvement in sport as being a positive experience. Children with disabilities cite making new friends, strengthening one's physique and an opportunity to assert themselves as individuals, as benefits of sport participation (Kristén, Patriksson, & Fridlund, 2002). Parents of children with disabilities also view their child's participation in sport as affording good health and opportunities to be part of a social group where fun is had and new friends are made, all while gaining knowledge and skills associated with learning a new sporting activity (Kristén, Patriksson, & Fridlund, 2003). Formal sport engagement has even been suggested to lead to increased leisure time physical activity for children with disabilities (Harada & Siperstein, 2009). More empirically based research suggests that physical activity for children with disabilities can improve gross motor function (Sterba, 2006), increase muscle strength and functional ability (Blundell, Shepherd, Dean & Adams, 2003) and improve cardiovascular function (Johnson, 2009). In fact, some research suggests physical activity participation can be more beneficial to a child with a disability than traditional rehabilitative methods (Sterba, 2006).

**Inclusive opportunities.** Opportunities for individuals with disabilities to be physically active have evolved substantially as attitudes and perceptions of people with disabilities have changed. Whereas institutionalization and segregation provided little in the way of opportunities for recreation, individuals with disabilities now are provided with supports that match their skills and abilities, allowing them to access appropriate and desired activities (Reid, 2003). The movement towards the inclusion of children with disabilities in sport primarily began in the classroom where children with disabilities were educated alongside peers without disabilities (Reid, 2003). As society began to advocate for inclusion in the classroom context, this trend also carried over to PE (DePauw, 1986). Inclusive PE classes are common places for children with and without disabilities to engage in physical activity together. Inclusive physical activity can provide for a sense of belonging for children with disabilities in settings with children who do not have disabilities (Goodwin & Watkinson, 2000). The strength and skill gleaned from PE participation may act as a foundation from which to build community sport involvement (An & Goodwin, 2007). Parents feel inclusive opportunities add to their children's connectedness to peers, citing enjoyment and an opportunity to participate with peers as being highly valued outcomes of involvement in inclusive settings (An & Goodwin, 2007). As such, inclusive opportunities are often explicitly sought out to participate in or passed along via word of mouth from parent to parent (Magill-Evans, Darrah, & Adkins, 2003). Inclusive community based programming may include activities such as swimming, dance class, gymnastics, and athletics (Coates & Vickerman, 2010).

Results of studies with children with disabilities indicate that inclusive programs encourage interactions between children with and without disabilities, help build friendships, and assist in increasing children's balance and motor ability (Ebesugawa, Wensley, & Murphy-Sims, 2010). Opportunities for inclusive physical activity can be very positive and powerful for children with disabilities.

As Block (1999) suggests, however, often overlooked is the “how of inclusion”, what inclusion means, and how it can be appropriately facilitated. Physical inclusion in a space does not always imply an individual is a full and valued contributor to the physical activity opportunity. Simple physical placement of children with disabilities alongside children without disabilities does not fulfill the most vital and fundamental underpinning of inclusion, which is “the belief that all potential participants, regardless of ability, are essential and valuable in the active living opportunity” (Longmuir, 2003, p. 364). Physical inclusion can be more readily achieved; however, ensuring positive and welcoming attitudes that facilitate feelings of inclusion is often more challenging. Inclusion is an attitude and a process rather than simple placement of individuals with disabilities alongside individuals who do not have disabilities (DePauw & Doll-Tepper, 2000).

Though the benefits of physical activity are evident, for children with disabilities, finding a suitable environment to participate in is often an arduous process. Often, physical activity opportunities are dependent on the nature of the child's disability, which require some sort of activity adaptation or modification to facilitate his or her participation, and not the child's personal preferences for



activity engagement (Taub & Greer, 2000). Barriers such as a lack of appropriate specialized equipment, inaccessible play spaces such as grassy fields or small gymnasiums, and a perception that physical activity for children with disabilities may be unsafe, often impede a children's participation in inclusive environments (An & Goodwin, 2007). Commonly, children with disabilities, who have participated in physical activity alongside peers without disabilities, can recall occurrences where inclusion was not successful (Hutzler, Fliess, Chacham & Van den Auweele, 2002). Inclusive contexts can create anxiety for children with disabilities who perceive their assistive devices, such as wheelchairs, as having negative impacts on their interactions with peers (Hutzler, et al., 2002). Often, children with disabilities express frustration with peers in inclusive contexts, citing instances of not being asked to play or being denied entry into play, as times when they did not feel included (Spencer-Cavaliere & Watkinson, 2010). Place and Hodge (2001) observed an inclusive PE class where, although students with and without disabilities were both part of the same class, little interaction between the two groups actually occurred. Though a physical part of the inclusive PE context, children with disabilities in this study spent the majority of their time away from the class and were socially isolated, engaging in social interactions mainly with other peers who had disabilities. Similar themes were echoed in a study by Goodwin & Watkinson (2000) who observed 'bad days' in inclusive PE as being those where children with disabilities were socially isolated, had their competence questioned, or were restricted in their participation of the activity.

Community recreation programs also present unique barriers to participation. Many community programs are competition based and require a certain degree of athletic skill as a prerequisite to participation, subsequently excluding children with disabilities who simply desire to be active (Jones, 2003). These barriers not only discourage physical participation in the activity, but cause some children to miss out on the commonly desired social component of physical activity (Watkinson, Dwyer, & Nielsen, 2005). Connectedness and belongingness with others is often centrally important in the participation of physical activity for children with disabilities (Spencer-Cavaliere & Watkinson, 2010). Sport is a prime setting for children with disabilities to learn new sport skills, while interacting with peers in pursuit of individual and team achievement (Požėrienė, Adomaitienė, Ostasevičienė, Rėklaitienė, & Kragnienė, 2008). However, some community programs in which children with disabilities take part, do not promote friendships or friendship building to assist with overcoming social skills deficits; areas of great significance to parents who acknowledge that a lack of interpersonal relationship skills may impede their child's future participation in other physical activity settings (Jones, 2003). As illustrated, physical placement of a child with their peers in inclusive contexts does not always equate to that child feeling like she or he is truly included.

**Specialized sport.** Opportunities for specialized sport participation alongside children, the majority of whom have disabilities, can arise in community settings. These opportunities, such as the skating program observed by Fragala-Pinkham, et al., (2009), are created in response to a desire for

participation in various avenues of physical activity that are often inaccessible to persons with disabilities due to barriers such as the requirement of smaller teacher to student ratios and a need for physical assistance in completing the activity. For many children with disabilities, the specialized sporting environment is a place of enjoyment, where they can experience successes in their physical activity participation (Kristén, et al., 2002). Sport enjoyment is perhaps the largest contributor to a children with disabilities' desires to keep participating in sport (Martin, 2006).

Specialized sport settings have been shown to provide participants with fun and enjoyment by placing less emphasis on performance and competition and more emphasis on enhancing perceptions of success in an encouraging environment (Casteñáda & Sherrill, 1999). This finding is significant as research suggests that children with movement difficulties, such as those with disabilities, choose to engage in physical activity based on their perceived ability to achieve a standardized level of performance (Watkinson, et al., 2005). Within the context of specialized sport, children and youth with disabilities have reported feeling capable and positive about their physical abilities (Martin, 2006), possibly encouraging lifelong physical activity engagement. Enjoyment of sport at a young age is often critical as interest and investment in elite level specialized sport performance begins in childhood (Wheeler, et al., 1999).

Specialized sport can allow for the creation of new friendships among peers with disabilities, by providing emotional and social support that may facilitate further participation (Kristén, et al., 2002). Often, children with

disabilities are more likely to model behaviours of individuals who are significant to them and tend to take up activities that are relevant to their social group (Požerienė, et al., 2008). Therefore, it is unsurprising that children with disabilities cite friends who are already participating in a specialized sport as a reason for joining the activity (Harada & Siperstein, 2009). The context of specialized sport allows children with disabilities the opportunity to interact with peers who have similar abilities, increasing the likelihood of successful participation (Watkinson, et al., 2005) while engaging in self-enhancing social interactions (Martin & Smith, 2002). Friends in specialized sport have also been shown to provide encouragement following mistakes and an opportunity to re-try the skill, looking out for one another while sharing common interests (Martin & Smith, 2002). The unique role these peers play in the lives of children with disabilities who participate in specialized sport cannot be overlooked when discussing engagement and motivation in specialized sport.

Participation in specialized sport can be a very powerful experience for individuals with disabilities, as evidenced by Goodwin, et al., (2009) who looked at the sense of community resulting from wheelchair rugby participation. These competitive athletes congregated around a shared life experience and interest in sport, which subsequently decreased feelings of loneliness and isolation (Goodwin, et al., 2009). Participants saw their involvement in sport as a means to assert their physical ability and independence. Similar sentiments have been echoed by children in specialized sport who see their participation in sport as an opportunity to gain physical strength through exercise, as well as psychological

strength by gaining self confidence and being accepted into a group (Kristén ,et al., 2002).

### **Summary of Sport Participation for Children with Disabilities**

Children without disabilities who exhibit greater motor skill abilities have been shown to engage in greater levels of physical activity than those who have difficulty executing similar tasks (Wrotniak, Epstein, Dorn, Jones & Kondilis, 2006). Possessing greater motor skill ability is fundamental to participation in active games and sports (Wrotniak, et al., 2006) placing children with disabilities who often experience some movement difficulties, at a high risk for more sedentary lifestyles. Nevertheless, physical activity and sport opportunities for children with disabilities are increasing in numbers (Zwier, et al., 2010). These opportunities to participate may take place in school or community settings, with children who do and/or do not have disabilities (Conatser, 2008). The benefits of physical activity for children with disabilities are clear, however inclusive contexts present challenges to participation that may not facilitate authentic feelings of inclusion (Hutzler ,et al., 2002). There is strong support for peers without disabilities as being perhaps among the most significant mediators of true feelings of inclusion in children, either in inclusive or specialized sport settings (Spencer-Cavaliere & Watkinson, 2010; Goodwin & Watkinson, 2000). Conversely, adult facilitation of participation and inclusion may be seen by children with disabilities as an overt intrusion, leading to a sense of inauthentic inclusion and undercutting feelings of belonging (Spencer-Cavaliere-Watkinson, 2010). Given the importance of friends in sport and physical activity (Goodwin &

Watkinson, 2000) and the impact they can have in providing a child with a disability a sense of belonging and value in the physical activity setting (Spencer-Cavaliere & Watkinson, 2010), a concentrated examination of the social relationships that take place within the unique setting of specialized sport is required. Sport provides an ideal opportunity for developing and strengthening friendship, creating a setting for peers to support and encourage each other (Weiss, Smith, & Theeboom, 1996) the extent and outcomes of which have received little attention in specialized sport. Truly, one the most difficult challenges facing children with disabilities may be participation in typical age-appropriate activities (Lyons, Corneille, Coker, & Ellis, 2009).

### **Significance of Relationships in Physical Activity Settings**

**Coaches.** Coaches often set the tone for physical activity opportunities, influencing morale, team harmony and team cohesion (Vella, Oades, & Crowe, 2011). Further insight however is needed into the dynamics of the relationships between coaches and athletes to determine what role they play and the needs these relationships fulfill in the participation of children with disabilities in sport. If coaches feel they are inadequately prepared to instruct children with disabilities they may see these children, particularly those with more severe needs, as a burden requiring further modifications for participation beyond the scope that they or the facilities they work in are able to provide (Conatser, 2008). The lack of knowledgeable staff to facilitate a sense of welcoming and belonging for children with disabilities heavily influences parents' decision to enrol their children in specialized sport as opposed to the initially desired inclusive sport context (Tsai &

Fung, 2009). Knowledgeable instructors and coaches within specialized sport contexts have been shown to successfully accommodate and facilitate active participation for children with disabilities by creating environments for motor skill and personal development that children with disabilities and their families can belong to (Goodwin, et al., 2006).

Coach/athlete relationships are often multifaceted, with coaches acting as teachers, friends, or councillors to their players. In families of children without disabilities, desirable coaches are seen as those who use positive feedback and provide opportunities for training and instruction that assist in improving athletic performance (Martin, Jackson, Richardson, & Weiller, 1999). While facilitating sport success, coaches may also assist in the development of life skills such as goal setting and leadership (Vella, et al., 2011). Additionally, coaches may play a role in helping to develop and maintain quality friendships between athletes on the same team (Vella, et al., 2011).

A coach can create an empowering sporting context by providing adequate instruction for participants to gain sport competence, subsequently helping to develop proficiency and allowing participants with disabilities to exert more control over their lives (Hutzler & Bar-Eli, 1993). Motivationally speaking, the environment coaches create can play into a child's decision and desire to participate in sport. Children who participate in sport at the insistence of their parents and do so to win over parental or coaching approval are said to be extrinsically motivated (Pelletier, et al., 1995). However, coaches who support autonomy, are caring, provide clear structure in the sporting domain and provide

competence feedback are said to be intrinsically motivating (Pelletier, et al., 1995). Intrinsic motivation is exhibited by individuals who participate in an activity for enjoyment or interest, deriving satisfaction from improvement in performance and learning (Pelletier, et al., 1995). Greater intrinsic motivation is more preferable for increasing the likelihood of continuation in a sporting activity over time in comparison to extrinsic motivation (Pelletier, et al., 1995).

**Parents and siblings.** Parents may be considered the gatekeepers to sport participation, initially choosing what sport their children will participate in, and where this activity will take place (Goodwin, et al., 2006). Levels of parental education and awareness of the benefits of physical activity have been suggested to influence a parent's decision to pursue physical activity for their children with disabilities (Zwier, et al., 2010). Parents may also actively promote health and physical activity for their children with disabilities and greatly influence their sport participation. Parents of children with disabilities ages eleven to sixteen were observed by Antle, Mills, Steele, Klanin, & Rossen (2007) and found to actively encourage and support their child's pursuit of physical activity, feeling strongly that their child's participation in sport would benefit them in other areas of their lives by providing opportunities to learn self discipline and gain self confidence.

For parents of children with disabilities, the choice is not only whether or not their child should play sports, but if this participation should be done in inclusive settings (Tsai & Fung, 2009). The role of parents in specialized sport must not be overlooked for it is often as a result of parental dissatisfaction and



disenfranchisement with traditional inclusive settings that parents move their children into specialized sport (Casteñada & Sherrill, 1999). Parents desire a sport environment where the participation of their children with disabilities will be socially valued, criticizing traditional sport environments that are not inclusive or fair for their child, and favouring settings that consider personal growth and fun as successful outcomes (Casteñada & Sherrill, 1999). The desire for specialized sport programming by parents is enough to require further investigation into the relationships that occur within it (Block, 1999; Goodwin & Watkinson, 2000).

Parental attitudes and behaviours, both perceived and reported by their children in youth sport can affect motivational outcomes. As Babkes & Weiss (1999) observed, parents who were perceived by their children without disabilities as being more supportive in their sport participation exhibited higher perceptions of competence, intrinsic motivation and enjoyed sport more. More specifically, this study revealed that parents who were perceived by their children as being exercise role models, holding positive attitudes towards their children's sport competency, giving positive and frequent feedback and placing little pressure to perform had children who were more likely to be internally motivated and feel competent in their sport. Within specialized sport, a parent's involvement in his or her child with disabilities' sport participation, is indicative to the child that the family values and supports his or her sports participation (Fitzgerald & Kirk, 2009). Parents can be critical contributors of a child's perceptions of competence, enjoyment, and intrinsic motivation in the sport domain.

**Peer relationships.** The social and psychological benefits of taking part in sport have been well documented. Children who participate in sport interact with different types of peers, deal with conflict and learn to adopt leadership roles all while working as a team, subsequently experiencing fewer difficulties in peer relationships while displaying more prosocial behaviours (Griffiths, et al., 2010; Holt, Black, Tamminen, Fox & Mandigo, 2008). Within the context of inclusive physical activity or sport environments, peers and peer relationships play a significant role in the experiences of children with disabilities. Spencer-Cavaliere & Watkinson (2010) sought the unique and individual experiences of inclusion from perspectives of children with disabilities who were participating in inclusive physical activity. The authors observed that peers and peer relationships contributed significantly, not only to the physical inclusion of children with disabilities in physical activity opportunities, but also to the participants' perceptions of what it means and feels like to be included. Three themes were observed that assisted in creating feelings of inclusion, those of gaining entry to play, feeling like a legitimate participant, and having friends (Spencer-Cavaliere & Watkinson, 2010). These themes are all reflective of the significant role peers have in the inclusive physical activity environment. The children in this study emphasized the importance of gaining entry into the physical activity environment indicating that inclusion was felt when they were permitted to join an activity or invited to participate by peers. Feeling like a legitimate and important part of the sporting opportunity also fostered feelings of inclusion. Legitimacy was dependent both on the child with a disability and how they saw themselves in that

environment, but perhaps more importantly how other children in the environment viewed their peers with disabilities and acted towards them in the physical activity context. The authors observed a distinct difference between being included and feeling included as children with disabilities expressed their desire to be taken seriously in sport by their peers. Having friends in children without disabilities often facilitated entry into play and participation in physical activity, by providing children with disabilities encouragement and helping to contribute to feelings of inclusion.

Similar observations were made by Goodwin & Watkinson (2000) who explored the substantial role peers played in the perception of either positive or negative experiences in inclusive physical education from the perspective of children with disabilities. Peers without disabilities who enacted a standard of performance required for admittance into physical activity opportunities or who were minimally engaged with children who had disabilities were seen as contributing to bad days in physical education. Alternatively, successful demonstration of a skill and peers without disabilities who were supportive, provided physical assistance and encouragement, contributed to a sense of enjoyment for children with disabilities and ultimately a good day in physical education. Blinde & McCallister (1998) also reported on the experiences of children with disabilities in inclusive physical education. Children with disabilities were not provided enough opportunity to participate regularly in physical education classes, often resulting in limited participation or complete exclusion. In this study, children with disabilities who were not able to participate

with peers experienced feelings of sadness and anger at being separated from the group, which often carried over into negative social interactions between peers with and without disabilities. Peers and peer relationships appear to play a significant role in providing a sense of belonging and community as characterized by increased opportunities for team play, encouragement and increased feelings of partnerships between children with and without disabilities (Hutzler, et al., 2002; Seymour, Reid & Bloom, 2009; Spencer-Cavaliere & Watkinson, 2010).

Hartup (1995) suggested that children make friends based around commonalities they see between themselves and another child. These similarities become apparent when children are brought together in physical groupings like classrooms, neighbourhoods or sports teams where social interactions occur and similarities emerge (Hartup, 1995). Given the propensity for gaining acceptance of peers through the exhibition of competency in a desirable skill area, the achievement domain of sport becomes an important context in which to observe the intricacies of peer relationships (Weiss & Duncan, 1992). It is important to acknowledge the diverse and dynamic nature of these relationships and the settings in which they occur. Desirable characteristics in friendships have been shown to change depending on the social demands of the various contexts children are in (Zarbatany, Ghesquiere, & Mohr, 1992). Indeed, Weiss, Smith, & Theeboom (1996) observed children's positive concepts of friendship in sport such as companionship, respect and motivation, and their contribution to an individual's self esteem differ from those previously observed in the school setting. In acknowledging the diversity of demands specific contexts present to a

child and the desired supports friends provide in those various situations, the need for a better understanding of the uniqueness of the relationships that take place in the sport setting becomes apparent.

Engagement in sport and the resultant enjoyable social aspects and friendships that develop out of participation are commonly cited reasons for involvement (Jago, et al., 2009). A child's attraction towards sport and games may be influenced by positive feelings associated with and facilitated by friendships (Smith, 1999). Children have also been shown to engage in more physical activity outside of school settings when accompanied by a best friend (Jago, et al., 2010). The commonality of a shared sporting experience can also act as an anchor in creating intimate friendships between sport participants or teammates, encouraging initiation of further physical activity (Bigelow, Lewko, & Salhani, 1989; Jago, et al., 2009), however the extent to which this occurs requires further inquiry among peers and in groups that are comprised primarily or solely of children with disabilities.

Friendships in sport help buffer the sometimes negative self-evaluative nature of sport. Within sport, children desire friends who can help provide preferential treatment to support their efforts and who will provide ego reinforcement (Zarbatany, et al., 1992). Within sport, peers can play contributing roles in positive perceptions of self confidence. Peers contribute to enjoyment in participation by helping to recognize an individual's accomplishments, providing companionship and esteem support (Smith, 1999). Higher peer acceptance may also be predictive of higher perceptions of competence and higher enjoyment in

sport (Ullrich-French & Smith, 2006). Children with disabilities are motivated to participate in sport for the simple fact that they enjoy the opportunities to socially interact with peers (Harada & Siperstein, 2009). Relationships with others, such as peers, contribute to a desire for continued participation in sport (Berndt & Perry, 1986), though despite their supportive attributes we know relatively little about these interactions for children with disabilities (Martin & Smith, 2002).

### **Summary of the Significant Relationships in Physical Activity**

Parents, coaches and peers play important roles in the initiation and enjoyment of physical activity for children with disabilities. Peer acceptance has been shown to be positively associated with greater enjoyment and positive perceptions of sport competency (Ullrich-French & Smith, 2006). A greater number of positive relationships in sports are more predictive of higher perceptions of competence and enjoyment, emphasizing the significance of relationships with parents and coaches also have in influencing motivational processes (Ullrich-French & Smith, 2006). The role of feedback and reinforcement from these significant others, degree of intrinsic motivation an individual possesses, affect, and perceptions of competency and control are key predictors of behaviour in achievement settings such as sport, and subsequently warrant further investigation (Harter, 1978).

### **Competence Motivation Theory**

The construct of motivation is understood as the force which drives an individual to become involved in a situation and continue his or her engagement

in that scenario (Swanson, et al., 2008). Motivation is key to inspiring engagement in sport for fun or enjoyment, leading towards a desire to push toward athletic achievement (Perreault & Vallerand, 2007). White (1959) described competence as “an organism’s capacity to interact effectively with the environment” (p. 78). Competency can be gained through persistent attempts at learning through specific behaviours enacted to develop proficiency in the environment (White, 1959).

**The significance of motivation in sport participation.** The potential for sport participation to benefit a child beyond the physical domain have resulted in a search for ways to foster sport commitment and understanding motivation becoming common areas of inquiry for researchers. Often, sport commitment is predicted by aspects of motivation including positive self-perceptions, intrinsic motivational orientation and enjoyment (Ullrich-French & Smith, 2006). Motivational orientations are commonly explored as they provide significant information about an individual’s choice for engaging in a scenario. If an individual is intrinsically motivated to participate, they typically do so to satisfy their curiosity, enjoyment of the novelty of the task, or for the opportunity to exercise skill and attain mastery (Pittman, Boggiano, & Main, 1992). Conversely, an individual who is extrinsically motivated will participate primarily to obtain rewards as a result of activity engagement; for the extrinsically motivated individual the activity is a means to an end (Pittman, et al., 1992). Friendships in sport have the potential to be both intrinsically or extrinsically motivating,

depending if being in a friendship is a reward in and of itself or if the rewards of the interpersonal interaction are outside of the relationship.

**Domains of competency.** Harter (1999) suggests five domains in which an individual can experience feelings of competency: physical appearance, peer likability, athletic competence, scholastic competence and behavioural conduct. Of these domains, individuals can value some domains more than others, a differentiation that begins in middle-childhood (Harter, 1999). These domains are of great significance to a child's self-definition, as inferior performances in domains of importance may impact global self-esteem (Harter, 1999). Often these chosen domains of value are decided upon as a result of a child being able to discount the importance of a particular domain in which they are not very competent, and value the domains in which they are (Harter, 1999). A linear relationship exists between actual ability in these domains and self-worth, with individuals exhibiting true competency in domains of personal significance exhibiting higher self worth (Harter, 1999). For children, the domains of physical appearance, peer likability and athletic competence are of great personal significance and can be impacted by peers more so than scholastic competence or behavioural conduct which are judged as more important to their parents (Harter, 1999). In total, these five domains are subject to evaluative judgements by children, contributing to a multifaceted self-concept (Harter, 1999). Parents play a large role in perceptions of competency as their evaluative comments towards their child's ability to meet a particular standard contribute to that child's basic sense of competence. Despite parental desire for their children to exhibit



competency in the academic domain, children tend to be more concerned with performance in peer salient domains such as sports and desire the subsequent peer approval that is derived from successful participation in those settings (Harter & Whitesell, 1996).

**Self perceptions.** Harter (1999) sees the self as both a primarily cognitive and to a lesser extent social construction, suggesting the cognitive abilities and limitations of a child as they develop will be reflected in the individual's self-portrait. Middle childhood marks the point at which cognitive maturation allows for the differentiation of one's own abilities across domains and in comparison with others (Harter, 1999). It is during this time that children are more able to form integrated and concrete representations of their attributes in the different competency domains (Harter, 1999).

As the social self is developed through interactions with other individuals, likely the opinions of others will be adopted as internalized definitions of one's sense of self as a person, particularly in the peer salient domain of sport (Harter & Whitesell, 1996; Harter, 1999). In sport, this developmental milestone coupled with the tendency for children to engage in social comparison may create conflict for those who fall short in comparison to peers, potentially leading to the development poor self-perceptions (Harter, 1999). Social comparison at this age is primarily used to gauge personal competencies, acknowledging both positive and negative attributes. Additionally, when discrepancies between the real and ideal self are present, children are at an increased likelihood of depression, anxiety, and low self-esteem (Harter, 1999).

### **Competence motivation theory as a conceptual framework. White**

(1959) first brought forth the notion of competence as a part of motivation. White maintained that behaviour in a given situation is not random; rather, individuals select certain behaviours and are persistent with them in order to not only make a change in that environment but to also satisfy a need to be competent in that scenario. His term, “effectance motivation” eludes to an individual’s need for feelings of efficacy which contributes to daily interest and engagement in situations. Building on White’s theory, Harter (1978) sought to define the concept in a manner to allow for empirically testable hypotheses. Harter (1999) acknowledged developmental differences that influence how each child will invest in the five different domains of competency: physical appearance, peer likability, athletic competence, scholastic competence and behavioural conduct. Within these domains, tasks that produce a level of optimal challenge, that are difficult but in which an individual can succeed in, are suggested to best explain the relationship between accomplishing a challenge and deriving pleasure from it (Harter, 1978). Harter (1978) acknowledged the significant role of socializing agents in maintaining, enhancing and satisfying motivation. At an early age, reinforcement is needed from parents as a source of information in regard to one’s performance and must be given whether or not the child successfully completes the task. Harter (1978) maintained that reward, as shown through approval, can be seen as either an incentive to engage further in the activity or can have an affective response and allow the child to feel satisfied with his or her performance. Also these rewards provide the child with information to either help

determine goals or evaluate personal performances. The evaluative component of rewards is internalized by the child, influencing either positive or negative perceptions of competence (Harter, 1978). Should a child be sufficiently provided with positive reinforcement for independent mastery attempts, a self-reward system in which they praise themselves for these attempts and successes, a sense of control over their lives and an internalization of mastery goals as a result of rewards or punishments from socializing agents will emerge (Harter, 1978). Over time, the need for these reinforcements will diminish particularly as a child develops. During middle childhood peers are significant distributors of reinforcement and assist in determining what mastery goals will be attempted (Harter, 1981). Ideally the aim of reinforcement is for a child to be intrinsically motivated to act in their environment and to have mastery goals that are accompanied by strong positive self-rewards leading to feelings of effectiveness and intrinsic pleasure (Harter, 1999).

**Significance of the athletic domain.** Research in sport for persons with disabilities has explored the impact sport can have on an individual's self-concept and self-esteem (Hutzler & Bar-Eli, 1993). In a review of relevant literature, both adults and children with disabilities have been shown to possess higher self-esteem and more positive self-concepts as a result of sport participation (Hutzler & Bar-Eli, 1993). Hedrick (1985) provides us with one of the few comparisons of perceived self-efficacy after participation in inclusive or specialized sport environments for children with disabilities. Though sport specific skills improved in both groups at the completion of the program, children with disabilities

preferred learning the sport in the environment with peers who also had disabilities. Additionally, these children reported better sport-related efficacy and higher levels of perceived competency than children who participated with peers who did not have disabilities. Feeling able in a sport setting is very significant for children with disabilities who may have lower self-worth and may subsequently be unable to discount the importance of the sporting domain where they may have limitations (Harter, 1999). It is possible that some children with disabilities participate in disability sport because they can compare themselves to peers who have similar abilities and limitations, as participating with peers who do not have disabilities may bring to light troubling discrepancies between actual and perceived competence. While this may be the case, it is important to recognize that individuals with disabilities who regularly participate in sport have higher self-concepts in comparison to those with disabilities who lead more sedentary lifestyles (Hutzler & Bar-Eli, 1993).

Levels of peer acceptance have been closely tied to a child's perception of actual and perceived sport competency (Weiss & Duncan, 1992), emphasizing the impact true physical ability and one's self-perceptions in physical and social domains have on levels of peer acceptance. Smith (1999) in acknowledging the roles peers have in the physical activity domain observed the propensity of peers to influence perceived levels of competency, affect and motivation in physical activity. Exhibiting proficiency in sport is of great significance to children, often contributing to social status determination in boys, and to a smaller extent in girls (Chase & Dummer, 1992).

Peer acceptance and friendship provide motivation to a child's sport participation, with peer acceptance acting as the dominant component of motivational outcomes (Ullrich-French & Smith, 2006). Perceptions of peer acceptance have been shown to be positively correlated with perceived competence, enjoyment, and self-determined motivation (Smith, Ullrich-French, Walker, & Hurley, 2006). Children who see themselves as being fully valued and accepted members of the team feel more capable in the sport and have more fun (Smith, et al., 2006). Ullrich-French & Smith (2009) maintain that positive friendship quality is a salient variable in supporting sport continuation and enjoyment. Similar conclusions were drawn by Martin (2006) in the specialized sporting context. However it is difficult to establish whether having high self-esteem facilitates the creation of friendships or vice versa (Hartup, 1995). This question directs attention to the need to understand peer acceptance in physical activity as children who have described their interactions with peers as low in conflict and high in acceptance have been shown to experience enjoyment and higher levels of perceived competency in physical activity (Smith, et al., 2006). Perceptions of sport competence are exceedingly significant in the domain of sport and can be impacted by high perceptions of peer acceptance, low perceptions of peer conflict, and a generally positive perception of friendship quality (Smith, et al., 2006). Indeed, perceptions of competence, as influenced by peers, parents [and coaches] may be the critical determining variable in influencing whether or not a child would continue on in sport, and subsequently warrants further inquiry (Ullrich-French & Smith, 2009).

## **Summary of Competence Motivation Theory in the Athletic Domain**

According to Harter (1999) individuals are motivated by a desire to express competency and may do so in five different domains. Of the five domains an individual can express competency in, the athletic is of great significance to children (Harter & Whitesell, 1996). Positive feedback from peers, peer approval and support can help contribute to positive perceptions of competence and ultimately an internal motivational orientation in the child (Harter, 1999). In addition to peers (teammates and opponents), critical others such as coaches and parents are also likely to contribute in significant ways to children's motivation to compete and continue on in disability sport. Intrinsically motivated children engage in sport for enjoyment and the opportunity to master a skill as opposed to external reward (Pittman, et al., 1992), and may be at an increased likelihood for lifelong continuation in physical activity. Often, motivation for children with disabilities to participate in disability sport is the opportunity to engage in social interactions with peers who also have disabilities in what is perceived as a 'safe place' to be physically active (Martin & Smith, 2002). Little research however, exists examining the social support provided to children with disabilities by significant others in the disability sport context and how this support encourages continued participation (Smith, 1999).

## **Chapter 3:**

### **Method**

#### **Methodology**

The purpose of this qualitative study was to explore the experiences of children with disabilities in the specialized sport of sledge hockey. Of particular interest was the nature of the social relationships between these children and their coaches, parents and teammates, and how these relationships and sledge hockey experiences contributed to the children's motivation to participate in specialized sport. Denzin & Lincoln (2008) described qualitative research as "a situated activity that locates the observer in the world [consisting] of a set of interpretive material practices that make the world visible" (p. 4). The observation and understanding of phenomenon in the setting in which it unfolds is at the heart of a qualitative researcher's pursuit (Patton, 2002; Creswell, 2007). Therefore, a qualitative, instrumental case study was chosen to examine the complexities of children's experiences and relationships, and their influence on motivation in the context of a junior competitive sledge hockey team (Mayan, 2009). An instrumental case study was undertaken to explore the "intrinsic interest" I had in understanding how children's relationships with others in a specialized sporting context contributed to their motivation to compete in sledge hockey (Stake, 2008, p. 123). The case study was conducted "within [the] bounded system" of the SledgeHammers (pseudonym) sledge hockey team (Creswell, 2007, p. 73). In conducting this case study, I was called to immerse myself in the case study

setting, which afforded me the ability to preserve the holistic and meaningful characteristics of the social phenomenon, that being the experiences and relationships of the children on the SledgeHammers team (Yin, 2009).

### **Context and Participants**

The sport of sledge hockey was invented in Sweden in 1961, and introduced as a demonstration sport in the 1994 Paralympics, where it is now a full medal event (Hockey Canada, n.d.,¶ 1). Sledge hockey uses rules similar to ice hockey and is typically played by athletes with physical disabilities. Standard ice hockey equipment is worn by players who are strapped into a sledge using shortened hockey sticks with picks on one end to propel themselves and blades on the other to handle the puck (Canadian Paralympic Committee, n.d.,¶ 4). This study took place in a large, Western Canadian city with a junior competitive sledge hockey team. The sledge hockey program, of which the SledgeHammers were a part, was one of many sport and recreation programs provided by a local non-profit, volunteer driven sport association called Sport4All (pseudonym). The association offered programs for individuals of all ages with physical and/or developmental disabilities with the goal of enhancing their social, physical and mental health. In addition to running the SledgeHammers team and the sledge hockey league, Sport4All provided the players with equipment including sledges and sticks. Players were responsible for transporting this equipment to and from all sledge hockey events. The SledgeHammers practiced on a weekly basis out of a local ice arena. The focus of the practices was primarily skill development. In addition to practices, players also had the opportunity to compete against stand-up



minor hockey league teams, who played in sledges for these matches, and other sledge hockey teams. Competitions against sledge hockey teams included regular league games, in addition to tournaments at home, within the home province of the team, and one out of province tournament. The SledgeHammers were comprised of a total of 18 players all with disabilities, ranging in age from 6-16 years old.

Children with a minimum age of 8 were permitted into the research study, however the youngest participants to provide assent and subsequently take part in the research study were 11 years old. It was important that participants be a minimum 8 years of age, the beginning of middle childhood, a developmental period from which children can form more integrated and concrete representations of their attributes (Harter, 1999). As children mature, they are able to describe themselves in terms of competencies (Harter, 1978), that they may be good at some things, and not good at others. It is difficult to pinpoint whether or not every child who is in this age range is capable of such representations, or whether or not at the age of twelve higher-order generalizations automatically occur because of developmental age. The gradual nature at which children begin to acknowledge that what previous was two contradictory attributes can now co-exist within themselves makes pin-pointing the exact age at which this process occurs quite difficult (Harter, 1999). Subsequently, children up to the age of 16 were permitted into this research study, as presumably they would possess similar, if not enhanced capabilities of describing the nature of their competencies in the specific domain of sport.

**Sampling.** Qualitative methods aim to gain large amounts of detailed information about a small number of individuals or cases (Patton, 2002). I used a purposeful sampling approach to select and recruit participants for the research study. This strategy is commonly employed in qualitative research where individuals are chosen to be part of a study because of their ability to provide information about the research questions and phenomenon of interest (Creswell, 2007). Prior to the commencement of the research study, I sent an email to Sport4All inquiring as to their interest in the study. Sport4All was supportive of the research and contacted the parents of the SledgeHammers to inform them of the research opportunity and that an information session would be held during an upcoming practice. The information session was held the following week with all the parents of the SledgeHammers players in attendance. The Executive Director of Sport4All provided a brief synopsis of the research and introduced me as the field researcher who was completing the project for my Master's thesis. I then explained the research study and outlined what would be required of the players should they agree to take part. Parents were then given the opportunity to ask questions about the study. All parents received an information package, which included an information letter describing the purpose of the study, and the criteria of who could participate, in addition to a consent form, assent form, and photography waiver. Parents were asked to review the package with their children. I asked that the information packages be returned the following week regardless of whether or not parents and children agreed to participate in the study.

Criterion sampling was used to ensure participants met a specified set of criteria prior to their involvement in the study (Creswell, 2007). The first criteria required that participants be between the ages of 8-16 years of age. This is the time at which children are able to form more integrated and concrete representations of their own attributes and discern between their actual and desired competencies in different domains (Harter, 1999). This age range was also significant as it is around the age of 8 that children begin to place personal importance on the competency domain of sport (Harter, 1999). Second, the children had to be regular participants with the SledgeHammers team from the beginning of the athletic season. This ensured they would have had ample sport involvement and interactions with coaches, parents, and peers in the setting. Lastly, participants must experience a physical disability or impairment as identified by their parents in the participant consent form. All participants who returned the consent and assent forms, photography waiver, and met the specified criteria, took part in the research study. In an effort to be inclusive, one participant who had autism and did not experience a physical impairment, but wished to take part in the research, was also welcomed into the study.

Achieving data saturation is a one way of determining appropriate sample size in qualitative research, however, there is a lack of consensus in the literature regarding the number of participants or data sources required to reach saturation. Patton (2002) maintains that a large enough sample size exists when theoretical saturation is reached. Guest, Bunce, & Johnson (2006) suggested that data saturation in a comparatively homogeneous, purposefully sampled population

could occur following the analysis of twelve interviews. Although the sampling criteria were likely to result in a less homogenous group than that described by Guest and colleagues (2006), I entered into the research with the goal of recruiting 10-12 participants. Ultimately, ten participants between the ages of 11-16 years, mean age 13.1 years, took part in the study. In focusing on a fewer number of participants, I was able to gain larger amounts of information about their experiences and collected data to the point of saturation. Saturation in this case was the time at which no new information was emerging from additional interviews that were being conducted (Mayan, 2009; Patton, 2002). Achieving saturation of data was aided in part by the small scope of the study, which asked the participants specifically about their relationships in sledge hockey, the relative ease with which participants were able to speak to the research question, and the use of a second semi-structured interview, which helped ensure participants were discussing their own experiences as opposed to another's (Mayan, 2009). Of the ten participants, only one was female. Eight of the ten participants experienced only physical disabilities. One participant experienced multiple developmental delays affecting cognitive, fine and gross motor functioning. As previously mentioned, one participant also experienced autism. Additional participant information is provided in Table 1. The words used to describe the associated disabilities are those of the parents of the participants.

Table 1

*Participant Demographic Information*

Name	Gender	Age	Current Grade	Years in Sledge Hockey	Disability	Description
Sarah	Female	13	7	2	Legg-Perthes Disease	Left hip affected, leg length discrepancy as a result
Liam	Male	15	10	2	Avascular Necrosis	Restricted in walking, wheelchair user 70% of the time
Jay	Male	11	6	6	Double below the knee amputee	Uses prosthetic limbs
Rory	Male	11	6	3	Autism	Speech, cognitive and social delay
Addison	Male	11	6	3	Genetic Spastic Paraplegia	Leg braces worn, spasms/tightness of legs and hips
Arthur	Male	13	8	4	Left hemiparesis spastic cerebral palsy	Left sided weakness
Max	Male	16	10	5	Spinabifida and hydrocephalis	Full time wheelchair user
Rocco	Male	15	10	2	Spastic Hemiparesis Cerebral Palsy	Right hemiplegia
Emmett	Male	14	9	10	Spinabifida and hydrocephalis	Wheelchair user due to tethered spinal cord
Calvin	Male	12	6	1	Developmental delays	Fine and gross motor delays

## **Data Collection**

Multiple sources of data were collected in an effort to produce “converging lines of inquiry” (Yin, 2009, p. 115). Subsequently, numerous sources of data were corroborated to comprehensively describe the role coaches, parents, and peers played in the participants’ motivation to take part in sledge hockey. These data collection methods included observations and field notes, semi-structured interviews, photographs, reflective notes, and analysis of program and organizational documents. Data collection, including direct and participant observations, and semi-structured interviews, occurred over a period of sixteen weeks.

**Observations and field notes.** Over the course of data collection I took on the roles of direct observer and participant observer. As Patton (2002) suggests, the complexities of a situation may be best captured by direct observation of and participation in the setting. For one week, I acted as a direct observer, acquainting myself with the sledge hockey environment and gathering information about the setting and behaviours taking place within the team (Patton, 2002). My observations on the first day included the participant’s arrival to the arena, their on ice time, and their departure from the arena. This initial day of observation also provided the opportunity to converse with parents in the stands and begin to establish rapport with them. I also attended one league match and two tournaments as a direct observer during the duration of my involvement with the team. My role as a participant observer occurred during the second half of the sledge hockey season and lasted approximately eleven weeks. Here I became a

participating member in the research setting (Mayan, 2009). As a participant observer, I was able to gather information from an insider perspective, which assisted in creating a more truthful portrayal of the case that was under observation (Yin, 2009). Each team practice began with players, coaches, and volunteers putting on equipment and chatting in the dressing room. On ice, I acted in the role of assistant to the coach, collecting pucks, fielding passes during drills and talking with participants as they lined up to complete drills. Following practices the team, volunteers, and coaches went back to the dressing room where we often joked around before heading home. Each practice lasted approximately one hour and fifteen minutes, though time spent in the locker room before and after each practice or game often meant parents and their children were at the arena for over two hours. These interactions and observations enriched my understanding of the issues of interest without an overreliance on previous conceptions of the environment, while adding new insight to issues and events that may be overlooked by those who were routinely involved in it (Patton, 2002). Immediately following every observation/participation session, I took field and reflective notes where I described my observations, ideas and interpretations of what I had experienced (Mayan, 2009). These field notes contributed to the quality and saturation of the data by providing a timely description of what was observed, including capturing subtleties and nuances to assist in the analysis of data. This was particularly important given that about one month had passed between the initial direct observation and analysis of the first set of participant interviews (Mayan, 2009; Patton, 2002). The field notes also contained my

reactions, feelings and reflections of what I observed, and helped me to understand how my experiences effected the way I viewed the research setting (Patton, 2002).

**Semi-structured interviews and photographs.** Interviews were used to obtain information not readily and directly observable (Patton, 2002). It was assumed that because the research participants were engaged in specialized sport that they would be able to provide some insight and information about the research question of how relationships with significant others contributed to their motivation in sledge hockey, and that by engaging in the interviewing process this information would become apparent (Mayan, 2009). I employed one-on-one semi-structured interviews with each of the participants. According to Rice and Ezzy (1999), one-on-one interviews are more likely to elicit truthful and unbiased responses from participants than when in the presence of their peers (Rice & Ezzy, 1999).

Semi-structured interview guides were developed for use in the interviews (see Appendix 1.0 and 2.0). Initially, the questions for the interview guides were drawn from issues and questions that arose during the literature review process, as well as some exploratory questions about the children's sledge hockey experiences. However, early field observations also stimulated some additional questions for clarification and probing purposes. The interview guides were useful in ensuring similar questions were asked of each participant, while still allowing for flexibility to probe further responses from the participants (Patton, 2002).

Prior to the beginning of the study, two pilot interviews were conducted with two



11 year old girls with disabilities, who were enrolled in similar disability sport contexts. These interviews served as an opportunity to refine and identify pertinent interview questions and procedures (Creswell, 2007; Yin, 2003) and provided a chance for me to practice my interviewing skills. The pilot interviews were transcribed verbatim and reviewed by me and a more experienced researcher, in an effort to refine the interview questions, as well as my interview techniques and protocols (Seidman, 2006). As a result of the pilot interviews, some interview questions and probes were changed and reworded to increase the participants understanding of the questions and what they were being asked to respond to. For example, the clarification probe of “How do you know that you need some extra practice?” was added to the question of “What things would you like to be better at in sledge hockey?” This was done in an attempt to further appraise how a child comes to understand areas of improvement in sledge hockey.

Each child involved in the study was asked to take part in two interviews. The first set of interviews took place one month after my initial involvement with the SledgeHammers. At the outset of the interviews, I explained to the children that their responses would be used to help better understand their sledge hockey experiences. I reminded them at the start of both interviews that they could stop participation at any time (Lewis & Porter, 2004). I also reinforced their integral role in the research process, telling them that “I am [was] asking children, directly, to help me, an adult, to understand [childhood]” (Mayall, 2000, p. 122). Good relationships between the interviewer and the interviewee are essential in promoting more candid responses from participants, as such I began the first

portion of both interviews rather informally, asking questions about their day and sledge hockey in general (Scott, 2000).

For the vast majority of participants the interviews took place in their homes, often around the kitchen table. Occasionally, interviews took place before or after sledge hockey practices or games, as well as the University of Alberta campus in a quiet, private space. Case study research is intensely personal, often requiring in depth and candid disclosure from the participant with regard to the issue of interest (Stake, 2008). Every effort was made to ensure the participants' comfort during the interviews, including allowing them to choose the setting where the interviews were conducted. Often, parents of the research participants sat in the same room during the interview. Parents were asked not to respond and in cases where they did, their responses were not taken into account during the analysis of the data. Their presence and my impressions were noted in the reflective notes taken following the interviews, however, allowing me to contextualize the interviews for analytical purposes.

All ten of the participants who agreed to be involved in the study completed the first interview. I began the interviews by asking the children to describe sledge hockey, their likes and dislikes about the sport and the aspects of the game they felt they did well in, or needed to improve upon. The interviews then moved into more specific questions with regard to their sledge hockey relationships with peers, parents, siblings and lastly, their coaches. The SledgeHammers team was under the instruction of two parent coaches, one who was described by the children as a head coach, Dwayne [pseudonym], and the other, Steve

[pseudonym], who was more of a parent helper. Both coaches attended practices and games regularly. In the absence of the head coach, the assistant would step in to oversee practices and games. As each first interview was nearing completion, I let the child know that I would be taking photographs at sledge hockey in the next few weeks and asked him or her to brainstorm a list of locations, people, and equipment that were significant to their sledge hockey experiences. Engaging in this initial discussion with the participants helped provide information about what was important to them (Cappello, 2005), and direction for what to capture in the photographs. This first set of interviews lasted an average 34 minutes long ranging from 29 to 47 minutes.

I conducted a second interview with seven of the participants approximately one month following the first. During the time between the first and second interviews, I acted as a participant observer with the team. Of the three children who did not take part in the second interview, one declined further involvement in the research study, another; a rural participant cited long travel time and transportation difficulties as barriers to participating in the second interview, and the third participant did not respond to repeated attempts to set up the second interview. The second interview provided an opportunity for me to share with each participant a summary of his or her responses from the first interview, as well as some initial interpretations of the data which acted as a source of individual level member checking. The second interview also allowed me to follow-up on questions that emerged as a result of the first interview. The tone of the second interview was generally more relaxed and informal. This may have

been due in part to the increased amount of time I had spent with the Sledgehammers between the first and second interviews and the rapport that was continuing to develop. Or, it could have been that the children were more comfortable with the interview process the second time through.

In addition to the follow-up and member checking in the second interviews, I also used a technique called photo elicitation. Photo elicitation was employed in an effort to evoke different types of memories, inviting longer more detailed responses from the participants (Rose, 2007; Epstein, Stevens, McKeever & Baruchel, 2006). This technique was used to encourage the children to further communicate their experiences in a unique, engaging and empowering way, discussing the meaning behind why certain pictures were chosen and what they represented for the participants (Kirova & Emme, 2008). The use of visual data in qualitative research can inspire responses from individuals that otherwise would not have been elicited from them in conversation, invoking affective, informative and reflective responses (Mayan, 2009; Rose, 2007). I had all of the photographs I had taken printed into 4X6 at a photography lab and put into an album. The pictures were organized into three sections; 1) pictures of the children and their teammates, 2) pictures of parents and coaches and, 3) photographs of inanimate objects such as the sledges, benches, and observer stands. I took the photographs before during and after sledge hockey games and practices using a Cannon Powershot 12.1MP Digital Camera. The decision to take the photographs myself, instead of asking the children to take them, stemmed from numerous concerns. First, not all sledge hockey players were participants in the study, by taking the

photographs myself I could be certain not to capture any of the non-consenting players in the photos (Epstein, et al., 2006). Second, because I was always present at sledge hockey, I did not want the children to feel compelled to take or not take certain photographs. As Cappello (2005), discovered in her study using photo elicitation, children took more and different photographs when she was not present. By taking the photos myself, I was able to avoid this issue. Finally, sledge hockey took place only once a week and for some participants was the only time they saw their teammates and were physically active. Asking the children to take the photographs would have limited their social and active time. It is not uncommon for researchers to take photographs that are to be used in photo elicitations (Rose, 2007; Clark-Ibáñez, 2004) and in doing so, I may have been able to capture aspects of the sledge hockey environment that may have been overlooked, but were valuable in prompting further discussion in the interviews (Clark-Ibáñez, 2004). However, what I choose to photograph was tied to my own interpretation of what was significant in the case study environment (Spencer, 2011). To minimize this subjectivity, I took pictures that were suggested by the participants in the first interview, in addition to some unconventional shots such as the clock, the score in a game and a Team Canada sledge hockey banner.

I asked the participants, to select 5-8 photographs they wanted to discuss during the course of the second interview. The children were free to select any photographs they wished and did so by using sticky notes to mark their choices. This approach was intended to empower the participants by involving them in the research process (Lewis & Porter, 2004). A prepared script was followed as I

explained what I was asking each child to do with the photographs. Specifically, I asked the children to explain why they chose the particular photographs and what they meant to them. Each photograph was accompanied by three main questions, “Tell me about this photo?”, “Why did you choose this photo?”, and “What is the story behind this photo?”. I probed further using questions such as: “What made you want to pick this picture?” and “Why do you think this picture tells me something important?” to elicit deeper responses. In using photographs the children were encouraged to describe what they saw; further engaging them in the research process and providing them a reprieve should they have grown tired of talking about what they know (Cappello, 2005). These photographs also served as an opportunity for the children to describe the meaning they attributed to the interactions occurring in the photographs and acted as a way to elicit more information during the interview process than may have been possible without the photographs (Emme, et al., 2006; Cappello, 2005). The photographs themselves were not used in the data analysis process; rather they were employed to further expand on questions and encourage conversation in the interviews (Clark-Ibáñez, 2004). The average length of the second interviews was 34 minutes ranging from 19 to 44 minutes.

All interviews were digitally recorded using the Olympus DS-40 audio recorder. The function of the recorder was introduced to the children prior to the commencement of each interview. Upon completion, each audio recording was downloaded onto a password protected computer, backed up on an external hard

drive and erased off the digital recorder. All interviews were transcribed verbatim by an independent transcriber.

**Reflective notes.** Immediately following the interviews, I manually recorded reflective notes, which included information about where the interviews took place, the length of the interviews and if any issues or questions arose during the interview process. Upon receiving the transcribed interviews from the transcriptionist, I performed a transcript check. I listened to the audio recordings of the interviews while reading the transcripts to ensure the accuracy of the document. After completing this task, I again listened to each interviews and took further notes, recording my impressions, including any questions I had, surprises I may have encountered or new ideas that may have developed in the time that had passed. The reflective notes assisted in my understanding and interpretation of any subtle nuances that may have emerged during the interview, which assisted in the data analysis stage of the research process (Patton, 2002).

**Document analysis.** The formal documents of an organization are essentially “material traces of behaviour” (Hodder, 2000, p. 705). As such, I examined documentation and reports from the non profit agency that ran the SledgeHammers program in an effort to further understand the ways in which their mission, vision, and value statements influenced the sledge hockey program.

### **Data Analysis**

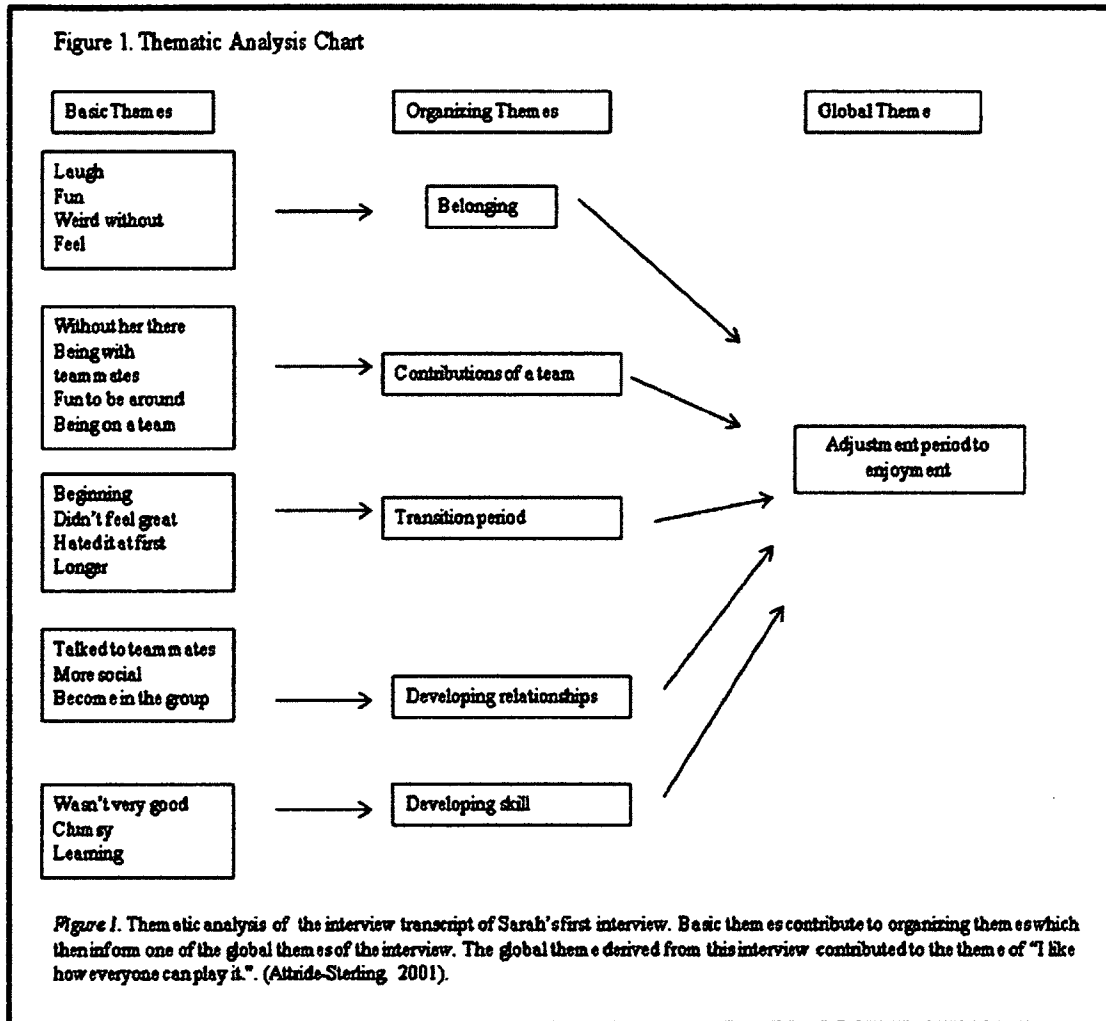
Thematic analysis is a process of analysis, interpretation and synthesis, pulling apart the data in an effort to summarize it in a meaningful and concise

manner (Stake, 1995). Thematic analysis was used to analyze the data from the interviews conducted with the SledgeHammers participants, inferring themes or patterns that illustrated the phenomenon (Boyatzis, 1998; Stake, 1995). In the process of thematic analysis, it is permissible to derive themes both inductively from raw data and deductively from theories used to guide the current research (Boyatzis, 1998). The themes that emerged from the data are not intended to be applicable to a variety of cases, but to draw focus to the multifaceted and intricate issues present in the observed case (Creswell, 2007). The data collected through observations, field and reflective notes and document analysis were used primarily for corroboration and in triangulation with the interview transcripts.

I used Attride-Stirling's (2001) approach to thematic data analysis by employing the use of thematic networks. Thematic networks, via illustrations summarizing the main themes drawn from the data "makes explicit the procedures that may be employed in going from text to interpretation" (Attride-Stirling, 2001). In accordance with Attride-Stirling, three classes of themes were derived. Basic themes or low order themes were derived from the textual data, and contributed towards the significance of higher level themes. Basic themes do not stand alone in providing information about the text; rather they need to be grouped together with other basic themes to create a second order organizing theme. Organizing themes are more representative of what the text is saying and also contribute to meaningful and significant higher order themes when combined with other organizing themes. Lastly, global themes were derived. They encompassed the data as the whole and acted as principal metaphors for the



analysis. Global themes are in effect summaries and illuminating interpretations of the text (Attride-Stirling, 2001). Figure 1. is an example of a thematic analysis of one of the interviews.



It is important to note that each individual interview can yield more than one global theme, though ultimately the number of global themes would be fewer than organizing or basic themes (Attride-Sterling, 2001). Following the analysis of each interview, each set of data and derivation of basic, organizing and global themes, a number of the super ordinate, global themes emerged. These global

themes were grouped by similarities and subsequently the four themes of this research study were derived. Before any final conclusions were made, the organizing themes that contributed to each of the global themes were revisited to ensure they were represented in the summary of the global themes to the final themes. Figure 2. through Figure 5. depict the global themes derived from each participant's interviews and their contribution to the four super ordinate themes.

Figure 2. "Cause the Coach Tells Ya'."

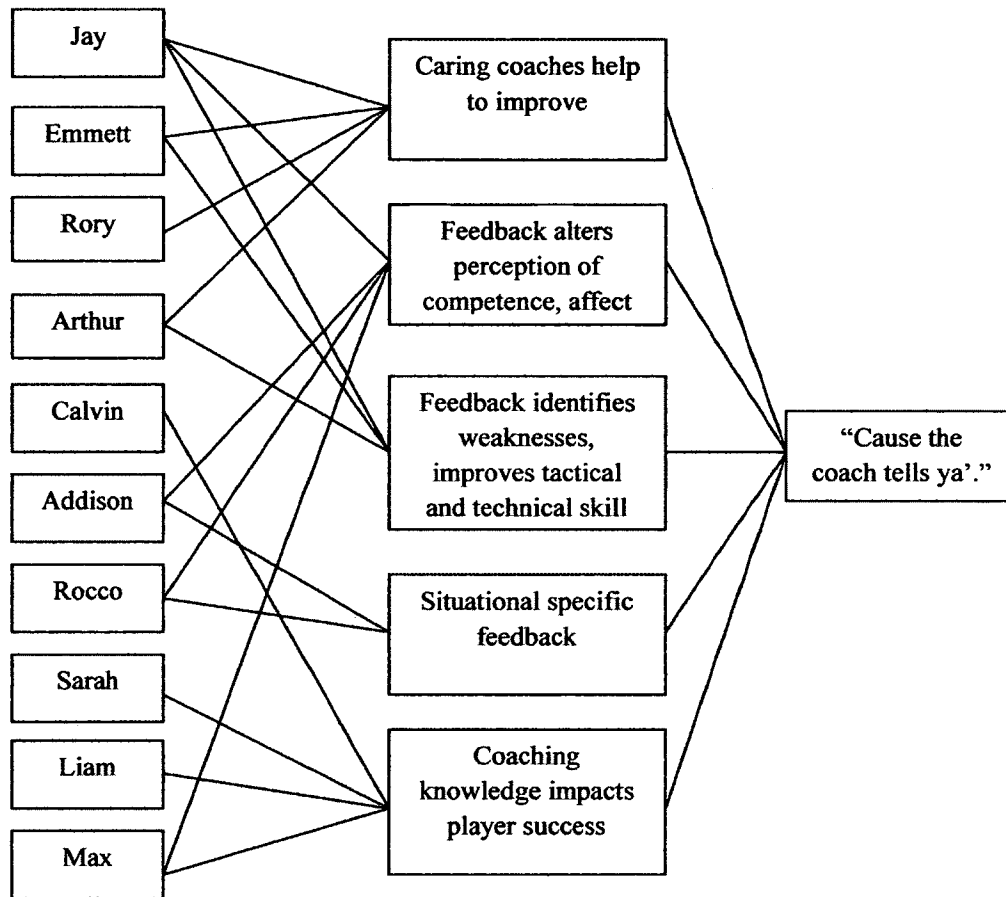
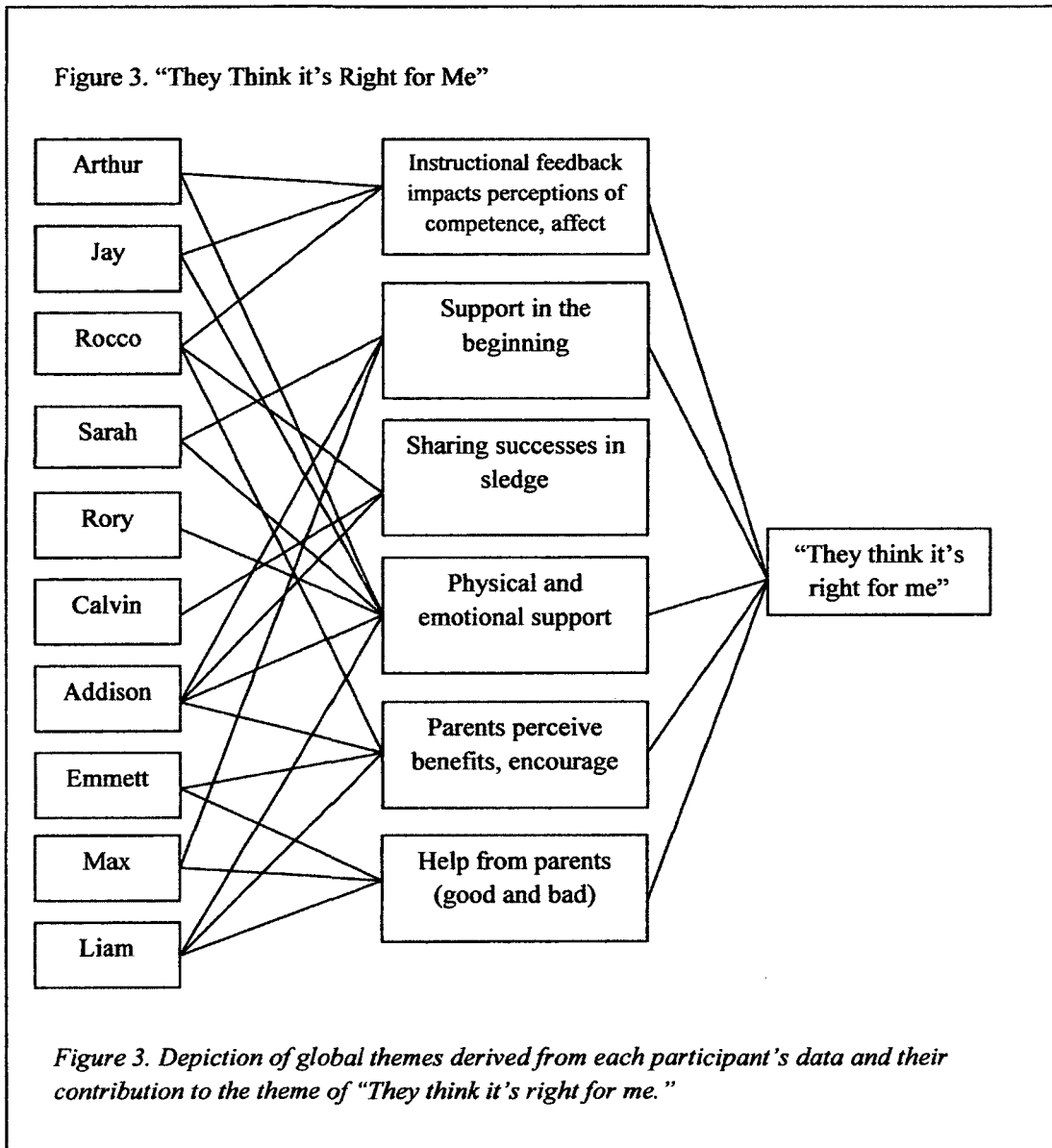
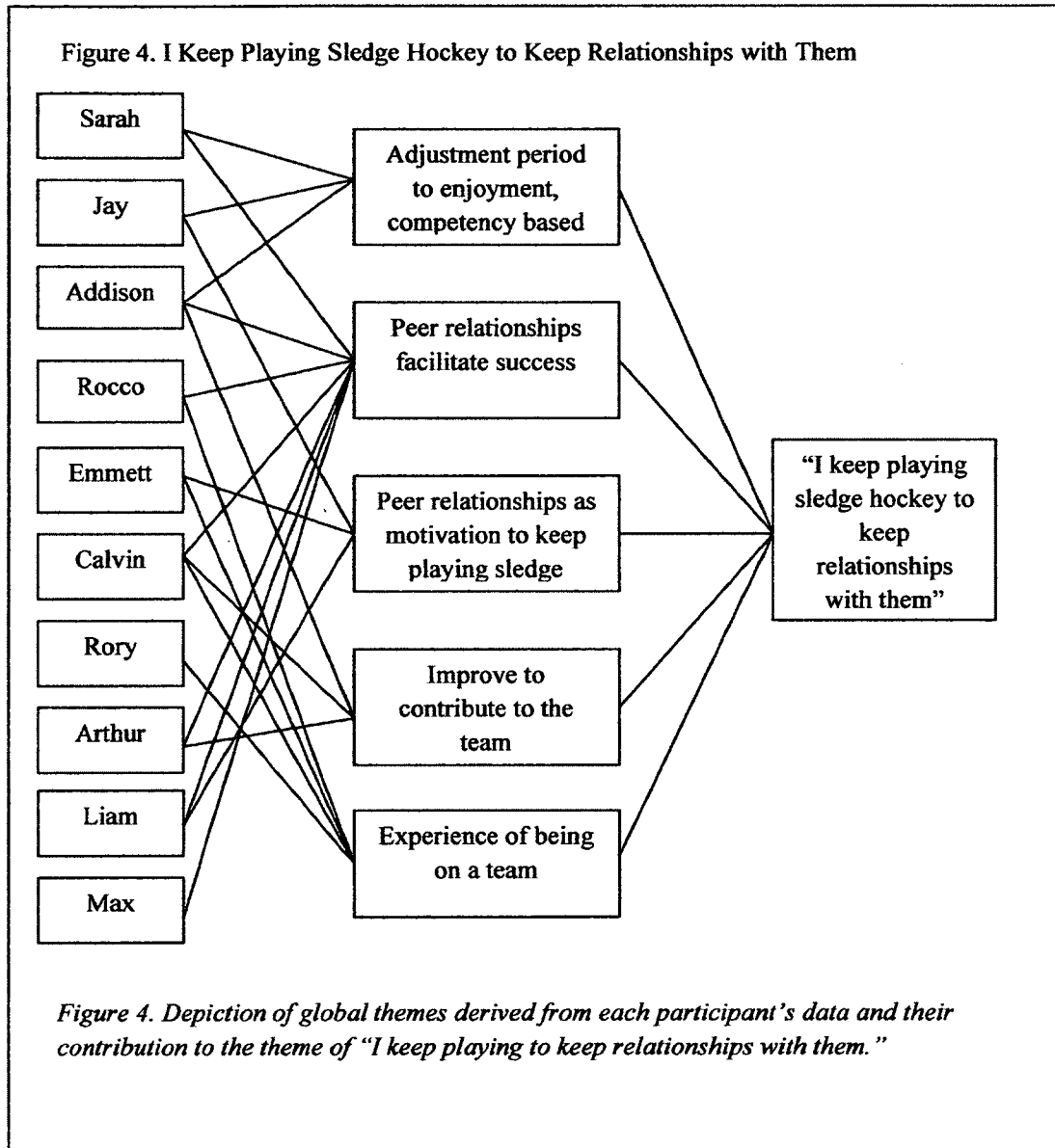
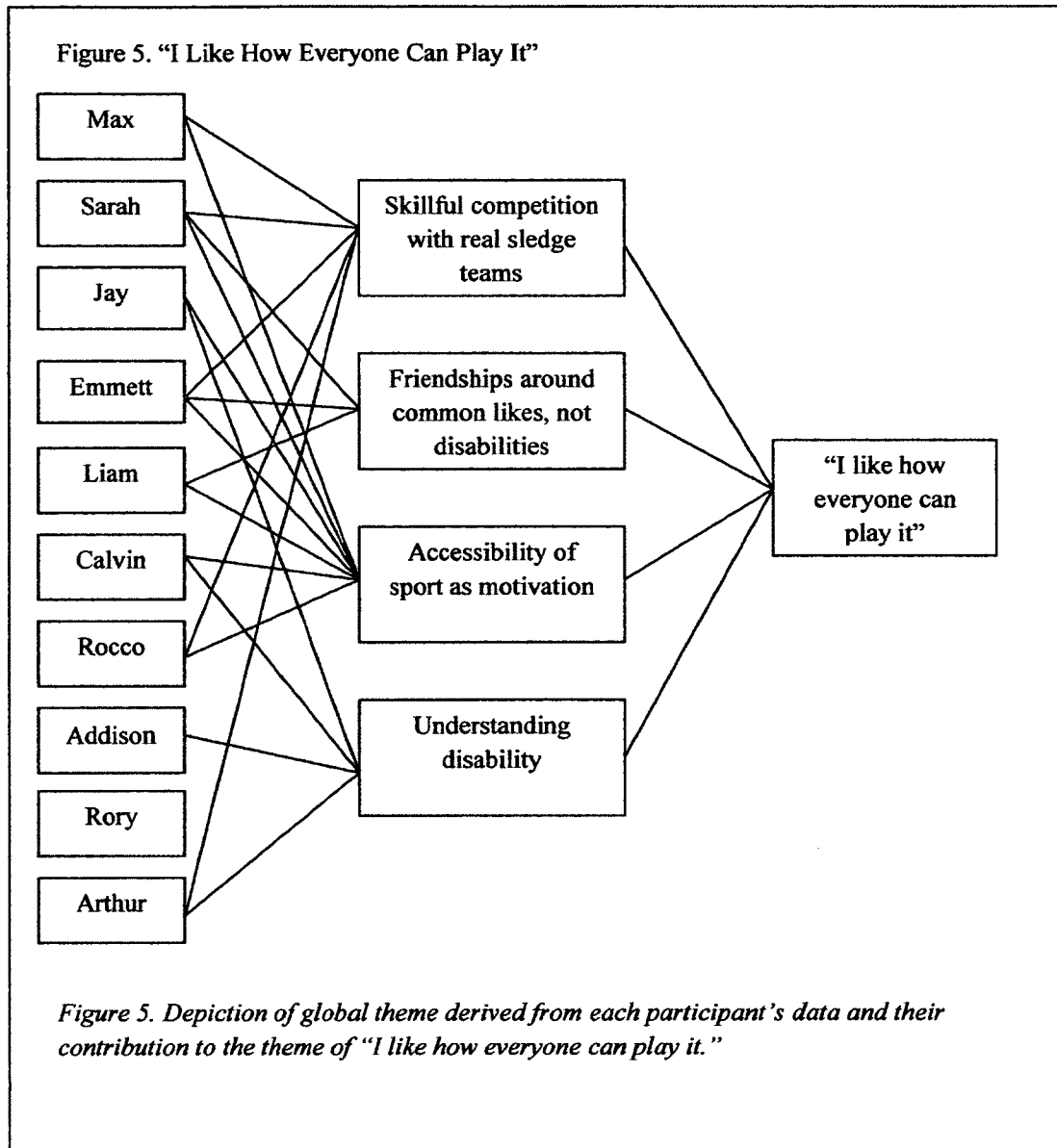


Figure 2. Depiction of global themes derived from each participant's data and their contribution to the theme of "Cause the coach tells ya'."







The six steps of Attride-Sterling's (2001) thematic network approach to thematic analysis are outlined in Table 2.

Table 2 <i>Steps in analyses employing thematic networks (Attride-Stirling, 2001, p. 391)</i>	
Step and Stage	
Analysis Stage A: Reduction or breakdown of text	
Step 1. Code Material	a) Devise a coding framework b) Dissect text into text segments using the coding framework
Step 2. Identify Themes	a) Abstract themes from coded text segments b) Refine themes
Step 3. Construct Thematic Networks	a) Arrange themes b) Select Basic Themes c) Rearrange into Organizing Themes d) Deduce Global Theme(s) e) Illustrate as thematic network(s) f) Verify and refine the network(s)
Analysis Stage B: Exploration of Text	
Step 4. Describe and Explore Thematic Networks	a) Describe the network b) Explore the network
Step 5. Summarize Thematic Networks	
Analysis Stage C: Integration of exploration	
Step 6. Interpret Patterns	

### **Trustworthiness**

Trustworthiness aims to establish the researcher's findings and interpretations as an argument for the "most probable interpretations" of the research data (Graneheim & Lundman, 2003, p. 110), as credible, transferable to an extent, dependable and confirmable (Lincoln & Guba, 1985). I endeavoured to establish trustworthiness through direct and participant observations and subsequent field notes, data triangulation, member checking during the second semi-structured interview, an audit trail, and by using multiple coders during the data analysis (Lincoln & Guba, 1985).

**Observations.** In an aim to holistically understand the context of interest (Patton, 2002), I acted as both a direct and participant observer at the SledgeHammers practices, games and tournaments. I was on site for approximately four weeks before the first round of interviews began and continued my involvement with the organization until the completion of the year ending league tournament. The total field research time was sixteen weeks. Engaging in the setting provided me a unique vantage point to observe goings-on that participants may have not readily addressed in the interview, in addition to increasing my proximity and understanding of events and occurrences in the environment that were significant to data analysis (Stake, 1995). Following the observations, I took detailed field notes which could be used as a source of reflection in data analysis as well as providing detail to help immerse me in the world of specialized sport (Patton, 2002).

**Data triangulation.** The use of data triangulation assists in providing credibility and confirmability to research findings, strengthening and supporting data interpretations (Lincoln & Guba, 1985; Yin, 2009). Data triangulation “helps to identify different realities,” to establish that despite multiple methods were used to collect data, similar conclusions were drawn from each (Stake, 2008, p. 133). Through the use of multiple data collection methods such as participation observations, field notes, semi-structured interviews, reflective notes, and document analysis, I endeavoured to increase the confirmability of the findings (Lincoln & Guba, 1985).



**Member checking.** Member checking assists the researcher in ensuring they have credibly and comprehensively represented the answers and experiences of the research participant (Lincoln & Guba, 1985). During the second interview with the research participants, I engaged in member checking. The second interview provided me the opportunity to present the participants with initial themes, quotes and summaries that were derived from their first interviews to check for correctness of my interpretations at the individual level. Participants were then provided the opportunity to confirm the appropriateness of the summaries and interpretations I had made. The participants agreed with my interpretations, clarifying their statements in answering any further questions I had from the previous interview.

**Audit trail.** During the course of conducting this research, I kept an audit trail to document how the research process evolved and how I made decisions. Essentially, the audit trail acted as a record of what was done during the course of the research. Audit trails assist the researcher in contributing to the confirmability and dependability of their findings as well as depicting the rationale for particular methodological choices (Lincoln & Guba, 1985).

**Multiple coders.** In addition to myself, two other coders took part in the analysis. These individuals were both graduate students, one had recently completed a qualitative research study with children for her Master's degree thesis, the other, was a PhD student and qualitative researcher with a keen interest in sport for individuals with disabilities. Both were knowledgeable of thematic data analysis techniques and had completed analysis on a number of interviews

prior to assisting me with my study. The coders were instructed to code the interviews after multiple readings of the transcripts using a coding framework I had created. I developed this framework following repeated readings of three of the initial interview transcripts I had received from the transcriber. The framework included phrases or words which routinely were present in the transcripts as well as being comprised of the “theoretical interests guiding the research questions” (Attride-Sterling, 2001, p.390). This framework was used to code all of the interviews. After the interviews were coded, the coders were asked to compile the data that were similarly coded and then asked to further derive themes from the data. Following this process, I met with each coder separately to discuss the codes and themes that were conceived. Minimal disagreements arose between the second coders and myself. On the occasion that discrepancies of codes or themes were present, the coders were asked to describe why they chose to code a particular section in one way as opposed to another. I then described my rationale for coding and deriving themes. We discussed these differences to the point of finding consensus in our interpretations. Gaining “intercoder agreement” (Creswell, 2007, p. 210) helps decrease the subjectivity of the data analysis process and assists in increasing the reliability and credibility of the themes drawn from the data (Creswell, 2007).

### **Ethics and Ethical Considerations.**

Qualitative research is a focused, intense process of inquiry centering on personal views and life circumstances (Stake, 2008). An application for ethics was submitted to the University Research and Ethics Board (REB) 1 using the Human

Ethics and Research Online (HERO) system. The application was submitted on January 6, 2012 and received approval on January 10, 2012. Through an amendment to the original application, the age range of eligible participants was extended from 8-12 to 8-16 in an effort to be more representative and inclusive of the ages of the participants on the SledgeHammers team.

**Informed consent.** All interactions with the participants and their parents were conducted in a manner concurrent with the Canadian Institute of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada (2010), which states that parents must voluntarily consent to their children's participation free from undue influence, and may withdraw this consent at any time. The children provided assent to take part in the study. No incentives were given to the parents or the children to participate in the research study. Following the completion of the research study, however, the participants were allowed to choose a photograph of themselves playing sledge hockey as a token of appreciation for their involvement in the study. Parents and children who chose not to participate in the research study or give photographic consent did not incur any repercussions as a result of their decision.

**Confidentiality and protection of data.** This study was thought to be of minimal risk to the participants and minimally invasive. Participants who engaged in a second interview received a summary of their responses and my interpretations of our previous interview in an effort to ensure they were represented in a manner in which they deemed accurate and appropriate (Stake,

2008). Ensuring participant anonymity in a relatively heterogeneous minority population can present challenges (Lewis & Porter, 2004). Pseudonyms were used for the nonprofit organization that runs the SledgeHammer team, the team name and participants. Transcribed interviews were subjected to the removal of all identifiable information before they were shared with other researchers for coding.

Electronic interview transcripts, digital photographs, and the transcribed interviews are currently stored on a password protected computer, as well as a secure external hard drive. Data will be retained until 5 years post publication at which time it will be destroyed. Personal information of the participants and the interview transcripts were only made available to the researcher and assisting researchers in addition to audio interview data being accessed to by the external transcriber.

## Chapter 4:

### Results

Four themes emerged from the analysis of the data: (a) “cause the coach tells ya’,” (b) “they think it’s right for me,” (c) “I keep playing sledge hockey to keep relationships with them,” and (d) “I like how everyone can play it.” These themes highlight the experiences of children with disabilities in the specialized sport of sledge hockey and the role that their relationships with coaches, parents and siblings, and teammates, played in their motivation to continue to participate in the sport.

#### **“Cause the coach tells ya’.”**

In discussing their sledge hockey experiences and in particular their relationships with the coaches, the players described strong feelings of encouragement and support. More specifically, from the players, perspectives, relationships with their sledge hockey coaches led to them having a greater tactical understanding of the sport and improved their level of skill. The desire to improve their sledge hockey skills was a key source of motivation for the players’ and helped to sustain their interest in participating in the sport. According to the athletes, the instruction and feedback provided by their coaches in practice were critical to facilitating their skill progression and overall performance in sledge hockey. By helping them to improve, the participants felt as though coaches truly cared about them. As Jay explained “...they [the coaches] want you to be the best that you can be and you can’t be the best if you don’t practice so they make you

practice hard.” The participants felt as though their coaches were encouraging their progress in the way they spoke to them, and by providing individualized feedback. The players expressed that the hard work their coaches asked of them was not without result, as they perceived actual improvement in their performances through their coaches’ involvement, instruction, and feedback as illustrate in the following quote from Jay:

“Cause they, you want to be the best that you can be like don’t want to be just the slow guy like I used to be the slow guy but then Dwayne [the coach] came along and I ended up getting pushed to the limit and now look at me - now I’m pretty good.”

Participants felt that through their coach’s instruction and encouragement they were able to achieve a level of skill that they could not have achieved alone. Players acknowledged that developing sport specific skills and learning the specific strategies needed to succeed in the sport were predominantly communicated to them by their coaches. Emmett explained that the role of coach feedback was to “make a comment on what we did and how to improve it and he [the coach] tells us if we did something wrong.” As Arthur explained, the verbal feedback provided by his coaches allowed him to gauge his successes and mistakes in practices and games. He shared that coaches let him know,

“... that you’re either doing good or you’re doing bad like and, and good means like if you had a good hit or you shot good. And the bad would be like a penalty or um not so good at accuracy, like the shot.”

Feedback from their coaches helped the players identify what skills they need to work on, and more importantly, how they could work to improve them. This type of feedback was perceived by the players to be particularly motivating. Feeling like the coaches believed in their abilities to become better sledge hockey players made the players want to continue playing and work hard to improve.

When discussing the types of feedback provided to them by their coaches, the players noted differences between practices and games. These differences were also supported through observations and field notes. During a practice, the following observation was made:

“Ran a shooting drill today...miss the net and skate a lap of the ice. The coach is hard on the kids, he pushes them to get the drills right, but they seem to have good rapport. He knows when it's too much, not constantly nagging them but is very communicative [of how to improve]. The other [coach] works more specifically with the goalie, one on one, taking shots and prepping him for the next drill.”

In practices, both coaches' interactions with the children were primarily based on technical skill development. For example, the coaches organized drills where the players performed specific tasks (like shooting on net), and then provided immediate feedback on their performances. The athletes expressed that this type of direct feedback was encouraging and led to individual improvement. Although this type of technical feedback in practices assisted in ensuring each player would improve their skills in sledge, players also felt that it contributed to

creating a strong and competitive team. Sarah said, “if you do just fun you won’t get better but if you do just drills you’ll be really good but it won’t be fun so you have to decide which one you want.”

Depending upon on the context, the players discussed the different types of feedback they were given. Whereas during practices both coaches focused on providing technical feedback, each took a different approach during games. Dwayne, the head coach, provided technical feedback to the players, communicating what needed to be done on the ice. In comparison, game scenarios proved to be settings where coach Steve “tells the people on the bench things that are happening and what you should do in that situation.” Players noted the value of both types of feedback on their performances, recounting being motivated by Dwayne’s vocal encouragement, and feeling better prepared by Steve’s on ice analysis. As Addison explained, Coach Dwayne encouraged him on the ice, “even to like yell like be aggressive and stuff [to me], I like being aggressive to the puck,” whereas Steve helps the players to “get like a hockey sense, like...how to play the game of hockey”.

The children also explained that the feedback provided by their coaches influenced the ways in which they viewed their sport competence, and helped them to recognize the improvements they were making. As Rocco explained when he plays in a game, he can only hear his coach’s voice:



“...I can hear him saying ‘that’s the way Rocco’ or someone or some other kind of praise during a game, lets me know that I do the right thing for that, that specific play and that makes me feel pretty good. ‘Cause I know I’m getting better at handling.”

Although players most often shared that the feedback they received from coaches was supportive and encouraging, there were also times when feedback intended to motivate or instruct had a negative impact on participants. Jay perceived himself to be one of the more skilful players on the team, he discussed the different ways coach Dwayne directed feedback towards him compared to the other less skilled players. He shared, “he only does it [yells] to like the good players... he won’t do it to like Rory or any of them, the slow ones.” For Liam an overemphasis by the coaches on the things he did well at times detracted from his progress. He said,

“I’d rather have constructive criticism than be like oh you’re doing this good but you suck at this, but I’m not gonna talk about that ‘cause you’re doing this good. I would rather know those little things in order to get better by myself than not knowing them and just being focusing on the good things.”

Several players shared instances of feeling singled-out and frustrated by the ways in which their coaches had provided feedback. Addison spoke of a time when his coach continued to provide corrective feedback throughout a practice and said, “...I felt like he was only yelling at me.” In the following excerpt Jay

explained how he was affected following a disparaging remark from his coach about his poor play:

Interviewer: So when, when you get sworn at how does that make you feel?

Jay: Ticked off.

Interviewer: Oh so you get a little bit of angry?

Jay: Yeah.

Interviewer: Why does that make you angry?

Jay: Well I just don't, I don't know it just kind of ruins your self-esteem.

While most players described coach feedback to have either a positive or negative impact, Rocco shared how the feedback he received from his coach could impact him in both ways. In describing the feedback he received during a game from Dwayne, Rocco said:

“In context when it's happening it tends to make me try to go faster. Uh and tends to motivate me...[but] when I think about it after, after the fact it makes me think that I wasn't going fast enough.”

Although initially motivating Rocco to work harder, upon reflection this type of feedback also led him to question his abilities. Rocco's statement highlights the significant influence that coach feedback can have on an athlete's self-perception of competence.

In general, the younger participants positively perceived their coaches at sledge hockey. One player said, the coaches “never like [did] something to discourage me or anything,” and another suggested that if he were rating his coach, it would be “a 5 out of 5.” Coaches were seen to greatly impact the experiences of players specifically when they were beginning their involvement in sledge hockey. This was described by Max who said, “when I first started out I was playing defence so [they were] helping me, helping me to say where I was supposed to go and so that was helping me out a lot.” The older participants, while generally expressing that both coaches were supportive, were also critical of them in certain respects. There appeared to be a limit, from the older players’ perspectives as to the expertise the coaches could provide. This limitation seemed to be contingent on the fact that both coaches lacked sledge hockey playing experience. This dissatisfaction, which was felt by the older, more skilful players, was summarized by Liam who explained that the coaches lack of sledge specific knowledge was frustrating:

“to see him like maybe try to learn how to play sledge, like just so he could become a better coach... if you’re not trying to learn, like don’t know the sport or aren’t trying even to learn the sport by yourself, how are you supposed to be able to coach the sport? So even just to see him get on a sled once in a year”.

Having a coach who had not played sledge hockey was, for the older, more skillful players “almost counterproductive and it doesn’t really teach us anything”. According to these players, taking time to play the sport, learn the

game and create partnerships with elite level sledge hockey players in order to gain sledge specific knowledge were ways the current SledgeHammers' coaches could improve.

**“They think it’s right for me.”**

According to the participants, their families and parents in particular, played a significant role in supporting their participation in sledge hockey, which in turn contributed to their enjoyment of the sport and motivation to play. The theme of “...they think its right for me” reflected the participants’ beliefs that their involvement in sledge hockey was not simply supported by their parents, but valued and encouraged. This was illustrated by Jay who said that his parents were “pretty happy and proud that I play sledge hockey” and that they enjoyed “the fact that I’m going out and doing things actively. Um I’m getting to know people, making friends.” Participants spoke about their families’ involvement in sledge hockey in several different ways. Parents played a key role in making attendance at sledge hockey possible by providing transportation to and from practices and games. They provided encouragement as the participants gained entry into the sport, and then continued to support their participation through game attendance. Parents and siblings also provided feedback to participants about their game play and skills. While this feedback was for the most part well received by participants, there were also times when the players felt criticized and demotivated by the feedback they received.

Recognizing the sacrifices made by their parents to make certain they could play sledge hockey demonstrated to the players that their parents believed their involvement in the sport was important. For many families, ensuring their children could participate in sledge hockey involved large amounts of time dedicated to driving to and from the arena. Liam explained, “[it’s] a lot of driving but you know, it’s like a good outlet for me and I think they [parents] like seeing that, seeing me happy.” The participants recognized the time and effort that was required of their parents to make their participation in sledge hockey a reality and interpreted these efforts as support for their current and continued participation in the sport. For the participants, the fact they were still involved in sledge hockey could only mean that their involvement was important to their parents, or as Rocco explained “If dad wasn’t happy that I played Sledge Hockey he just wouldn’t drive me down, or he would be very reluctant to.” Jay felt that if his parents didn’t enjoy his involvement in sledge hockey “...they wouldn’t buy me new stuff [sledge equipment].” Having their parents “take their time and drive me out to practice” spoke volumes to the participants, who felt that these actions indicated their parents “actually want me to keep doing this sport for the rest...of...my career and more.”

Although parental support was viewed as important at all times by the participants, it was particularly critical when they first began their involvement in sledge hockey. During this time, parents were the participant’s greatest source of comfort and motivation when players felt uncomfortable and unsure of their abilities. Sarah described the pivotal role her mom played in her decision to stay

on and participate in sledge hockey when she first began. She said, “because without my mom’s support, I wouldn’t have stayed in sledge after the first few weeks.” Transitioning into sledge hockey was difficult for a number of the participants, and the support of parents was very important. Liam, who initially began his involvement in sledge hockey in a rural location, was even accompanied by his father and siblings to sledge hockey practices in their hometown to build up his confidence and skills before joining a team on his own.

For the participants, the presence of their parents in the stands was a profoundly significant and motivating experience. One participant maintained that his family’s willingness to attend his sledge hockey games led him to believe that “they care about me playing sledge hockey.” The participants felt as though their parent’s support of their involvement in the sport meant they were doing something important and legitimized their participation. A parent or family member’s presence at a game made the participants feel good about their participation, showing them, “that the parents enjoy watching their kids play and that just the general audience enjoys watching it.” Parental attendance at games and practices made the participants feel that sledge hockey was more than an activity for children with disabilities but rather an exciting, fast-paced sport that required skill to play. Max described the significance of having his family attend sledge hockey events and the impact their presence had on him. He shared, “they’ve come to pretty much all my games...they just come, they, they always come and watch me play and yeah, cheer me on and encourage me to play more.” Addison also expressed that his mom’s presence also “encourages [him] more.”

Conversely, should this physical show of support not exist participants expressed that they would not be as motivated to participate in the sport. As one participant explained, if his parents weren't there to watch him participate in games "it would matter a little bit, I'd feel sad for a little bit... they're not coming... it makes me feel sad, discouraged for a little bit." Participants looked to their parents, and their parent's involvement with them at sledge hockey as a significant source of motivation and validation.

Sibling relationships contributed in some ways to the participants' enjoyment of their time in sledge hockey, though these relationships appeared to be far less important than the ones shared with parents. Often, siblings were younger and did not take much interest in their older sibling's involvement in the sport. Contrastingly, older siblings' support of the participants was meaningful. When the older siblings were in attendance, participants described feeling overjoyed that a game they were playing was of interest to an older brother or sister. As Sarah explained, the last sledge hockey practice of the season, where friends and family were encouraged to try out the sledges, "was the first game my brother had come to so it's just really fun that he was there." Though irregular in their involvement, the participants appreciated their sibling's presence as Liam indicated, "that's nice to have support like that with your siblings and family."

Game settings proved to be the most common settings for parent/child relationships to foster a sense of pride, positive affect and motivation. It was significant for the participants that their parents be present to share in their successes. As Rocco explained " ...if I have an achievement like I score or I shut

down someone's break away chance I want him [my dad] to be there to see that." Successes in sledge hockey were something both the parent and child could share in and provided players the opportunity to demonstrate their abilities. Exhibiting competence in the domain of sport and in a competitive context fostered an immense sense of pride for the participants. When asked what he enjoyed most about sledge hockey, Max explained, "favourite part is being on the ice and skating around...[and] getting all the goals and hat tricks and assists and yeah, and getting all the big hits." Addison's mom was also proud of his achievements. He described how she had organized a sledge hockey day at school where he instructed introductory sledge hockey lessons to his peers for the entire day.

Parents also provided significant emotional support especially following a difficult game. Liam shared, "[they] try like console me or whatever to help me get better and build off the last game." When a game ended in a loss, participants looked to their parents, not only for consolation, but confirmation that regardless of the outcome they in fact were improving. The strongest indicator for the players that their parents supported their involvement was that they encouraged success in them. When asked to describe how he knows his mom likes him to play sledge hockey, Arthur responded "like they say go, like go, go, go."

Parental encouragement in sledge hockey was always welcomed by the participants; however, commenting directly on their performances, particularly on what skills they needed to improve on was interpreted and internalized by participants in two very distinct ways. Feedback perceived as informed and instructive was well received by the players. Participants appreciated when their



parents identified an area that needed work, feeling that it reflected their parents desire for them to improve and be successful in the sport. For example, Addison shared that typically on the way home from practice he chats with his dad about “what I should do in sledge hockey like what I should work on and if I should uh go more for the puck and pick harder and like try to go faster.” A number of the players indicated that the feedback they received from their parents was positive and “encourag[ed] me to keep playing, encourag[ed] me to get better.” This type of feedback affirmed their potential to improve in the sport, which subsequently encouraged further involvement in sledge hockey. Jay’s mother regularly attended practices with him, however, he was glad she did not provide any technical feedback, as she “doesn’t know anything about hockey.” Alternatively, Jay looked forward to occasions where his father was in town to watch him play because he had knowledge of sledge hockey and could provide “good feedback after.” Sarah felt good about the type of feedback she received from her parents and said that her parents noticed “when I make a good play during games so they’ll usually comment on it or if I make a bad play how I could improve on it.” When asked to describe what his parents would say about his involvement in sledge hockey, Addison offered “they’d probably say I improved a lot from when I started and I’m, uh I’m getting better and I yeah I’m getting better and I work harder and I’m getting more aggressive from when I first started.” Acknowledging the improvements they made in the sport bolstered the participant’s confidence in their ability, strengthening their resolve to keep practicing and participating.

Parents and siblings who were quick to criticize did so with lasting negative impact. Sarah recounted the first game her brother attended as an observer and “mentioned a bad play I’d made.” Sarah found it difficult to cope with the negative feedback and felt her brother did not appreciate the skill required to be successful in the sport. Rocco had a similar experience when he described the following situation:

“...occasionally dad will say I didn’t do something that I should have, during practice or a game or something. Kinda wish he wouldn’t do that except I guess it is positive reinforce, uh constructive criticism... I kind of wish they wouldn’t say somethin’ like that, ‘cause I kind of try.”

Commenting on a lack of skill, without providing suggestions how they could improve was difficult for participants to accept. As Rocco explained, “the thing is dad never actually tells me that I should do this and this differently ’cause he almost has no idea what hockey is.” For the participants, negative feedback on their performances was associated with negative perceptions of competence, which resulted in decreased enjoyment. It was also important to the participants that their parents recognized their effort not just their physical performance.

While the participants tended to focus on transportation to and from the arena, games, and practices when discussing their interactions with parents, events occurring in the dressing room and transferring on and off the ice also provided information about the children’s relationships with their parents. On several occasions the field researcher observed frustration on the part of both players and

parents in these settings. For example, Emmett who exclusively used a wheelchair for mobility preferred to leave his wheelchair in the dressing room, and crawl on his hands and knees to his sledge on the ice a short distance away. However, he was not always permitted to do this by his mother who attempted to assist him in transferring into his sledge, as was outlined in this field note:

“Today his [Emmett’s] mom wanted him to use his chair up to the gate so she could help him but he didn’t want to. He’d rather crawl and do it himself. She didn’t want him crawling it’s probably like 3 meters from the dressing room to the ice. They had a bit of a spat with him looking at her and saying “Mom” like perhaps why are you doing this why can’t I do it myself stop being so stubborn.”

A similar scenario played out with Jay, who in order to get into his sledge would go to the team’s bench to take off his prosthetic legs and transfer with the help of his mom. On one occasion the following observation was made:

“She [Jay’s mom] tried to take his sledge out onto the ice and he was quite cross with her. He waived her off and quite loudly and whiney said “No! I can do it”. And she tried again and he looked at her, right in the eyes and said no. And then he got out over the lip into the bench and went on the ice himself. It was as if he needed help but only to a certain point.”

In contrast to Emmett and Jay, Arthur consistently received a large amount of parental support when getting ready for sledge and accepted the assistance willingly. He explained that he needed assistance to tape his stick to his hand

because “I can’t grasp it that well”. Interestingly, when a photograph of Arthur and his mom on the ice was viewed by another participant in his interview, he exasperatedly described that it, “really seem(s) [like he is]... almost belittled like (his mother is saying) oh I, I have to help you with this, it’s kind of, it’s frustrating for me”. The role of parents in the participants sledge hockey experiences was multifaceted. Parents were viewed as critical due to the support and encouragement they provided. However, instances of conflict and disagreement with their parents were also shared by the participants and observed by the researcher.

**“I keep playing sledge hockey to keep relationships with them.”**

As players shared about their experiences in sledge hockey, the importance of peer relationships was highlighted. Establishing relationships with teammates was critical to developing a sense of belonging. Forming these relationships, however, appeared to rely heavily on sledge hockey competence from the perspectives of both self and others. Competence appeared to play an important role in developing friendships, but also in the way players felt about their roles in teaching to, and learning from, each other. Having positive peer relationships was viewed as integral to team success.

Players discussed how making friends with other players was associated with achieving a certain level of skill development. One participant described that forming friendships was not easy when she first started sledge hockey, but that it became easier as she developed her skills. She said, it was “difficult to start but

then as I improved, they just, everything got better as I improved.” Similarly, another player explained that it was important as a new player to demonstrate basic competence in the sport in order to feel that he belonged as highlighted in the following quote:

“when I’m just like falling over at every turn my team doesn’t really notice me but as I’m getting faster and I’m catching up to them they’re like oh hey and then they try to get to know me better ‘cause I’m at their level of skill.”

Routinely described was the desire to improve in order to make contributions to the team, and how adding to the team’s successes facilitated a sense of belonging. This was illustrated by Max in discussing his most successful experience in sledge hockey. He shared, “we had a tournament... came back with gold... and they [teammates] all were happy that I came... I still went, played all the games, and got four hat tricks.” In scoring these goals, Max not only felt appreciated by his team for the successes he had, but also that his presence signified potential success for his team in saying “they (teammates) were happy that I gotta come... and got a gold.”

Although players described the importance of having a certain level of skill to feel accepted by their peers, it was also important to feel comfortable and supported by teammates in order to improve their skills in the first place. When Sarah first started playing she loathed sledge hockey, as she described being self-conscious of her beginner skill level. “At the beginning I was super quiet, wasn’t

very good, um felt awkward and clumsy,” she said. For Addison, having a friend on the team led to a sense of comfort that acted as a gateway to a more satisfying sporting experience “... I kinda like him as a friend so he makes me...feel more welcome than other players.” When asked to explain why being friends with players was important, Rocco offered, “well it’s a lot easier to play sledge hockey when you’re with a bunch of friends than it is to play with a whole bunch of strangers.” These relationships further contributed to the players’ desire to continue playing sledge hockey. As one participant explained, sledge hockey practices and games were welcome occasions. He said, “between going to sledge hockey, playing with friends and stuff like that rather than staying home, watching TV, I’d rather play sledge hockey.” Forging relationships with teammates was perceived as having a positive impact on the success of the team. Furthermore, feeling more comfortable on the team and in their athletic abilities allowed participants to worry less about their skill level and enjoy their participation in the sport. As was suggested by Liam:

“by being more comfortable they [teammates] can... relax more and then they can...work like harder instead of being stressed ‘oh I might not do this right’, but then you have...the support of the other teammates cheering you on or helping you to get better and then... you don’t have to worry about that.”

New players often looked up to older, more skilled participants as role models. Players felt that developing sledge hockey skills was contingent on relationships with other highly skilled teammates. Other players identified as

significant to the experiences of the participants were described as “the first one to show me where to go and teach me how to do stuff.” Often, these roles were recounted as being facilitated by the same individuals on numerous occasions; typically older, more skilled players, who themselves had experienced difficulties transitioning into the sport. For younger participants, a teammate’s skill was a source of motivation to become better in the sport. Addison said, “because if you didn’t have someone to look up to... you wouldn’t like uh have like a goal to get better.” Seeing teammates improve and experience success led less skilled players to believe they too could improve their skills and achieve successes.

In a similar manner, older teammates felt they had the ability to positively impact their younger teammates’ skill levels and that being seen as a role model to the younger players improved their own performances as well. As Liam suggested “... it makes me uh wanna work harder in order to like show them [younger teammates] what they should be doing or how to get better.” Some participants felt their younger teammates could actually learn more from the more experienced players than from the coach. In discussing a photograph of a more and less skilled player talking, one participant described his preference for learning from teammates over learning from a less knowledgeable coach. He shared,

“...I like this [photo] because there’s no coach in it and it’s just like our teammates helping him... cause the, like team helping him and how he’s progressed through I think, through that help from the team.”

Players described the distinct differences between the role of a coach and a role model on the team. Older participants felt they were able to teach their peers more effectively because of the sledge specific skills they possessed, and that because they were sledge hockey players, they could better convey what the coach was trying to teach. As one participant explained, teammates were an invaluable source of knowledge and could teach things “that you can’t experience unless you’ve actually played sledge hockey.” Whereas the coach would tell the players what to do, having relationships with peers meant being able to ask for, and receive help from a teammate on how to accomplish a particular task.

The dressing room was also an important place to observe the relationships between players. In addition to teaching skills, players also assisted each other in different ways as illustrated in the following field note:

“Trying to get into his [Arthur’s] jersey. Having a tough time with all the equipment on. He pulled the jersey over his head, got his arm in it but the other arm (the one that seemed to have a contracture in it, the weaker one he has to get help taped) doesn’t reach up very high so he couldn’t pull the jersey over his head. He struggled, everybody was laughing. Eventually one of his teammates came over and pulled the jersey down over his head for him. He said thanks and smiled...finished getting his stuff together... and then went out onto the ice”.

In many ways, the dressing room proved to be the hub of teammate camaraderie a place to “fool around”, as illustrated in the following observation, “kids slowly



start trickling out, more joking, this is their social time, before and after [in the dressing room]. On ice it's business". Here, it wasn't uncommon for teammates to joke back and forth, teasing "their teammate about his shocking bleach blonde hair". The dressing room provided a venue for peers to share their experiences in the sport. This included a desire for a more rough and tumble game, as was evidenced by Arthur's tales of trying to "get rocked". A friendly level of competition was evident between the teammates, with players observably "really [going] at it on the ice. They bump into one another, tease each other back and forth".

Sledge hockey provided a unique forum for players to form relationships with each other. Although disability was a common experience among the players, it was the players' desires to compete as part of a team and develop friendships that appeared to be most salient in their relationships with each other. As Arthur described, for him the best part of sledge hockey was being "able to play with my friends." Rocco summarized the impact participating in sledge hockey had on his relationships with teammates in saying,

"Well one factor that I keep playing is the group of friends that I have at sledge hockey that I would never talk to like, I don't usually talk to those friends outside of sledge hockey 'cause I don't go to their school... so I go there, I keep playing sledge hockey to keep relationships with them."

**“I like how everyone can play it.”**

In recounting their sledge hockey experiences the players often referred to the accessible nature of the sport and how it accommodated diverse physical disabilities and ability levels. In fact, this was identified as one of the best and most important aspects of the sport. When asked to describe what the sport of sledge hockey was, Jay explained “... uh it’s basically just hockey in a different way so everyone can play.” A number of the players valued their participation in sledge hockey because of its uniqueness in accommodating their individual differences. Emmett expressed how playing sledge hockey felt and why he continued to participate. He explained, “it’s fun and uh one of the only sports that I can do.” For some participants, a sense of pride in their participation was evident outside of sledge hockey. For example, Addison described how sledge hockey became part of his identity in saying “I have my own sledge hockey jacket and I... talk to it about my... friends at school... and on announcements.”

Taking part in a sport setting that could facilitate the engagement of all the players led to additional opportunities to engage with others with similar or different disabilities and abilities. This was illustrated by Max who said, “sledge hockey is an adapt[ation] of uh ice hockey sport that’s for people like me in a wheelchair or with, in crutches, and um and that have no legs.” Max further described the diversity of his teammates when he said, “... you can have, no legs and one leg, half a leg... you can have any disability and you can still play sledge.”

Instead of emphasizing their disabilities, players spoke about having similar abilities to their teammates and the successes they could share in together as a team, which contributed to gratification in playing the sport. In fact, when asked to describe his team, Max explained that the SledgeHammers were “a bunch of kids playing sledge hockey but most of ‘em have...different disabilities.” Often, the children spoke about their motivation to continue playing sledge hockey, in part because of the team component, which allowed them to create and maintain friendships but also because they were actually able to compete in the sport and contribute to the team’s success.

Interviewer: OK. What do you say about sledge hockey?

Arthur: I say that I would really like to get it in. I think it’s really, it’s a really good feeling...to like play.

Interviewer: What, what’s the good feeling about it?

Arthur: Um that um you get to uh like to help your team score goals...

Although disability was not identified as the most prominent feature in their sledge hockey experiences, several of the players indicated that their teammates understood the challenges that were at times disability related, that their peers faced in pursuing a very physical and skillful game. This understanding among peers lead to a supportive environment where the participants felt at ease because their peers were “... all nice ‘cause they make mistakes too so they know [about disability].” Furthermore, peers understood the significance of being given the opportunity to make choices and experience

challenges, “I’ve seen a lot of parents like see people strugglin’...so they just take the stuff outta their hands... Instead of you like takin’ stuff outta of their hands. You should let them struggle. So they learn what to do .”

Seeing other players with similar abilities motivated the participants to believe they could also succeed in the sport. Sarah found a role model in Liam, who shares a similar orthopedic impairment and described that he was the most significant player on the team to her because “he’s one of the best players on our team and he’s really good at like noticing when you make a good play... and he gives you a lot of feedback.” The “fully accessible” nature of the sport in that people with a wide range of disabilities could participate in the sport was a desirable and valued aspect of sledge hockey involvement. This was confirmed by many participants on the team who responded in a similar fashion that the best part of sledge hockey was that “all different people can play it with no legs and really bad disabilities and stuff.” This was highlighted by Emmett who chose a photo of himself carrying his equipment off the ice to illustrate “that everyone, even wheelchairs can do it.” Further support for these findings was established through observation and field notes as the impairments experienced by individuals on the team varied greatly, with some experiencing minimal physical impairment off the ice, while other’s used mobility devices such as wheelchairs. This spectrum of impairments is illustrated in the following field note through Jay, who used prosthetic legs and required some assistance balancing on his sledge: “his [Jay’s] blades are set really close together so once he takes off his legs and then sits in the sled he’s really quite unstable,” whereas “some participants are able to

walk out onto the ice and put their sledges on there, while others wheel out and get out of their chairs, and yet others crawl out [onto the ice from the dressing room].”

Sledge hockey’s relative infancy as a sport meant the SledgeHammers could compete against a limited number of teams. In comparison with the previous year, however, this season was much more competitive as Liam explained:

“...last year was just like playing hockey for fun, it wasn’t really any purpose to it but this year with the [creation of the] League it really gave like actual competition, with actually like real games and stuff like that. So it gave a sense of realism to the sport this year.”

Disability was also referred to when players described competing against other teams. Arthur explained that he enjoyed “playing against other teams that have the same kind of [strong] ability as we [do].” Participants felt that competing against other sledge teams, who had players with disabilities, gave them the opportunity to learn from those who had similar impairments, showing them what was possible. As Max explained “what’s inspired me to play more sledge is just meeting the ones that are more physical than I am or have more physical disability than I do.” Games and tournaments against other participants with disabilities were valuable opportunities for the participants to gain an understanding of their own skill levels. When asked what made tournaments more fun to attend than games or practices, Emmett remarked that they were “more competitive.” The

competitive nature of sledge hockey was of personal significance to the participants and legitimized their involvement in the sport as more than a recreational opportunity, but rather, as a place to hone their abilities, to grow, and to succeed.

Despite the creation of a league, the opportunities to play against sledge hockey teams were still limited. To increase game play the players also competed against stand-up teams, who would use sledges for these occasions. Participants described a preference for competing against authentic sledge hockey teams with players who had disabilities. Part of the allure of playing other teams whose players had disabilities was because of the high level of competition. Stand-up teams who competed in sledges did so with difficulty. In these instances, the Sledgehammers' athletes possessed more skill and sledge experience and were at an advantage in the sport over the players without disabilities. Playing stand up teams was "...alright, it's still fun," though often, these games were lopsided affairs. Emmett described how the team changed their strategy during these games in an effort to make them more enjoyable for all participants:

"This is when like playing stand up team we don't... get very many shots on net so [we] let the goalie play out, and we'll get another person to go in net and play... So it gives the goalie a chance to be in the game too."

Players revealed that they found this reversely integrated setting did not provide them with a rewarding athletic experience. Participants described a sense of disappointment as they felt their abilities were not being adequately challenged.

Even though the SledgeHammers consistently won the matches, the players did not experience the same level of satisfaction as they would have against an authentic sledge hockey team. As Sarah explained:

“most of us enjoy playing other sledge teams better...’ cause we don’t really get much out of it ourselves at least... we don’t try our hardest to win, we just go in an easy pace that keeps us moving but doesn’t work us too hard.”

This lack of competitive play was also acknowledged by the coaches. This is illustrated in the field notes in a conversation I had with one of the coaches prior to the beginning of a game against a stand up team. I said, “ ‘ oh it’s a game today” and he smiles and laughed and said ‘oh it’s not going to be much of a game today.’ ” During that same game the following field note was made: “Ten minutes into the first period the coach goes over to the other team and tells them they can have two extra players on the ice because they’re getting walloped.” The coaches anticipated the Sledgehammers would emerge victorious and even went as far as to give the other team more players in an effort to increase the competitiveness of the game. The vast discrepancies in skill between the stand up team of hockey players and the sledge hockey players were, however, always noticeable in the final score, with the sledge hockey team regularly winning games by a margin of five goals or greater.

These occasions did contribute to a greater understanding and appreciation by the stand up hockey players of the skills required to be successful in sledge

hockey. For example, when the stand up team's goalie managed to "make a save everybody, both sides, parents of kids with and without disabilities go wild," reinforcing that the skills considered routine for sledge hockey players to complete, were a challenge for stand up players using sledges. This observation was further highlighted by remarks made by a stand up hockey player during a sledge hockey match where the following field note was made: "interesting experience, one of the kids from the other team [the stand up hockey team] said [to his teammate about a SledgeHammer player] "he's so good, no they're all so good!"

For the authentic players, though, there was no challenge in these games, as they were "clearly superior sledge hockey players." These game situations did not test them from a technical or tactical perspective and did not contribute to their growth as players or as a team. The lack of competitiveness led one player to muse that he would rather participate in stand up hockey "because... there's more opportunities... like there's more teams and stuff playing stand-up hockey. Whereas we have to play mostly stand up games in sledge hockey." Regardless of the outcome of the game, the SledgeHammers preferred competing against other sledge hockey teams, whose players had disabilities due to the higher level of skill those teams possessed.

For many participants a significant motivator to take part in sledge hockey was attributed to the competitive nature of the sport and the opportunity to test their sport skills. In an effort to expose the team to more competitive settings throughout the course of the season the SledgeHammers began to enroll in a more



competitive classification at tournaments. Though rarely departing with a win, Addison summed up his enjoyment of competition playing the sport in saying “as long as I had fun I don’t care if I win or lose at all.” For Addison, the act of competing was fun.

## Chapter Five

### Discussion

Although there exists a range of opportunities for children to take part in integrated sport settings, many children with disabilities and their parents choose to take part in specialized sport activities comprised solely or primarily of children with disabilities. The purpose of this case study was to explore the experiences and perspectives of a team of children taking part in the specialized sport of sledge hockey. Of particular interest were the children's relationships with their coaches, parents, and peers and the role these relationships played in the children's motivation to take part in sledge hockey. Though the significant impact peers and peer relationships have on sport and physical activity have been observed in integrated sport settings (Spencer-Cavaliere & Watkinson, 2010; Goodwin & Watkinson, 2000), limited research exists that examines the influence of coaches, parents, and peers in specialized sport (Martin, 2006). In consideration of physical activity motivation in child and youth sport, in addition to the individuals surrounding the child, actual and perceived competence, and affect must also be taken into account (Smith, 1999). The four themes of this study: (a) "Cause the coach tells ya'," (b) "They think it's right for me," (c) "I keep playing sledge hockey to keep relationships with them," and (d) "I like how everyone can play it," are discussed in relation to the relevant literature and Harter's theory of competence motivation.

## **The Role of Coaches**

Player and coach relationships are viewed as vital by players who actively seek out improvement in performances and feel that feedback from coaches contribute to their betterment as athletes (Swanson, et al., 2008). For the Sledgehammers' participants, the role of a coach was defined as someone who provided encouragement and instruction. From the perspectives of the participants in this study, the instructional feedback provided them by their coaches impacted both their actual and perceived sledge hockey competence, leading to a desire to improve and work hard. This is in keeping with Harter's suggestion that evaluative information can significantly impact a child's perception of competence. Support for this finding is also provided by Swanson and colleagues (2008), who found that coaches who emphasized skill development and improvement enhanced the desire that children with disabilities had for self-improvement in sport, serving as an important source of motivation.

The belief that the coaches were able to contribute positively to their skill improvement, enhanced the players' perceptions of success in the sport. From the perspectives of the younger players, in particular, their coaches served primarily an instructional role, informing them of ways to improve, and providing them with an understanding of the skills they were learning, which players found motivating. This finding is supported by Harter (1978), who suggested that the provision of feedback and approval to children can act both as encouragement to continue performing behaviors that had warranted the feedback in the first place, and as a source of understanding for self-perceptions of competence. The

implication of placing a large amount of significance on the feedback of the coach meant participants held coaches responsible, to a degree, for their improvements and successes in the sport. This supports Bocksnick, Belyk, & Napier (2002) suggestion that external appraisals of competence must reflect meaningful attributes such as the improvement of skills. Participants expressed the significance of feeling that their coaches cared about their improvement in the sport and that this was motivating both in terms of working hard at improving their skills and in their desire to continue competing. Positive relationships with coaches have been demonstrated to foster positive attitudes towards the team and increase players' enjoyment of involvement and commitment to their sport (Fry & Gano-Overway, 2010).

Conversely, as was also demonstrated in this study by several participants and similar to the findings of Boiche & Sarrazin (2009), when performance comments provided by the coaches were interpreted negatively, affect towards the sporting activity decreased. Negative comments from coaches directed towards sport participants may decrease their enjoyment of competitive sport (Robinson & Carron, 1982). Although the coaches were viewed positively for the most part, instances of negative performance feedback were salient and enduring for some of the players. Harter (1990) emphasized the importance of avoiding reward based solely on performance. Rather, coaches must attend to the incremental skill increases their participants make in order to foster perceptions of competence and mastery within the setting.

Commitment to sport and physical activity may be dictated by a child's perception of his or her own competence (Martin, 2006). The value ascribed to an activity, such as sledge hockey, may be positively predicted by a child's perception of competence and perceived level of coach investment (Boiche & Sarrazin, 2009). Stated differently, children place greater significance on the activities they feel they do well, and when they believe their coach is committed to the sport and the athletes. The participants in this study spoke at great lengths about the feedback they received from their coaches and, for the most part, this appeared to have a critical and positive influence on their perceptions of competence. Given the frustrations participants faced as they learned how to play the sport and initially not feeling like a part of the team, relying on positive coach feedback may have been used as a strategy by players to sustain views of their sport competence that were positive enough to encourage them to continue playing. The players, rather than focusing on the rewards of winning games or tournaments, that may have accompanied improvements in skill (Bocksnick, et al., 2002), sought feedback from their coaches that contributed to their pursuit of skill improvement, which in and of itself was a primary source of motivation. As such, the players may have internalized the feedback provided by their coach as a benchmark by which to judge their increasing competence in sledge hockey.

Positive evaluations of performances have the capability to enhance a child's feelings of competence in the setting (Harter, 1978). Feeling like they were able to be successful in the sport of sledge hockey and that their success in the setting was attributable to factors that they could control, like hard work and

practice, appeared to increase the children`s motivation to continue in the setting. This feeling was facilitated by the mostly evaluative and instructional feedback provided by coaches, which had the capability of enhancing the players` feelings of competence (Harter, 1978). Positive feedback, contributing to a positive perception of competence is integral in encouraging an individual to participate, as low perceived competence may decrease a child`s motivation to become involved, evoking feelings of anxiety and uncertainty (Harter, 1978). Positive perceptions of competence, as well as feelings of control in the setting may also impact future participation in other settings and facilitate future involvement in sport if a child is appropriately supported in the environment.

While the coaches were generally perceived to have a positive influence on the children`s sledge hockey experiences, actual and perceived competence, and motivation to take part, several of the older, more skilful players expressed some dissatisfaction with the level of expertise possessed by the coaches. These players desired more knowledgeable coaches capable of challenging them to further develop their skills in order to be successful at the more competitive levels of sledge hockey. This level of coaching requires coaches to have expert technical knowledge and skills (Swanson, et al., 2008). Having knowledgeable coaches within specialized sport is critical for facilitating active participation and skill development of participants with disabilities (Goodwin, et al., 2006). Often, in integrated sport, coaches enter into partnerships with their athletes who have disabilities so as to collaboratively determine appropriate instructional strategies (Cregan, et al., 2007). However, in the context of specialized sport, it is possible

that while the SledgeHammers' coaches were well versed in hockey, because they did not have experience playing sledge hockey, they were unable to provide the best possible feedback and instruction for the players once they attained a certain level of skill. According to Harter (1978) children are motivated to participate in an activity because of a desire to be capable in that setting. Successful exhibitions of competency in a sport, as defined by feedback received from coaches, lead to increases in positive affect in that sport (Harter, 1978). As participants gained competence and mastery within the sledge hockey environment, it is reasonable that they desired more knowledgeable coaches. Perceiving low competence of coaches has been identified as a barrier to participation by individuals with disabilities in specialized sport, leading to frustration and potential sport attrition (Hutzler & Bergman, 2011). Given the important role coaches can play in creating empowering sporting experiences for participants with disabilities (Hutzler & Bar-Eli, 1993), opportunities to develop their coaching skills and sport specific knowledge are critical. The need for further investigation of trained coaches in specialized sport has been identified (Cregan, et al., 2007). Although the players did not indicate that not having a disability influenced their perceptions of the coaches as lacking knowledge, it would be interesting to know what, if any role not having a disability might have played in the coaches ability to provide expert sledge hockey instruction. Although coaches primarily tend to work with athletes in sports they have experience in, rather than focusing solely on working with athletes who have disabilities (DePauw & Gavron, 1991; Cregan, et al., 2007), facilitating sport involvement for children with disabilities must take into account

the possible differential effects a coach without a disability might have in disability sport (Hedrick, 1985).

### **The Role of Parents**

The impact of parental involvement in facilitating sport participation for the SledgeHammers participants was significant as was similarly observed by Keegan, et al., (2010) who suggested the unconditional support of parents in sport encouraged further sport involvement and positive affect towards that parent/player relationships. All of the participants spoke at length and positively about the key role their parents played in facilitating their engagement in sledge hockey and encouraging them to continue taking part. Parents played critical roles in their children's sledge hockey participation in a variety of ways. Importantly, they made attendance possible by providing transportation to and from the arena, they provided confirmation when their children were first learning how to play and when they experienced difficulties, and they provided support through game attendance and by providing feedback.

Despite numerous barriers to participation in sledge hockey, such as long distances to travel or financial concerns, parents of the SledgeHammers' participants still encouraged and supported their participation in the sport. Ensuring access to sledge hockey for their children through transportation and other organizational aspects (Harada & Siperstein, 2009) demonstrated to the children their parents' commitment to their sport participation. Parental involvement in their children's specialized sport participation signals to children



that their engagement is meaningful and valued (Fitzgerald & Kirk, 2009).

Knowing that their parents were so supportive of them playing sledge hockey appeared to be an important motivator for the children.

Connectedness with parents and their important role in helping to motivate and develop positive perceptions of competence in their children were especially apparent as players discussed their difficult beginnings in the sport. For the players, their relationships with their parents provided a sense of security from which they could begin to engage in a new and uncertain environment. This heavy emphasis on the support of parents when first starting involvement in a sport may continue to be significant to players, as Martin (2006) observed parental support to be significant to participants even as duration in the setting increased. In the beginning however, players appeared to rely heavily on feedback from their parents when first developing competence in sledge hockey. Although Martin (2006) further suggested that encouragement from parents and friends was less significant to children in specialized sport compared to enjoyment and perceived physical ability in the activity, it could be that when first gaining entry into the sporting environment when competence is low, that the role of parental feedback and support is heightened. While perceptions of physical ability were integral to motivating further sledge hockey participation, these understandings were in part arrived at via the physical support and feedback provided to the children initially, and importantly, from their parents. As was suggested by Goodwin and colleagues (2006), it may be that parents felt the need to be significantly involved in their children with disabilities' sport experiences because of previous negative

experiences, which appear to be common among children with disabilities (Goodwin, et al., 2006).

Parents presence at games and practices was also highlighted by the players as having a positive impact. Having parents in the stands reinforced to participants that their families viewed their involvement in the sport as worthwhile and beneficial. The presence of supportive parents can play a significant role in motivating continued participation for children with disabilities (Keegan, Spray, Harwood & Lavalley, 2010). Although the parents were not interviewed, research has demonstrated that they desire a sport setting for their children that is socially valued, inclusive, and encourages personal growth and fun (Casteñada & Sherrill, 1999). The results of this study appear to corroborate Martin's (2006) findings that players who possess strong perceptions of their sport skills and feel encouraged by their parents, are more likely to continue sport participation. Also in keeping with the literature, participants believed that their parents supported their participation, in part due to perceived benefits such as gaining knowledge and sport skills, and belonging to a peer group (Kristén, et al., 2003). Previous research has suggested that regardless of how parents feel about their children's sport competence, they are still likely to enjoy their involvement and encourage their participation (Martin & Choi, 2009).

The significance of adult approval may depend on the competence domain where support is provided (Harter, 1981). Though suggested that adult feedback may have less significance than that of peers in social domains (Harter, 1981), participants in this study actively sought the approval and encouragement of their

parents in sledge hockey. Harter & Whitesell (1996) stated that as players develop, the influence of parents on self esteem does not decrease, instead the influence of peers increases dramatically. However, given the reports of negative experiences children with disabilities tend to have in integrated setting, largely due to a lack of feeling included by their peers (Spencer-Cavaliere & Watkinson, 2010), it could be that the children in this study were more reliant on the feedback of their parents in order to develop or maintain positive perceptions of competence. It could also be that the limited amount of time participants had to interact with teammates may have impacted their opportunities to form meaningful relationships with each other (Seymour, et al., 2009), subsequently increasing the significance players placed on the feedback received from their parents. Feedback from parents had a significant impact on the players' affect and perceptions of ability. Participants desired for their parents to acknowledge the effort they had put into learning a new sport, as well as their physical performance in the activity. One child also spoke about the importance of having her sibling attend sledge hockey and how this show of interest was motivating.

Although not occurring often, criticism of performances or skills by parents was difficult for participants to accept, at times decreasing their motivation and frustrating them when they perceived their parents to lack sport specific knowledge (Keegan, et al., 2010). This was also true of siblings, as one player recounted the first occasion her brother attended sledge hockey. What she recalled most vividly, were his remarks about a bad play she had made. Instances of conflict with parents were observed at sledge hockey as well, specifically when

parents provided too much or unwanted assistance to their children. Nixon (2007) suggested that sports that require some level of parental involvement and over which they have some control are seen as preferable environments for their children with disabilities to participate in.

Despite some negative comments on skill, the players still perceived their parents as encouraging their involvement in the sport (Martin & Choi, 2009), and were eager and motivated to demonstrate their competencies in ways their parents could recognize, such as scoring a goal or making a good defensive play (Harter, 1978). Positive feedback towards participants and their participation in sledge hockey informed the players that their parents believed they possessed the potential to improve, further encouraging their involvement in sport. Parental decisions of sport participation for their children have been shown to be heavily influenced by a desire to see their children succeed in sport (Goodwin, et al., 2006). For the most part, the children in this study shared that they felt competent and enjoyed playing sledge hockey, very much in keeping with what the literature suggests parents desire for their children when they make decisions to enrol them in specialized sport settings (Casteñada & Sherrill, 1999).

### **The Role of Peers**

Friendship in sport means a child has access to “encouragement and reinforcement, help and guidance” (Seymour, et al., 2009, p. 211). Peer acceptance may be achieved when children are successful in an area that their peers value, one such venue being that of sport (Evans & Roberts, 1987).

However, before social acceptance and the benefits of friendship could be experienced by the participants in the sledge hockey setting, competence in the sport needed to be demonstrated. Players spoke about the challenges of feeling like they did not belong when they first began playing sledge hockey because they were not very good at the sport, but as their competence improved, they began to feel included as part of the team and to develop friendships.

It is difficult to ascertain whether new players initially lacked the confidence to begin interacting with peers and would not do so until they amassed some skill, as suggested by Bigelow and colleagues (1989), or if being skilful actually led to efforts on the part of the more senior players to include the newer players and newer players feeling more confident about developing relationships. It could also be that as the players spent more time in the environment together, they became more comfortable with each other, forging friendships at the same time as they were developing their skills. From the perspectives of the participants, however, being skilful led to feelings of inclusion and having friends. It also led to opportunities for positive feedback from teammates. Players expressed being motivated to improve their skills, in part, so to feel accepted on the team. These results further confirm findings that exhibiting competence in an important area of skill leads to a greater likelihood of gaining peer acceptance (Weiss & Duncan, 1992).

Peer relationships have been shown to provide children with a variety of supports in sport participation, such as the opportunity to retry skills and the provision of encouragement following mistakes (Martin & Smith, 2002). At

sledge hockey, peers played a large role in not only facilitating feelings of belonging, but in also increasing player`s perceptions of competencies in the sport. This may have been in part due to the nature of the sport, and the perceived expertise more skilled players possessed and their willingness to share their knowledge. Often discussed by participants was how learning sledge specific skills was better conveyed by teammates, who in addition to actually playing the game of sledge hockey, similarly experienced disabilities. Experience playing the game was seen as an asset by younger, less skillful players who looked up to and sought instruction from their more experienced and skillful peers. In turn, the older players recognized the unique perspective they were able to provide their teammates and regularly offered assistance to them.

Harter (1978) suggested that positive reinforcement can serve a variety of functions for children. As she stated and was exhibited in this study, praise from teammates and a sense of belonging, combined with a greater understanding of the skills required to become competent in the sport, appeared to reinforce participants` motivation to succeed. Although participants believed they needed to acquire some competence to truly feel part of the team, they also expressed that friendships with teammates benefitted their skill development. Feeling like part of the team and enjoying the benefits of affiliation with teammates, such as thoughtful instructional feedback and encouragement, seemed to motivate participation and encourage players to engage in more opportunities to demonstrate and develop their competencies in sledge hockey. The players` desires to demonstrate competence, as reflected in their quests to contribute to the

success of the team, reinforces the significance of peers in the valued domain of sport (Harter, 1978). In line with Smith (1999), the participants in this study also attributed some of their enjoyment in the sport to their teammates who acknowledged their successes and provided a sense of camaraderie and support.

It has been suggested that players perceived to be weaker and experience skill difficulties are often assumed to also experience friendship difficulties (Bigelow, et al., 1989). Feeling like they lacked skill was a barrier, from the perspectives of the players, to developing friendships. The findings of this research study suggest that children who do in fact have difficulty forming relationships with peers, potentially as a result of being new in a setting, may be at a distinct disadvantage, as peer relationships and the sharing of sport related information may positively contribute to the learning of and competence in sport. As this research study was conducted during the second half of the SledgeHammer's hockey season, it is difficult to posit what benefited the participants most as a result of prolonged engagement; skills or relationships. Irrespective of friendships having the potential to encourage sport participation by overriding a child's perception of a lack of skill or competence (Spencer-Cavaliere & Watkinson, 2010), from the players' perspectives, improvement in their skills solidified their position on the team. Furthermore, as predicted by Harter (1978), feeling like they were part of the team provided participants with the added incentive of learning sledge specific knowledge from teammates, integrating into their understanding what skills were required for them to be perceived as successful by teammates, and to feel successful themselves. This

finding supports the suggestion that competency in sport is a strong social asset with peers (Evans & Roberts, 1987).

Sport participation is often touted as a venue to develop peer relationships with teammates for children with disabilities (Taub & Greer, 2000). Some of the challenges commonly experienced by children with disabilities in integrated sport settings are tied a lack of perceived and actual competence, and having friends (Spencer-Cavaliere & Watkinson, 2010). Similar challenges were experienced by the participants in this study as it related to feeling included in the specialized sport setting. Participation in sport for children with disabilities appears to present similar challenges in both integrated and specialized settings, at least upon gaining entry into the sport; that of perceiving skill as a prerequisite to relationships with peers. However, integrated sport participation may further discourage the formation of peer relationships in part because peers without disabilities may doubt the abilities of children with disabilities, which can lead to decreased perceptions of competence for those children (Goodwin & Watkinson, 2000). This preconceived notion about children with disabilities' sport competence may leave them feeling as though they must achieve a certain level of performance in order to fit in (Goodwin & Watkinson, 2000). Similar to Groff, Lundberg & Zabriskie (2009)'s findings, enjoyment of the sport was integral in encouraging prolonged engagement, followed by the opportunity to socialize with peers. While disability initially brought the players together to participate in the sport, the experience of being on a team solidified player motivation to continue their sport involvement. Being on, and more significantly feeling as though they



were part of a team, benefitted the participants and provided the players with guidance, support, help and assistance; encouraging and motivating sport engagement (Weiss, et al., 1996; Keegan, et al., 2010). These feelings are reflective of those experienced by children without disabilities in sport, indicating that participants in sledge hockey similarly benefitted from their sport involvement as participants without disabilities do in traditional, non specialized sport. In the case of specialized sport, where the abilities of participants may be more comparable and the support to develop those abilities more appropriate, achieving skillfulness and success may be more likely, thereby enhancing the possibility of positive relationships with peers and a meaningful sense of belonging. This is important as greater peer acceptance may predict greater levels of enjoyment and perceptions of competence (Ullrich-French & Smith, 2006).

### **The Role of Sledge Hockey**

Often, issues of inclusion typically emphasize the physical activities of children without disabilities as the areas in which children with disabilities must enter and experience success, in order for inclusion to occur (DePauw & Doll-Tepper, 2000). Increasing gaps between the sport performance of children with disabilities in comparison to peers without disabilities, and awareness of these gaps, have been described as reasons why children with disabilities leave integrated sports (Goodwin, et al., 2006). Sledge hockey presented participants with an opportunity to engage in a sporting activity where the potential to develop a positive sense of competence existed, subsequently contributing to their enjoyment of the sport and their commitment to the activity (Martin, 2006).

Sledge hockey represented, for the players, a sport first and foremost, not a disability sport, with the potential for any individual, of any ability, to participate. In integrated settings, participants are required to perform to a standard set by individuals without disabilities (DePauw & Doll-Tepper, 2000). However, sledge hockey, afforded children with disabilities the opportunity to define for themselves the standards for success in a sport that accommodated their individual needs, and challenged them to work hard and develop their skills.

The nature of sledge hockey as a disability sport, comprised of children with disabilities, meant that instead of being the only child with a disability, as is often the case in integrated settings, using a wheelchair or a walker was typical in the setting. While disability was present and did provide a sense of connection and understanding for the children, it also appeared to be less relevant simply because all of the children experienced it in some form. Sledge hockey was a setting where the players were able to be kids, without the implications of disability surrounding their every interaction and sport development. Harter (1978) suggested that the ways in which children's behavior is reinforced by significant individuals around them will not only determine if children perceive themselves as competent in the activity, influencing whether or not they enjoy their involvement, but also influences how much control they feel they have over the outcomes in their lives. For many children with disabilities, integrated sport experiences highlight the areas in which they lack competence, leaving them with little sense of control over outcomes (Goodwin & Watkinson, 2000). Intrinsic motivational orientations contribute positively to children's perceptions that they

are in control of what happens to them, rather than external agents and events controlling their lives (Harter, 1978). An intrinsically motivated individual will have had their attempts at mastery of a task positively evaluated by individuals in the setting, gain an incentive for performing the task and have an increase in affect (Harter, 1978). It is possible that because of fewer barriers to participation being present in the sledge hockey setting, participants were able to feel encouraged and supported enough by their performances and feedback from others that they gained a sense of control over their participation in the sport. It could be that participation in specialized sport, where the standards for success are determined by individuals with similar skills and experiences, the potential to foster increased perceptions of behavioral control leading to higher perceptions of competence is more likely.

The competitive nature of sledge hockey was of central importance to the participants and a source of pride. As the players developed their skills, their desire to compete and contribute to the successes of the team increased. In scoring a game winning goal or making a great play, participants' enjoyment of the sport and performance related affect was significantly and positively impacted by being viewed as competent by their teammates (Weiss & Duncan, 1992). Achieving success as a team was important to the players. increasing the value participants ascribed to the activity (Boiche & Sarrazin, 2009). A competitive setting, was often described by the participants as a place where they could judge their competencies, solidifying their beliefs that they were playing a sport that required skill and strength (Groff, et al., 2009). A desire to develop and demonstrate

competence in the sport setting is a tenant of Harter's Competence Motivation Theory (1978). Players were motivated by a desire to develop and demonstrate competence in sledge hockey as illustrated in their expressions of wanting to develop their skills in order to contribute to the team's success. Sledge hockey provided a setting where these outcomes were attainable for the players.

In order to provide more opportunities for the SledgeHammers to compete, games were organized against stand up hockey teams. These games regularly ended in lopsided scores, with the SledgeHammers handily defeating their opponents. These games held very little enjoyment for the SledgeHammers participants, despite the team routinely winning. Harter (1978) predicted that together with feedback and perceived behavioral control, success and failure experiences contribute to the motivation of participants. Typically, being successful in a setting would motivate individuals to continue their involvement, as they perceive their competence to be adequate if not exceptional, contributing to enjoyment in the setting and motivating future participation. However, succeeding in games against stand up hockey players did not positively impact motivation, rather, players became unmotivated and were disinterested in future games. Whereas when individuals with and without disabilities participate in disability sport together, competitiveness and athleticism of the sport are prized (Medland & Ellis-Hill, 2008), competing against an entirely reversely integrated sports team was uninteresting and tedious for the sledge hockey players, and presumably frustrating for the stand up hockey players. Participation in a disability sport that accommodated their abilities, provided participants with the

opportunity to develop and demonstrate physical skills and perceive themselves as athletic individuals (Taub, Blinde & Greer, 1999). When playing against stand up teams participants were not challenged and their demonstrations of superior skills were not meaningful. These findings reflect Harter's (1978) suggestion that an optimal level of challenge is required for individuals to experience pleasure from their achievements. Should a task be too easy, as was the case in the games against the stand up teams enjoyment is decreased, while being successful in a task that is challenging is likely to produce enjoyment (Harter, 1978). Maximum pleasure is derived when individuals experience success in an activity that is optimally challenging (Harter, 1981). This finding also highlights the need for growth in the sport of sledge hockey in order to ensure appropriate levels of competition for the SledgeHammers and opportunities to showcase their skills in meaningful ways.

### **Implications**

Employing case study for this research was an effective methodology with which to explore the contemporary issue of the sport involvement of children with disabilities in a specialized sport setting (Yin, 2009). In exploring this bounded system, I was able to use a number of data collection techniques to capture an in depth and extensive amount of information about a small number of people, in order to acquire a deeper understanding of a complex phenomenon. In choosing to conduct a case study, researchers are permitted to "retain the holistic and meaningful characteristics of real-life events" (Yin, 2009, p.4). Furthermore, the use of an instrumental case study (Stake, 1995) enhanced my ability to explore the

bounded case of a junior sledge hockey team illustrating the issues of interest; relationships and motivation in specialized sport. A common criticism of case study is the lack of generalizability of the research findings (Yin, 2009). However, as stated by Stake (2005), conducting a case study is a choice of what is to be studied rather than a methodological one, not representative of a number of situations, but rather the case that is under observation.

Harter's (1978) Competence Motivation Theory provided a useful framework from which to interpret the study's findings, particularly around the different ways participation can be motivated. Participants' desires to demonstrate competence in the achievement domain of sport heavily impacted their motivation to continue involvement in sledge hockey. Profoundly and for the most part positively influencing participant motivation were significant others and the feedback they provided. Coaches, parents, and peers all played a role in motivating the players through instruction, support, and encouragement. Perceived behavioral control also appeared to play a role in encouraging further participation. Participants expressed that through hard work and practice they were able to improve their skills. This is an important finding given that in integrated contexts children with disabilities may be less likely to feel and have control over their participation (Blinde & McCallister, 1999). In the specialized setting, where barriers to participation were minimized by the use of sledges and achievable standards of performance, the children expressed feeling capable of improving and motivated. Perceiving themselves as gaining competence lead to a heightened perception of control over their participation in a sport that was

tailored, in part, to their abilities. Interestingly, the children in this study did not speak about their failure experiences in the sport, with the exception of the difficulties they first encountered when initially developing their sledge competencies and in not feeling part of the team. Successes, however, were described as meaningful, for example when the children scored goals or made a good play. These led to positive affect and motivation to continue playing. However, successes against stand up teams were not valued because they did not provide optimal challenge, in keeping with Harter's predictions. Despite winning these games and experiencing a high degree of behavioural control, players experienced negative affect because there was little to no challenge in the games leading to a lack of motivation. Meaningfulness associated with success appears to contribute significantly to motivation in this case study.

In choosing to explore relationships in a specialized setting comprised of participants with disabilities, I had anticipated that participants would rely more heavily on the social relationships with peers in this setting as an opportunity to share their disability experiences. Disability, however, was not identified by the players as a prominent feature of their sledge hockey experiences. Several of the players did indicate that their teammates understood the challenges that were at times disability related, but this was not a focus of the interviews or observations. Disability was emphasized when players revealed preferring to participate with individuals with disabilities because of their competence and comparable abilities. Martin (2006) suggested that perhaps athletes with disabilities in disability sport perceive themselves to be competent in reference to the skills of those around

them while participating in specialized sport. Importantly, the findings of this study support Martin's suggestion but also extend it. Not only were players able to compare their competencies to those around them, but they were also able to set the high standards for performance. Subsequently, preferring to compete against other sledge hockey teams, versus stand up teams, increased enjoyment because the standards for performance were elevated. A common assumption of disability sport is that the levels of competition and competence are lower (Taub, et al., 1999), however, in this study specialized sport was experienced, described, and observed to be a competitive sport where the players desired opportunities to demonstrate competence and be challenged.

Martin (2006) suggested that specialized sports, such as sledge hockey, have in their nature the opportunity for participants to engage in sport where the barriers to competition they may have experienced in integrated settings are small, thereby increasing enjoyment and commitment. Though the accessible nature of sledge hockey facilitated participation for children with different physical impairments, competence continued to be an issue for them when first entering into the setting. Participants in this study described a need to be and feel competent in order to feel like they belonged, emulating the experiences of children with disabilities in integrated physical activity settings, such as the one described by Goodwin & Watkinson, (2000). However, in sledge hockey, the children were able to attain a level of competence that led to feelings of belonging. In specialized sport, where the standards for success are set by children with disabilities, participants may actually have the potential and legitimate



opportunity to develop competence, thereby increasing the likelihood of feelings of inclusion and belongingness.

## **Chapter Six**

### **Conclusion**

#### **Summary**

Rarely have the experiences of children and young adolescents in disability sport contexts been the focus of researchers (Martin, 2006), despite the documented need to understand sport participation motives of athletes within disability sport (Swanson, et al., 2008). Researchers have found that opportunities for children with disabilities to take part in physical activity and sport are increasing (Zwier, et al., 2010). Despite an ideological shift towards the participation of children with disabilities in sporting activities alongside children who do not have disabilities, specialized sport programs solely directed towards children with disabilities continue to exist. Furthermore, given the emphasis that has been placed on inclusion in integrated settings, little is known about children's experiences and motivation in disability sport settings or settings that are primarily or completely comprised of children who experience disability (Lyons, et al., 2009).

The purpose of this study was to explore the role of social relationships and children's motivation to participate in the specialized sport of sledge hockey using Harter's (1978) Theory of Competence Motivation to help interpret the findings. A qualitative case study was employed with ten players ranging in age from 11-16 from the SledgeHammers, a junior competitive sledge hockey team. Using a variety of data collection methods, information about participants' sledge

hockey experiences, their relationships with coaches, parents, and peers, and their motivation in sledge hockey were captured.

Participants viewed their relationships with coaches as serving the primary purpose of improving their sledge hockey skills and competency through feedback and instruction. This feedback helped to improve their sport skills, and also provided an understanding of the competencies they possessed in the sport. When accompanied by suggestions of how to improve, feedback that acknowledged shortcomings was motivating to participants as they had a goal to work towards. Negative feedback decreased affect in the sport, and detracted from player's perceptions of competency. Older, more skilled players also expressed a desire for more knowledgeable coaches.

Parents supporting participant involvement in sledge hockey played a significant role in encouraging and motivating player involvement. In making the commitment to facilitate their child's participation, the players felt as though their engagement was worthwhile, meaningful and beneficial. Parental involvement was most significant to players when their initial perceptions of competence in the sport were low, at the beginning of their involvement in sledge hockey. As the players became more comfortable in the sport and on the team, sharing successes with parents contributed positively to affect and motivated involvement. Parental feedback was overwhelmingly positive and appeared to contribute to the players' developing perceptions of competence. There were only a few instances of negative feedback which players found discouraging, particularly when parents

were not perceived as knowledgeable about the sport or overstepped their helping roles.

Establishing relationships with teammates was integral to the participants' enjoyment in sledge hockey. Peer relationships, however, were perceived to be contingent on competence. Once players developed their sledge skills, they felt able to contribute to the success of the team, which facilitated a sense of belonging. Furthermore, gaining acceptance on the team led to more opportunities to develop competence through the role modeling and teaching by the more experienced players. While disability was acknowledged as a common experience among players, it did not feature prominently in the players' accounts of their sledge hockey experiences.

The nature of the sport of sledge hockey provided a setting and activity where children with disabilities could develop their skills and become competent. As a disability sport, sledge hockey appeared to afford opportunities for these children to feel supported and to become competitive athletes. Subsequently, competition against other sledge hockey teams and individuals with disabilities was highly prized, both as an opportunity to be motivated by older, more experienced role models, and because of the chance to compete against other players who possessed similar skills in the sport.

### **Limitations**

There are several limitations to this study. In the first interviews, the majority of parents were present, potentially influencing the freedom participants

felt they had to respond. More specifically, participants may have felt it necessary to respond to questions about their parents in favorable ways. Fortunately, the second interviews were mostly conducted with just the participants, providing opportunities to follow-up on questions from the first interviews. Participants also had the opportunity to elaborate on any answers they had given in the first interview.

The use of photo elicitation during the second interview contributed greatly to the richness of participant descriptions and answers to questions. This was due in part to the photographs acting as visual reminders for topics of discussion participants might not have remembered otherwise. However, while taking photographs of participants was easy, with many opportunities to do so, I felt self-conscious taking pictures of parents and coaches. Subsequently, there were substantially fewer photographs of parents, though each participant had their families represented in the photographs at least once. This may have limited responses from participants. Despite this challenge, I do believe my decision to take the photographs was preferable, as the logistics of having players take photographs of themselves or their peers while participating in sledge hockey would have been challenging.

I prepared interview guides for the first and second interviews. The scripts were flexible, allowing for unique directions of inquiry with each participant. While the goals of the second interview were to expand on the first using the photographs, ask follow-up questions, and check for accuracy, I did not consider what might have occurred during the time span between the first and second

interviews. For example, one participant's mother had mentioned that in comparison to the last interview, her child now was much more involved with peers outside of sledge hockey, regularly making plans on weekends with teammates to socialize. Asking participants to reflect on how their relationships had expanded and evolved since our first interview did not occur to me. In not specifically addressing the impact of time on relationships in the setting, I may have limited to degree to which participants shared about their teammates in particular.

When the team was away at tournaments no direct observations were possible, as I did not travel with them. These observations may have had added to the depth of the understandings of participant relationships in unique contexts, as presumably parents conducted or assisted the players in different ways during travel. Furthermore, tournaments were described in the interviews as highly enjoyable because of the large amounts of time spent exclusively with teammates. Observations of these occasions may have contributed to a greater understanding of the significance of these trips in enhancing peer relationships.

I was unable to obtain consent of all of the participants on the team to take part in the research study and specifically for the older players on the team. Given that case study seeks depth of a particular group or issue, it would have been beneficial to have all members of the team as part of the study. This would have allowed for a greater range of responses in the questions and perhaps different and more expansive interpretations of the data. Also, previous involvement in sport was not addressed in the questions posed to participants. Why the players came to

the specialized setting and their experiences in other settings would have contributed to the depth of the study as competence and peer relationships are often challenges for children with disabilities in integrated settings (Spencer-Cavaliere & Watkinson, 2010).

Finally, this research study was conducted in December, following the start of the season in September. By this time, a level of team solidarity had already developed. Particularly in reference to the players' perceptions of the integral role sledge competence played in facilitating peer relationships, being involved as a field researcher from the onset of the season would have provided greater insight into this finding. Furthermore, had I engaged with the team from the beginning of the season, my rapport with the participants would probably have been stronger, increasing the likelihood that they would have felt more at ease and willing to share when participating in the first interview. Additionally, a longer period of involvement as a participant observer may have added to the extent to which I was able to gain an insider's perspective of the goings on of the case.

### **Future Directions**

Despite a move toward inclusive sport settings, children with disabilities continue to take part in specialized sport, however, little is known about their experiences there. This study represents one of a handful of research studies that have as their focus the experiences of children with disabilities in specialized sport. In the extant literature, the benefits of inclusive environments are often touted at the expense of overlooking those of specialized sport. Part of a child's

decision to participate in specialized sport may involve their tendency to make friends based around commonalities they see between themselves and other children in the setting (Hartup, 1995). In the current research study, the commonality of a shared sporting experience acted as an anchor in creating friendships with teammates, motivating involvement in sledge hockey, and holding the potential to encourage the initiation of further physical activity participation (Bigelow, et al., 1989; Jago, et al., 2009). Although the children did not discuss disability to any significant degree in the current study, it would be interesting to explore, from the perspectives of the children with disabilities, how they perceived the role of disability in specialized sport and the creation of friendships in the sport setting. In understanding these perspectives, parents, coaches, and practitioners could gain a better understanding of the significance of disability in specialized sport or whether the nature of the sport is key in facilitating equal participation and subsequent peer relationships. Furthermore, examining the longitudinal benefits of specialized sport participation on attitudes and motivation to pursue recreation and sport activity is another important future direction for research, as the current study suggests the uniqueness of the sport setting increases participant motivation to continue involvement.

Other issues warranting further exploration in the specialized sport setting include the need for knowledgeable coaches that can facilitate children's entry into the sport setting, the importance of meaningful competition as illustrated by the lack thereof in matches against stand up teams, and the potential for sledge hockey to become a reverse integrated sport, where children with and without



disabilities can compete with and against each other in ways that enhance their views of self and provide enjoyment and fun. Specialized sports may be criticized as furthering the separation of children with disabilities from society, rather than including them. It is critical to also explore specialized settings from the perspective that these sports context may be legitimate, freely chosen and valued places for children to develop competence and engage in meaningful, challenging and motivated physical activity.

Finally, relationships with coaches, parents and peers were highlighted in this study. The role of siblings in children with disabilities sport and physical activity experiences is another area for future investigation as it has garnered little attention in the literature thus far. Often, disability research examining siblings have as a focus, the impact the sibling with a disability has on the sibling without a disability's physical activity participation. Although a few of the children in this study spoke about their siblings, very little information was shared about sibling involvement in specialized sport. Further research exploring the relationship of siblings with regard to sport and physical activity, when one of the children has a disability, would make an important contribution to understanding the role of families in supporting the activity participation of children with disabilities.

### **Personal Reflection**

My initial desire to pursue the line of inquiry taken for this research study was born from a place of personal frustration with professional dialogue. As a Kinesiology student, much of my coursework in adapted physical activity focused

on how to facilitate inclusive physical activity for children, as a practitioner. Conversely, my personal life as a big sister of a teenager with a disability had exposed me firsthand to the invaluable feelings of belonging, acceptance, and social support my sister and our family felt when she participated in specialized programs. Furthermore, I had spent the previous two years facilitating a wheelchair sports program for adults with recently acquired impairments and had seen the powerful impact of the relationships fostered in that setting. Participants discussed everything from family life, to different types of wheelchairs, with peer sport mentors even offering to provide input on what wheelchairs would be most appropriate for new users. Despite the large appeal I perceived there would be for individuals with disabilities to have participated in specialized sport, and the benefits I saw my sister derive from such participation, there was little research being conducted on the topic. As such, this research study was conducted to explore the experiences of children in a specialized sport, particularly taking interest in the relationships the children had on the team with their coaches, parents, and peers.

Becoming acclimatized to the team took some time, as I began my involvement midway through the season in the midst of previously established routines and relationships. It was overwhelming to come in with perhaps an expectation of finding something unique about the setting, and not being sure what to attend to in order to support these interpretations when the time came to write up my findings. Keeping a field journal and audit trail helped immensely in the ensuring all of my thoughts were in one place, and provided a forum for my

musings of observations and assumptions following each sledge hockey practice or interview with a participant. The first set of interviews, which occurred just over one month after my initial involvement with the team, was a challenging experience. I had presumed the children would be eager to share their perspectives on their involvement in the sport, and most were. However one child provided a maximum of four word answers for the entire duration of the interview. I was incredibly frustrated following this interview, particularly as a result of the great extent I went to in accommodating for this interview, rescheduling a number of times and a lengthy drive to meet the participant at a convenient location for the family. It took some reflection on my part to appreciate just how artificial and foreign the process of taking part in research must have felt for the participants. This was when I understood the significance of becoming a participant observer in the setting when working with children. Most of the participants took part in the first interview with their parents in the room, bringing them along to quell their sense of uncertainty or trepidation. In the second interview, the participants were on their own. This difference may have been attributable to the participants being more familiar with what was being asked of them in the second interview, and the informality with which the interview was conducted. The depth of the responses and the ease with which participants answered the questions made the second interview seem much more enjoyable for the participants. I do wonder if the first round of interviews would have benefitted from the kids feeling more comfortable around me, had I spent more time in the setting prior to beginning interviewing.

Throughout this process, I have become a tremendous proponent for conducting research from the perspective of the participant. I feel this approach was not only interesting for the thesis paper I was writing, but that engaging in the process of research was particularly valuable and rewarding for participants. One player actually thanked me for the opportunity to talk about his sledge hockey involvement. Another mom volunteered her son to participate, despite his difficulty communicating, because she wanted for him to have his voice heard. In creating my inclusion criteria for participants, I overlooked the significance that being asked to participate in this study held for the players, especially those whose voices often are not heard.

Far outnumbering any differences I saw between the SledgeHammers and a sports team for kids without disabilities, were the similarities. I was anticipating great moments of insight into the relationships between children with disabilities, what I observed were relationships with friends, minimally impacted by a difference, or in this case a commonality, that I assumed would be a cornerstone of involvement. Instead, what I saw especially in the locker room were children getting to be their goofy selves, teasing each other, talking about school or an exciting event coming up. The fact that all participants had a disability wasn't something that factored into their discussions. As I was often told, sledge hockey was a cool sport played by a bunch of kids, who just happened to have disabilities. These instances in the dressing room reminded me of this.

I was somewhat frustrated at the lack of sibling involvement. I had assumed, likely because of my experiences with my sister, that siblings would

have taken a more active role in encouraging or facilitating sport involvement for their brother or sister. My experiences, however, may have been influenced by the large age difference between me and my sister and the greater level of assistance she requires in participating in some activities. I often find myself in a caregiver or attendant role. It is plausible that the nature of sledge hockey meant that siblings did not need to be involved in facilitating their brother or sister's sport involvement, which could be seen as a success of the sport and the environment that was created with the SledgeHammers. Conversely, there may be underlying reasons as to why siblings choose not to be involved in specialized sport, or are not encouraged to do so by their parents as I actively was.

In closing, conducting this research study created a tremendous amount of introspection, personal growth, and increased my interest in the area of sport opportunities for children with disabilities. Acting as a participant observer, talking to participants and becoming part of their routine in sledge hockey, gave me a new appreciation of the importance of rapport when conducting a research study. Furthermore, being engaged in the setting further developed my understanding of the value of conducting research for the purposes of gathering findings but also in creating an opportunity for children to discuss and share their unique experiences. The use of photographs during the second interview with participants was quite enjoyable for me and participants. I wondered if participants may have been more inclined to agree to the second interview out of curiosity to see the photographs I had taken. During these interviews, my initial interpretation of photos took on new meaning when discussed through the

perspective of participants who assigned different meanings based on their experiences. This was perhaps the most enjoyable aspect of the research study, observing firsthand the uniqueness of every individual's experiences and their way of seeing the world.

The SledgeHammers were a tight knit group of coaches, parents and teammates, who were supportive of the players' participation in sledge hockey. Despite some instances of conflict, there was a sense that everyone in the setting wanted to be there and enjoyed their involvement. What I took away from my involvement as being most significant was the need for children with disabilities to have a place where they feel like they belong and the significant role the environment, the activity, and the people around them play in making this possible. Though not viewed in the literature in this way, sledge hockey was an inclusive setting for children with disabilities.

## References

- Aguilar, F. S., Martinez-Vizcaino, V., Sanchez Lopez, M., Martinez, M. S., Guterrez, R. F., Martinez, S. S.,...Rodriguez-Artalejo, F. (2010). Impact of after-school physical activity program on obesity in children. *Journal of Pediatrics*, 157, 36-42. doi:10.1016/j.jpeds.2009.12.046
- An, J., & Goodwin, D. L. (2007). Physical education for students with spina bifida: Mother's perspectives. *Adapted Physical Activity Quarterly*, 24, 38-58. Retrieved from <http://journals.humankinetics.com/apaq>
- Antle, B.J., Mills, W., Steele, C., Kalanins, I., & Rossen, B. (2007). An exploratory study of parents' approaches to health promotion in families of adolescents with physical disabilities. *Child: Care, Health & Development*, 34, 185-193. doi:10.1111/j.1365-2214.2007.00782.x
- Attride-Stirling, J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative Research*, 1, 385-405. doi: 10.1177/146879410100100307
- Babkes, M.L., & Weiss, M.R. (1999). Parental influence on children's cognitive and affective responses to competitive soccer participation. *Pediatric Exercise Science*, 11, 44-62. Retrieved from <http://journals.humankinetics.com/pes>

- Bedini, L. A., & Anderson, D. M. (2005). I'm nice, I'm smart, I like Karate: Girls with physical disabilities' perceptions of physical recreation. *Therapeutic Recreation Journal, 39*, 114-130. Retrieved from <http://js.sagamorepub.com/trj>
- Berndt, T. J., & Perry, T. B. (1986). Children's perceptions of friendships as supportive relationships. *Developmental Psychology, 22*, 640-648. doi:10.1037/0012-1649.22.5.640
- Bigelow, B. J., Lewko, J. H., & Salhani, L. (1989). Sport-involved children's friendship expectations. *Journal of Sport & Exercise Psychology, 11*, 152-160. Retrieved from <http://journals.humankinetics.com/jsep>
- Blinde, E. M., & McCallister, S. G. (1998). Listening to the voices of students with physical disabilities. *Journal of Physical Education, Recreation & Dance, 69*, 64-68.
- Block, M. E. (1999). Did we jump on the wrong bandwagon? Problems with inclusion in physical education. *Palaestra, 15*, 30-36.
- Blundell, S. W., Shepherd, R. B., Dean, C. M., Adams, R. D. (2003). Functional strength training in cerebral palsy: A pilot study of a group circuit training class for children aged 4-8 years. *Clinical Rehabilitation, 17*, 48-57. doi: 10.1191/0269215503cr584oa



Bocksnick, J., Belyk, J., & Napier, L. (2002). Youth swimmers' understanding of competence. *Journal of Physical Education, Recreation & Dance*, 73(7), 40-44.

Boiche, J.C., & Sarrazin, P.G. (2009). Proximal and distal factors associated with dropout versus maintained participation in organized sport. *Journal of Sports Science and Medicine*, 8, 9-16. Retrieved from <http://jssm.org>

Boyatzis, R. E. (1998). *Transforming qualitative information*. Thousand Oaks, CA: SAGE Publications.

Burke, P. (2010). Brothers and sisters of disabled children: the experience of disability by association. *British Journal of Social work*, 40, 1681-1699.  
doi: 10.1093/bjsw/bcp088

Canadian Fitness and Lifestyle Research Institute. (2009). *Kids CAN PLAY!* (Bulletin no. 1: Activity levels of Canadian children and youth). Retrieved from Canadian Fitness and Lifestyle Research Institute website:  
[http://www.cflri.ca/media/node/105/files/CANPLAY2009\\_Bulletin01\\_PA\\_levelsEN.pdf](http://www.cflri.ca/media/node/105/files/CANPLAY2009_Bulletin01_PA_levelsEN.pdf)

Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, December 2010. Retrieved from [http://www.pre.ethics.gc.ca/pdf/eng/tcps2/TCPS\\_2\\_FINAL\\_Web.pdf](http://www.pre.ethics.gc.ca/pdf/eng/tcps2/TCPS_2_FINAL_Web.pdf)

- Canadian Pediatric Society (2002). *Healthy active living for children and youth*. (CPS Statement: HAL 2002-01). Retrieved from Canadian Pediatric Society website: <http://www.cps.ca/english/statements/HAL/HAL02-01.pdf>
- Canadian Society for Exercise Physiologists. (2011). *Canadian Physical Activity Guidelines for Children 5-11 years*. Retrieved from Canadian Society for Exercise Physiologists website: <http://www.csep.ca/english/view.asp?x=1#>
- Cappello, M. (2005). Photo interviews: Eliciting data through conversations with children. *Field Methods*, 17, 170-182. doi: 10.1177/1525822X05274553
- Castañeda, L., & Sherrill, C. (1999). Family participation in challenger baseball: Critical theory perspectives. *Adapted Physical Activity Quarterly*, 16, 372-388. Retrieved from <http://journals.humankinetics.com/APAQ>
- Chase, M. A., & Dummer, G. M. (1992). The role of sports as a social status determinant for children. *Research Quarterly for Exercise and Sport*, 63, 418-424.
- Clark-Ibáñez, M. (2004). Framing the social world with photo-elicitation interviews. *American Behavioral Scientists*, 47, 1507-1527. doi:10.1177/0002764204266236

- Coates, J., & Vickerman, P. (2010). Empowering children with special educational needs to speak up: experiences of inclusive physical education. *Disability and Rehabilitation*, 32, 1517-1526. doi: 10.3109/09638288.2010.497037
- Conatser, P. (2008). International perspective of aquatic instructors' attitudes toward teaching swimming to children with disabilities. *International Journal of Aquatic Research and Education*, 2, 256-265. Retrieved from <http://journals.humankinetics.com/ijare>
- Cregan, K., Bloom, G.A., & Reid, G. (2007). Career evolution and knowledge of elite coaches of swimmers with a physical disability. *Research Quarterly for Exercise and Sport*, 78(48), 339-350.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. (2<sup>nd</sup> ed.). Thousand Oaks, CA: SAGE Publications.
- Daley, A. J., & Leahy, J. (2003). Self-perceptions and participation in extra-curricular physical activities. *The Physical Educator*, 60, 13-18. doi: 10.1177/1356336X020081003
- Denzin, N. K., & Lincoln, Y. S. (2008). Introduction the discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (3<sup>rd</sup> ed., pp. 1-44). Thousand Oaks: SAGE Publications.

- DePauw, K. P., & Doll-Tepper, G. (2000). Toward progressive inclusion and acceptance: myth or reality? The inclusion debate and bandwagon discourse. *Adapted Physical Activity Quarterly*, 17, 135-143. Retrieved from <http://journals.humankinetics.com/APAQ>
- DePauw, K.P., & Gavron, S.J. (1992). Coaches of athletes with disabilities. *The Physical Educator*, 48(1), 33-40.
- DePauw, K. P. (1986). Toward progressive inclusion and acceptance: implications for physical education. *Adapted Physical Activity Quarterly*, 3, 1-5. Retrieved from <http://journals.humankinetics.com/APAQ>
- Devine, M.A., & Lashua, B. (2002). Constructing social acceptance in inclusive leisure contexts: the role of individuals with disabilities. *Therapeutic Recreation Journal*, 36(1), 65-83. Retrieved from <http://js.sagamorepub.com/trj>
- Dunton, G. F., Jamner, M. S., & Cooper, D. M. (2003). Physical self concept in adolescent girls: behavioural and physiological correlates. *Research Quarterly for Exercise and Sport*, 74, 360-365.
- Ebesugawa, M. K., Wensley, L., & Murphy-Sims, J. (2010). The developmental and social benefits of the inclusive e-karate community sports program. *International Journal of the Humanities*, 8, 141-150.

- Emme, M.J., Kirova, A., Kamau, O., & Kosanovich, S. (2006). Ensemble research: a means for immigrant children to explore peer relationships through fotonovela. *Alberta Journal of Educational Research*, 52(3), 160-181. Retrieved from <http://ajer.synergiesprairies.ca>
- Epstein, I., Stevens, B., McKeever, P., & Baruchel, S. (2006). Photo elicitation interview (PEI): Using photos to elicit children`s perspectives. *International Journal of Qualitative Methods*, 5, Article 1. Retrieved from [http://www.ualberta.ca/~ijqm/backissues/5\\_3/pdf/epstein.pdf](http://www.ualberta.ca/~ijqm/backissues/5_3/pdf/epstein.pdf)
- Evans, J., & Roberts, G.C. (1987). Physical competence and the development of children`s peer relations. *Quest*, 39, 23-35. doi:10.1080/003362-97.1987.10483854
- Faude, O., Kerper, O., Mulhaupt, M., Winter, C., Beziel, K., Junge, A., Meyer, T. (2010). Football to tackle overweight in children. *Scandinavian Journal of Medicine & Science in Sports*, 20, 103-110. doi: 10.1111/j.1600-0838.2009.01087.x
- Fitzgerald, H., & Kirk, D. (2009). Identity work: Young disabled people, family and sport. *Leisure Studies*, 28, 469-488. doi: 10.1080/02614360903078659
- Fragala- Pinkham, M. A., Dumas, H. M., Boyce, M., Peters, C. Y., & Haley, S. M. (2009). Evaluation of an adaptive ice skating programme for children with disabilities. *Developmental Neurorehabilitation*, 12, 215-223. doi: 10.1080/17518420902980100

- Graneheim, U.H., & Lundman, B. (2003). Qualitative content analysis in nursing research: concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today, 24*, 105-112. Retrieved from [intl.elsevierhealth.com/journals/nedt](http://intl.elsevierhealth.com/journals/nedt)
- Gringras, R. (2003). Community active living programming. In R.D. Steadward, G.D. Wheeler & E.J. Watkinson (Eds.), *Adapted Physical Activity* (p. 408). Edmonton, AB: The University of Alberta Press.
- Groff, D.G., Lundberg, N.R., & Zabriskie, R.B. (2008). Influence of adapted sport on quality of life: perceptions of athletes with cerebral palsy. *Disability and Rehabilitation, 31*(4), 318-326. doi: 10.1080/09638280801976233
- Goodwin, D.L., Fitzpatrick, D.A., Thurmeier, R., & Hall, C. (2006). The decision to join Special Olympics: Parents' perspectives. *Adapted Physical Activity Quarterly, 23*, 163-183. Retrieved from <http://journals.humankinetics.com/APAQ>
- Goodwin, D., Johnston, K., Gustafson, P., Elliott, M., Thurmeier, R., Kuttai, H. (2009). It's okay to be a quad: Wheelchair rugby players' sense of community. *Adapted Physical Activity Quarterly, 26*, 102-117. Retrieved from <http://journals.humankinetics.com/APAQ>
- Goodwin, D.L., & Watkinson, E.J. (2000). Inclusive physical education from the perspective of students with physical disabilities. *Adapted Physical Activity Quarterly, 17*, 144-160. Retrieved from <http://journals.humankinetics.com/APAQ>

- Griffiths, L. J., Dowda, M., Dezaux, C., & Pate, R. (2010). Associations between sport and screen-entertainment with mental health problems in 5-year-old children. *International Journal of Behavioural Nutrition and Physical Activity*, 7, 1-11. doi:10.1186/1479-5868-7-30
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, 18(1), 59-82. doi: 10.1177/1525822X05279903
- Harada, C.M., & Siperstein, G.N. (2009). The sport experience of athletes with intellectual disabilities: A national survey of Special Olympics athletes and their families. *Adapted Physical Activity Quarterly*, 26, 68-85.  
Retrieved from <http://journals.humankinetics.com/APAQ>
- Harter, S. (1978). Effectance motivation reconsidered toward a developmental model. *Human Development*, 21, 34-64. doi: 10.1159/000271574
- Harter, S. (1981). A model of mastery motivation in children: Individual differences and developmental change. In W. A. Collins (Ed.), *Minnesota symposium on child psychology* (Vol. 14, pp. 215-255). Hillsdale, NJ: Erlbaum.
- Harter, S. (1999). *The construction of the self: A developmental perspective*. New York, NY: The Guilford Press.

- Harter, S., & Whitesell, N. R. (1996). Multiple pathways to self-reported depression and psychological adjustment among adolescents. *Development and Psychopathology, 8*, 761-777. doi:10.1017/S095457940000741
- Hartup, W. W. (1995). The three faces of friendship. *Journal of Social and Personal Relationships, 12*, 569-574. doi: 10.1177/0265407595124012
- Hedrick, B. N. (1985). The effect of wheelchair tennis participation and mainstreaming upon the perceptions of competence of physically disabled adolescents. *Therapeutic Recreation Journal, 19*, 34-46.
- Hodder, I. (2000). The interpretation of documents and material culture. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (2<sup>nd</sup> ed.) (pp. 703-716). Thousand Oaks: SAGE Publications.
- Holt, N. L., Black, D. E., Tamminen, K. A., Fox, K. R., & Mandigo, J. L. (2008). Levels of social complexity and dimensions of peer experiences in youth sport. *Journal of Sport & Exercise Psychology, 30*, 411-431. Retrieved from <http://journals.humankinetics.com/JSEP>
- Hutzler, Y., & Bergman, U. (2011). Facilitators and barriers to participation while pursuing an athletic career: retrospective accounts of swimmers with disabilities. *Therapeutic Recreation Journal, 45*(1), 1-16. Retrieved from <http://js.sagamorepub.com/trj>



- Hutzler, Y., & Bar-Eli, M. (1993). Psychological benefits of sport for disabled people: A review. *Scandinavian Journal of Medicine and Science in Sports*, 3, 217-228. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1111/j.1600-0838.1993.tb00386.x/pdf>
- Hutzler, Y., Fliess, O., Chacham, A., & Van den Auweele, Y. (2002). Perspectives of children with physical disabilities on inclusion and empowerment: Supporting and limiting factors. *Adapted Physical Activity Quarterly*, 19, 300-317. Retrieved from <http://journals.humankinetics.com/APAQ>
- Jago, R., Brockman, R., Fox, K.R., Cartwright, K., Page, A.S., & Thompson, J.L. (2009). Friendship groups and physical activity: qualitative findings on how physical activity is initiated and maintained among 10-11 year old children. *International Journal of Behavioral Nutrition and Physical Activity*, 6. doi: 10.1186/1479-5868-4
- Jago, R., MacDonald-Wallis, K., Thompson, J. L., Page, A.S., Brockman, R., & Fox, K. R. (2011). Better with a buddy: influence of best friends on children's physical activity. *Medicine & Science in Sports & Exercise*, 43, 259-265. doi: 10.1249/MSS.0b.013e3181edfaa
- Johnson, C. C. (2009). The benefits of physical activity for youth with developmental disabilities: A systematic review. *American Journal of Health Promotion*, 23(3), 157-167. doi: 10.4278/ajhp.070930103

- Jones D. B. (2003). Denied from a lot of places' barriers to participation in community recreation programs encountered by children with disabilities in Maine: perspectives of parents. *Journal of the Canadian Association for Leisure Studies*, 28, 49–69. doi: 10.1080/14927713.2003.9649939
- Karagiannis, A., Stainback, S., & Stainback, W. (1996). Historical overview of inclusion. In S. Stainback & W. Stainback (Eds.), *Inclusion: A guide for educators* (pp. 17-25). Toronto: Paul H. Brookes Publishing Co.
- Keegan, R., Spray, C., Harwood, C., & Lavalley, D. (2010). The motivational atmosphere in youth sport: coach, parent, and peer influences on motivation in specializing sport participants. *Journal of Applied Sport Psychology*, 22, 87-105. doi: 10.1080/10413200903421267
- Kirova, A., & Emme, M. (2008). Fotonovela as a research tool in image-based participatory research with immigrant children. *International Journal of Qualitative Methods*, 7(2), 35-57. doi: 142.244.176.52
- King, G., Law, M., Hurley, P., Petrenchik, T., & Schwellnus, H. (2010). A developmental comparison of the out-of-school recreation and leisure activity participation of boys and girls with and without physical disabilities. *International Journal of Disability, Development and Education*, 57, 77-107. doi: 10.1080/10349120903537988

- Kristén, L., Patriksson, G., & Fridlund, B. (2002). Conceptions of children and adolescents with physical disabilities about their participation in a sports programme. *European Physical Education Review, 8*, 139-156. doi: 10.1177/1356336X020082003
- Kristén, L., Patriksson, G., & Fridlund, B. (2003). Parents conceptions of the influences of participation in a sports programme on their children and adolescents with physical disabilities. *European Physical Education Review, 9*. doi: 10.1177/1356X03009001178
- Lewis, A., & Porter, J. (2004). Interviewing children and young people with learning disabilities: guidelines for researchers and multi-professional practice. *British Journal of Learning Disabilities, 32*, 191-197. doi: 10.1111/j.1468-3156.2004.00313.x
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: SAGE Publications.
- Longmuir, P. E. (2003). Creating inclusive physical activities. In R.D. Steadward, G.D. Wheeler & E.J. Watkinson (Eds.), *Adapted Physical Activity* (pp. 363-380). Edmonton, AB: The University of Alberta Press.
- Lyons, S., Corneille, D., & Coker, P. (2009). A miracle in the outfield: the benefits of participation in organized baseball leagues for children with mental and physical disabilities. *Therapeutic Recreation Journal, 43*, 41-48.

- Magill-Evans, J., Darrah, J., & Adkins, R. (2010). Youths with cerebral palsy and their satisfaction with recreational services: Implications for inclusion. *Leisure/Loisir, 28*, 71-86. Retrieved from <http://dx.doi.org/10.1080/14927713.2003.9649940>
- Martin, J. J. (2006). Psychosocial Aspects of youth disability sport. *Adapted Physical Activity Quarterly, 23*, 65-77. Retrieved from <http://journals.humankinetics.com/APAQ>
- Martin, J.J., & Choi, Y.S. (2009). Parents' physical activity-related perceptions of their children with disabilities. *Disability and Health Journal, 2*, 9-14. doi: 10.1016/j.dhjo.2008.09.001
- Martin, S. B., Jackson, A. W., Richardson, P. A., & Weiller, K. H. (1999). Coaching preferences of adolescent youth and their parents. *Journal of Applied Sport Psychology, 11*, 247-262. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/10413209908404203>
- Martin, J. J., & Smith, K. (2002). Friendship quality in youth disability sport: perceptions of a best friend. *Adapted Physical Activity Quarterly, 19*, 472-482. Retrieved from <http://journals.humankinetics.com/APAQ>
- Mayall, B. (2000). Conversations with children: working with generational issues. In P. Christensen & A. James (Eds.), *Research with Children: Perspectives and Practices* (120-135). New York: Falmer Press.

Mayan, M. J. (2009). *Essentials of Qualitative Inquiry*. Walnut Creek, CA: Left Coast Press Inc.

Medland, J., & Elliss-Hill, C. (2008). Why do able-bodied people take part in wheelchair sports? *Disability & Society*, 23(2), 107-116. doi: 10.1080/09687590701841133

Nixon, H.N. (2007). Constructing diverse sports opportunities for people with disabilities. *Journal of Sport and Social Issues*, 31(4), 417-433. doi: 10.1177/0193723507308250

Patton, M. Q. (2002). *Qualitative research & evaluation methods* (3<sup>rd</sup> ed.). Thousand Oaks, CA: SAGE Publications.

Pelletier, L.G., Fortier, M.S., Vallerand, R.J., Tuson, K.M., Briere, N.M., Blais, M.R. (1995). Toward a new measure of intrinsic motivation, extrinsic motivation, and amotivation in sports: the sport motivation scale (SMS). *Journal of Sport & Exercise Psychology*, 17, 35-53. Retrieved from <http://journals.humankinetics.com/jsep>

Perreault, S., & Vallerand, R. J. (2007). A test of self-determination theory with wheelchair basketball players with and without disability. *Adapted Physical Activity Quarterly*, 24, 305-316. Retrieved from <http://journals.humankinetics.com/APAQ>

- Pittman, T. S., Boggiano, A. K., & Main, D. S. (1992). Intrinsic and extrinsic motivational orientations in peer interactions. In A. K. Boggiano & T. S. Pittman (Eds.), *Achievement and motivation: A social-developmental perspective* (pp. 9-36). New York: Cambridge University Press.
- Place, K., & Hodge, S. M. (2001). Social inclusion of students with physical disabilities in general physical education: a behavioural analysis. *Adapted Physical Activity Quarterly*, 18, 389-404. Retrieved from <http://journals.humankinetics.com/APAQ>
- Požėrienė, J., Adomaitienė, R., Ostasevičienė, V., Rėklaitienė, D. & Kragėnienė, I. (2008). Sport participation motivation of athletes with intellectual disabilities. *Education. Physical Training. Sport*, 70, 69-75.
- Rice, P. L., & Ezzy, D. (1999). *Qualitative research methods: A health focus*. South Melbourne: Oxford University Press.
- Reid, G. (2003). Moving toward inclusion. In R.D. Steadward, G.D. Wheeler & E.J. Watkinson (Eds.), *Adapted Physical Activity* (pp. 131-148). Edmonton, AB: The University of Alberta Press.
- Robinson, T.T., & Carron, A.V. (1982). Personal and situational factors associated with dropping out versus maintaining participation in competitive sport. *Journal of Sport Psychology*, 4, 364-378.
- Rose, G. (2007). *Visual methodologies*. Thousand Oaks: SAGE Publications.

Scott, J. (2000). Children as respondents: the challenge for quantitative methods.

In P. Christensen & A. James (Eds.), *Research with Children:*

*Perspectives and Practices* (pp. 98-119). New York: Falmer Press.

Seidman, I. (2006). *Interviewing as qualitative research: A guide for researchers*

*in education and the social sciences*. (3<sup>rd</sup> ed.). New York, NY: Teachers

College Press.

Seymour, H., Reid, G., & Bloom, G. A. (2009). Friendship in inclusive physical

education. *Adapted Physical Activity Quarterly*, 26, 201-219. Retrieved

from <http://journals.humankinetics.com/APAQ>

Shaw, D., Gorely, T., & Corban, R. (2005). *Sport and exercise psychology*.

Independence, KY: Taylor & Francis.

*Sledge hockey*. (n.d.). Retrieved from

<http://www.paralympic.ca/en/Sports/Winter/Sledge-Hockey.html>

*Sledge hockey history*. (n.d.). Retrieved from

[http://www.hockeycanada.ca/index.php/ci\\_id/18800/la\\_id/1.htm](http://www.hockeycanada.ca/index.php/ci_id/18800/la_id/1.htm)

Smith, A.L. (1999). Perceptions of peer relationships and physical activity

participation in early adolescence. *Journal of Sport & Exercise*

*Psychology*, 21, 329-350. Retrieved from

<http://journals.humankinetics.com/jsep>

- Smith, A. L., Ullrich-French, S., Walker, E. II., & Hurley, K. S. (2006). Peer relationship profiles and motivation in youth sport. *Journal of Sport & Exercise Psychology, 28*, 362-382. Retrieved from <http://journals.humankinetics.com/jsep>
- Spencer, S. (2011). *Visual research methods in the social sciences*. New York, NY: Routledge.
- Spencer-Cavaliere, N., & Watkinson, E. J. (2010). Inclusion understood from the perspectives of children with disability. *Adapted Physical Activity Quarterly, 27*, 275-293. Retrieved from <http://journals.humankinetics.com/APAQ>
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: SAGE Publications.
- Stake, R. E. (2008). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of qualitative inquiry* (pp. 119-150). Thousand Oaks: SAGE Publications.
- Stainback, W., & Stainback, S. (1990). Inclusive schooling. In W. Stainback & S. Stainback (Eds.), *Support networks for inclusive schooling* (pp. 3-24). Baltimore: Paul H. Brookes.
- Sterba, J. A. (2006). Adaptive downhill skiing in children with cerebral palsy: effect on gross motor function. *Pediatric Physical Therapy, 18*, 289-296. doi:10.1097/01.pep.0000233006.69121.b



- Steele, C. A., Kalnins, I. V., Jutai, J. W., Stevens S. E., Bortolussi, J. A., Biggar, W. D. (1996). Lifestyle health behaviours of 11 to 16-year-old youth with physical disabilities. *Health Education Research, 11*, 173-186. doi: 10.1093/her/11.2.173
- Swanson, S. R., Colwell, T., & Zhao, Y. (2008). Motives for participation and importance of social support for athletes with physical disabilities. *Journal of Clinical Sports Psychology, 2*, 317-336. Retrieved from <http://journals.humankinetics.com/JCSP>
- Taub, D.E., Blinde, E.M., & Greer, K.R. (1999). Stigma management through participation in sport and physical activity: experiences of male college students with physical disabilities. *Human Relations, 52*(11), 1469-1484. doi: 10.1177/001872679905201106
- Taub, D. E., & Greer, K. R. (2000). Physical activity as a normalizing experience for school-age children with physical disabilities: implications for legitimation of social identity and enhancement of social ties. *Journal of Sport & Social Issues, 24*, 395-414. doi: 10.1177/0193723500244007
- Tsai, E. H., & Fung, L. (2009). Parents' experiences and decisions on inclusive sport participation of their children with intellectual disabilities. *Adapted Physical Activity Quarterly, 26*, 151-171. Retrieved from <http://journals.humankinetics.com/APAQ>

- Ulrich-French, S., & Smith, A.L. (2006). Perceptions of relationships with parents and peers in youth sport: independent and combined prediction of motivational outcomes. *Psychology of Sport and Exercise*, 7, 193-214. doi:10.1016/j.psychsport.2005.08.006
- Ulrich-French, S., & Smith, A. L. (2009). Social and motivational predictors of continued youth sport participation. *Psychology of Sport and Exercise*, 10, 87-95. doi:10.1016/j.psychsport.2008.06.007
- United Nations. (1982). *World programme of action concerning disabled persons*. Retrieved from <http://www.leeds.ac.uk/disabilitystudies/archiveuk/united%20nations/world%20programme.pdf>
- Vella, S., Oades, L., & Crowe, T. (2011). The role of the coach in facilitating positive youth development: moving from theory to practice. *Journal of Applied Sport Psychology*, 23, 33-48. doi:10.1080/10413200.2010.511423
- Watkinson, E. J., Dwyer, S. A., & Nielsen, B. A. (2005). Children theorize about reasons for recess engagement: does expectancy-value theory apply? *Adapted Physical Activity Quarterly*, 22, 179-197. Retrieved from <http://journals.humankinetics.com/APAQ>
- Weiss, M.R., & Duncan, S.C. (1992). The relationship between physical competence and peer acceptance in the context of children's sport participation. *Journal of Sport & Exercise Psychology*, 14, 177-191. Retrieved from <http://journals.humankinetics.com/JSEP>

- Weiss, M. R., Smith, A. L., & Theeboom, M. (1996). "That's what friends are for"; children's and teenagers' perceptions of peer relationships in the sport domain. *Journal of Sport & Exercise Psychology*, 18, 347-379. Retrieved from <http://journals.humankinetics.com/JSEP>
- Welk, G. J., Wood, K., & Morss, G. (2003). Parental influences on physical activity in children: An exploration of potential mechanisms. *Pediatric Exercise Science*, 15, 19-33. Retrieved from <http://journals.humankinetics.com/PES>
- Wheeler, G. D., Steadward, R. D., Legg, D., Hutzler, Y., Campbell, E., Johnson, A. (1999). Personal investment in disability sport careers: an international study. *Adapted Physical Activity Quarterly*, 16, 219-237. Retrieved from <http://journals.humankinetics.com/APAQ>
- White, R. W. (1959). Motivation reconsidered: The concept of competence. *Psychological Review*, 66, 297-333. doi: 10.1037/h0040934
- Winnick, J. P. (2005). An introduction to adapted physical education and sport. In J. P. Winnick (Ed.), *Adapted Physical Education and Sport*, (4th ed., pp.1-20). Windsor, IL: Human Kinetics.
- World Health Organization (2001). *International classification of functioning, disability and health*. Geneva: World Health Organization.
- World Health Report- Reducing Risks, Promoting Healthy Life. (2002): Retrieved from <http://www.who.int/whr/2002/en/>

- Wrotniak, B.H., Epstein, L.H., Dorn, J.M., Jones, K.E., & Kondilis, V.A. (2006).  
The relationship between motor proficiency and physical activity in  
children. *Pediatrics*, *118*, 1758–1765. Retrieved from  
<http://pediatrics.aappublications.org>
- Yin, R. K. (2003). *Applications of case study research*. Thousand Oaks, CA:  
SAGE Publications.
- Yin, R. K. (2009). *Case study research: Design and methods*. Thousand Oaks,  
CA: SAGE Publications.
- Zarbatany, L., Ghesquiere, K., & Mohr, K. (1992). A context perspective on early  
adolescents' friendship expectations. *The Journal of Early  
Adolescence*, *12*, 111-126. doi: 10.1177/0272431692012001007
- Zwier, J. N., Van Schie, P. E., Becher, J. G., Smits, D., Gorter, J. W., &  
Dallmeijer, A. J. (2010). Physical activity in young children with cerebral  
palsy. *Disability and Rehabilitation*, *32*, 1501-1508. doi:  
10.3109/09638288.2010.49701

## Appendices

### Appendix 1.0 Interview Guide, Interview #1

Preface to the actual interview (approximately 5 minutes)

- Discuss: who I am, where I am from, why we are doing an interview today. Tell the child that I'd like for the opportunity to do a second interview in a few weeks but that they don't have to decide that today.
- Show the child the digital recorder, telling them what it will do, why I've got it, what I'm using it for, where it will sit, and what will happen with the interview that's recorded on it once we're finished.
- Introduce the topic of confidentiality: "Whatever you say is going to stay between you and me. If I use your words to write up my paper I'll use a code name so nobody will know it's you who said those words."
- Tell child they can stop the interview at any time, they just have to tell me "Katrina, I want to stop the interview now".
- Tell the child that they can skip a question if they don't want to answer it
- Tell the child that there are no right or wrong answers; I just want to hear what about what their parents, coaches, and friends are like in sledge hockey.
- Ask the child if they have any other questions to ask or things that they are worried about.
- Present the child with the assent form to fill out.

Semi-structured Interview Questions (~35 min; Harter, 1985; Zarbatany, et al., 2002; Weiss, et al., 1996; Welk, et al., 2002; Spencer-Cavaliere & Watkinson, 2010).

Clarification probes such as “What do you mean by...?” and elaboration probes such as “Can you give an example of...?” will be incorporated into the interview when needed to encourage richness in respondents description.

**Explore sledge hockey experiences.**

- If somebody had never heard of sledge hockey before how would you explain it to them?
- How do you feel about playing sledge hockey? What’s your favourite part of sledge hockey?
  - Probe: What makes that your favourite part of sledge hockey?
- What’s your least favourite part of the sledge hockey?
  - Probe: Why is that your least favourite part of sledge hockey?

**Explore competence in sledge hockey.**

- What things are you really good at in sledge hockey?
  - Probe: How do you know you’re good at that?
- What things would you like to be better at in sledge hockey?
  - Probe: What would help you to get better at that?
  - How do you know you need some extra practice on some things?

- One of the things I want to know about is how the other people at sledge hockey, like your teammates, coaches and parents affect how you feel about it so I am going to ask you some questions about them now.

**Explore social relationships between children and their peers.**

- Tell me a little bit about your teammates in sledge hockey, what are they like?
- Are you close to any of your teammates (who and why?)
- Can you think of a time when one of your teammates said/did something that made you feel good at sledge hockey? Can you tell me about it?
  - Probe: Why did that make you feel good?
- What other kinds of things do your teammates do that make you want to keep playing sledge hockey?
- Can you think of a time when one of your teammates said/did something that didn't make you feel so good? Can you tell me about it?
  - Probe: Why did that make you feel bad?
- Are there other kinds of things that your teammates have done or said that made you not want to play sledge hockey?

**Explore social relationships between children and their parents.**

- If I was going to ask your mom or your dad about sledge hockey and why they think it's important for you to play it, what do you think they would say?

- Probe: Are they happy that you play sledge hockey? How do you know?
- Can you tell me about the things your mom or dad do when it comes time for sledge hockey practice?
  - Probe: Is it important that they do these things?
- Do your parents ever say or do things that make you feel good about playing sledge hockey?
- Are there things that your parents could do or tell you that would make you want to play sledge hockey even more?
- Do your parents ever say or do things that make you not feel good about playing sledge hockey?
- Are there things that your parents could do or tell you that would make you not want to play sledge hockey?

**Explore social relationships between children and their coaches.**

- Can you tell me about the kinds of things your coach does in sledge hockey?
- How do you know if a coach is good? What kinds of things should they do or say?
- What sorts of things does your coach tell you?
  - Probe: Can you tell me about a time when your coach did or said something that made you feel good? Why did that make you feel good?



- What else could your coach do or say that would make you want to keep playing sledge hockey?
  - Probe: Can you tell me about a time when your coach did or said something that didn't make you feel so good? Why?

## **Appendix 2.0 Interview Guide, Interview #2**

### **Interview Guide: Interview #2**

#### **Preface to the actual interview (approximately 5 minutes)**

- Reintroduce myself to the participants, telling the child that this second interview is sort of a check up on the first one. During this second interview I'll be asking them some questions about what they discussed during the first interview, making sure I understood what they were trying to tell me. I will also ask them to tell me about some things that I had questions about from the first interview.
- Discuss with the child that the other part of the interview has to do with the pictures that I have taken at sledge hockey. The child will be asked to pick 5-8 pictures that they would like to talk about. These pictures can go together to illustrate a story about a kid like them in sledge hockey, or they can be chosen because the child finds them interesting and would like to explain more about them.
- Remind the child of the use of the digital recorder and the topic of confidentiality.
- Discuss with the child that they are able to stop the interview at any time, or skip a question if they do not want to answer it.
- Tell the child again that there are no right or wrong answers; I just want to hear more about what is going on in some of the pictures I have taken and what their parents, coaches, and friends are like in sledge hockey.
- Ask the child if they have any questions.
- Present the child with the assent form to fill out.

Semi-structured Interview Questions, Interview #2 (~ 35 min; Cappello, 2005, Epstein, Stevens, McKeever & Baruchel, 2006, Block, 1999 (inclusion stuff?), Kristen et al., 2002, Spencer-Cavaliere & Watkinson, 2010).

- Provide child with a summarized list of his or her responses and initial interpretations made by the researcher. Ask the child any questions that may have been generated in the first interview. Examples of such questions include “What did you mean by when you said...?” or “ Can you tell me a little bit more about when you said this...?”.

The second part of the interview will entail the photographs being presented to the child.

- I would like to show you some of the pictures I've taken over the last while at sledge hockey. You can go through them all, and pick out 5 to 8 pictures that you would like to talk about. These pictures can either make up a story of you playing sledge hockey, or they can be pictures that show something important that you'd like to talk about.

### **Describing the photographs.**

- Can you explain to me what is happening in the picture/ or what this is a picture of?
  - Probe: If you had to describe this picture to somebody who wouldn't be able to see it themselves, what sorts of words
- Do you do this often/does this happen often?

### **Exploring the significance of the photographs.**

- Why did you choose this photo?
  - Probe: What made you want to pick this picture?
- Does this picture tell me something important about you or a kid like you at sledge hockey?
  - Probe: Why do you think this picture tells me something important?
- Of the pictures that you've chosen, what shows the most important part of sledge hockey to you?
  - Probe: Why is this the most important part?
  - Probe: What would sledge hockey be like if this important part wasn't there?

## Appendix 3.0 Letter to Sport4All

### Title of Research Project: Children's Sledge Hockey Experiences

Investigators: Katrina Wynnyk, Graduate Student, Faculty of Physical Education and Recreation, University of Alberta, 780-492-2679, kwynnyk@ualberta.ca

Dr. Nancy Spencer-Cavaliere, Supervisor & Assistant Professor, Faculty of Physical Education and Recreation, University of Alberta, 780-492-9615, ncavaliere@ualberta.ca

Name: [REDACTED] Executive Director

Sport4All

Dear [REDACTED],

My name is Katrina Wynnyk. I am a graduate student at the University of Alberta. I am doing a study with Dr. Nancy Spencer-Cavaliere. It is a project looking at children's sledge hockey experiences. This study is part of my thesis. The children who take part in this study will get to share their thoughts on how to make specialized sport programs a positive experience for children. The purpose of this letter is to describe this study and to ask if Sport4All would be interested in taking part.

The project consists of observations and interviews with children.

### Participants

About 10-12 children and youth who play on the Junior Division Sledge Hammers Hockey Team.

### Data Collection

**Observations.** I will attend sledge hockey for about 3 months during the study. Sometimes I will participate in activities with the children and sometimes I will just observe what is going on. This will help me to become familiar with your program and allow the children to get to know me.

**Interviews.** Each child taking part in the study will do two individual interviews. Each interview will be about 45 minutes long and take place where the parent chooses. The first interview we will be about children's sledge hockey experiences. In the second interview children will use sledge hockey photographs to talk more about these experiences.

Participation in this study is voluntary. Whether or not children and staff take part in this study should not affect their involvement your program.

We will keep the identity and answers of the participants private. We will keep the data in a locked room or on a computer with a password. The data will be copied from the

tapes into written form. Only the research team will hear or read the interviews. We will give all the participants a code name and real names will not be used. The photographs will only be used for the interviews. We will keep the data for five years after we have published any papers and then it will be destroyed.

Possible risks of taking part revolve around the disclosure of personal or sensitive information. Participants do not have answer any questions they don't want to. Individuals, who wish to withdraw from the study, can indicate this to the researcher either verbally or in writing. Their information will be removed from the study upon their request prior to data analysis.

If you have any questions about this project, please feel free to contact:

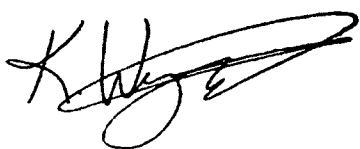
- Katrina Wynnyk @ 780-492-2679 or [kwynnyk@ualberta.ca](mailto:kwynnyk@ualberta.ca)
- Dr. Nancy Spencer-Cavaliere @ 780-492-9615 or [ncavaliere@ualberta.ca](mailto:ncavaliere@ualberta.ca)

If you have further concerns about this study, you may contact Dr. William Dunn, Chair of the Research and Ethics Board 1, at (780)-492-4280. Dr. Dunn has no direct involvement with this project.

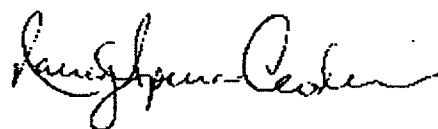
If your organization would like to take part in this study, please contact Katrina using the contact information listed above.

Thank you for your time.

Sincerely,



Katrina Wynnyk  
Graduate Student  
Faculty of Physical Education & Recreation  
& Recreation  
University of Alberta



Dr. Nancy Spencer-Cavaliere  
Assistant Professor  
Faculty of Physical Education  
University of Alberta

## Appendix 4.0 Participant Assent Form



Faculty of Physical Education and Recreation

E488 Van Vliet Centre  
Edmonton, Alberta, Canada T6G 2H9

### Title of Research Project: Exploring the effects of social relationships on children with disabilities` motivation to compete in sledge hockey

Researcher: Katrina Wynnyk, MA Candidate  
Faculty of Physical Education and Recreation  
University of Alberta  
Phone: 780-492-2679, Email: kwynnyk@ualberta.ca

Supervisor: Dr. Nancy Spencer- Cavaliere

#### To be completed by the child/youth participant at the beginning of the interview:

Hi! My name is Katrina and I am a student at the University. I want to find out how different people at sledge hockey, like your mom and dad, coaches and the other kids at sledge help to motivate you. Kids who play sports like sledge hockey aren`t always asked about what they think about sports; that is why you are being asked to take part in this study. You don`t have to answer any questions you don`t want to and you can stop the interview at any time. If you change your mind and don`t want me to ask you questions any more, that is okay too. There are no right or wrong answers. I will keep what you say to me private.

- |  |     |    |
|--|-----|----|
| 1. Would it be okay if I asked you some questions about sledge hockey?                       | Yes | No |
| 2. Do you know that you don`t have to answer any questions you don`t want to?                | Yes | No |
| 3. Do you know that it`s okay to change your mind if you don`t want to answer any questions? | Yes | No |
| 4. Do you know that I will keep what you say private?  | Yes | No |

Please write your name here: \_\_\_\_\_

And put the day you signed this paper on here:

\_\_\_\_\_

THANK YOU VERY MUCH!

## Appendix 5.0 Parent Consent Form



Faculty of Physical Education and Recreation

E488 Van Vliet Centre  
Edmonton, Alberta, Canada T6G 2H9

**Title of Project: Exploring social relationships and experiences in children's motivation to participate in sledge hockey**

**Researcher:**

Katrina Wynnyk, MA Candidate  
Faculty of Physical Education and Recreation, University of Alberta  
Phone: 780-492-2679, Email: [kwynnyk@ualberta.ca](mailto:kwynnyk@ualberta.ca)

Dear Parent/Guardian,

This is a study to find out about different social relationships in sport and how they impact children with disabilities. We want to learn about how relationships with parents, peers and coaches can keep a child wanting to play sports. By taking part in this study, your child will get to share their thoughts about how all the people in sledge hockey motivate them and will help us in making sport environments that kids want to stay playing in.

There are 2 parts to this study: 1. Interviews and 2. Observations

1. Interviews (two in total, about 45 minutes each):  
We would like to interview your child on two separate occasions. The interviews will be audio taped, and will be held in a place that you choose. The first interview is to learn about the people in sledge hockey that motivate your child to keep playing the sport. The purpose of the second interview is to present your child with some findings from the first, and to ask them to look at and talk about some pictures I have taken. During the interview, your child might want to skip a question and that's okay. If you or your child wish to stop taking part in the study, please let the researcher know verbally or in writing. You and your child's information will be removed upon your request up until the end of the first interview.
  
2. Observations:  
Before the interviews begin, we would like to get to know a little bit more about the sledge hockey setting your child takes part in. I will be at sledge hockey as a participant observer one or two times before the first interview. Participant observers learn about the setting by being in them, and talking with the people taking part in the activities. I will stay in this role until the second interviews are finished, about the end of March. While observing I'd also like to take some pictures of sledge hockey, including the important people in that setting like families of participants, teammates and coaches. These pictures will be used in the second interview to talk more about your child's sledge hockey experiences.



UNIVERSITY OF  
**ALBERTA**

Faculty of Physical Education and Recreation

E488 Van Vliet Centre  
Edmonton, Alberta, Canada T6G 2H9

**Title of Project: Exploring social relationships and experiences in children's motivation to participate in sledge hockey.**

The observations and interviews will be kept private. Only members of the research team will have access to this information. All of the data will be kept in a locked room at the University. The tapes will be copied into written form and then erased. Everyone who is in the study will be given a code number and their names will not be used. Data will be kept for five years after we have published any papers from it, and then it will be destroyed.

Being in this study is completely voluntary. If you or your child does not want to be in this study they can still participate in sledge hockey. If you have any questions about this project, please feel free to call Katrina Wynnyk at (780) 492-2679. You may also email any questions you might have to: [kwynnyk@ualberta.ca](mailto:kwynnyk@ualberta.ca). If you have any further concerns about this study, you may also contact Ms. Wynnyk's degree supervisor, Dr. Nancy Spencer-Cavaliere at (780)492-9615. You may also contact Dr. William Dunn, Chair of the Research and Ethics Board 1, at (780)-492-4280. Dr. Dunn has no direct involvement with this project.

If you agree for your child to take part in this study, please complete the participant information sheet and consent letter and return it to your child's coach or program leader.

Thank you for your time.

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Wynnyk'.

Katrina Wynnyk  
MA Candidate  
Faculty of Physical Education and Recreation  
University of Alberta



## Appendix 6.0 Photograph Waiver



Faculty of Physical Education and Recreation

E488 Van Vliet Centre  
Edmonton, Alberta, Canada T6G 2H9

### Title of Research Project: Exploring social relationships and experiences in children's motivation to participate in sledge hockey

#### Researcher:

Katrina Wynnyk, MA Candidate  
Faculty of Physical Education and Recreation, University of Alberta  
Phone: 780-492-2679, Email: kwynnyk@ualberta.ca

#### Dear Parent/Guardian,

During the research study, the lead researcher would like to take pictures of people who play a role in the sledge hockey environment. This may include you, the child's parents, their coaches and their teammates. Letting the researcher take you/your child's picture **does not** mean that you have agreed for your child to participate in the study. These pictures will be used in the interviews that will take place, and will not be shown to anybody besides the children being interviewed.

#### Authorization to Reproduce Physical Likeness for Research Purposes

I hereby grant to Katrina Wynnyk, the right to *(please check all that apply)*

- Photograph ME
- Photograph my child (named above)

\_\_\_\_\_  
Name of Child

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name of Parent or Guardian

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Parent or Guardian for photographic consent of child

\_\_\_\_\_  
Signature of Parent or Guardian for photographic consent

## Appendix 7.0 Coach Photograph Waiver



Faculty of Physical Education and Recreation

E488 Van Vliet Centre  
Edmonton, Alberta, Canada T6G 2H9

### Title of Research Project: Children's Sledge Hockey Experiences

Investigators: Katrina Wynnyk, Graduate Student, Faculty of Physical Education and Recreation, University of Alberta, 780-492-2679, [kwynnyk@ualberta.ca](mailto:kwynnyk@ualberta.ca)

Dr. Nancy Spencer-Cavaliere, Supervisor & Assistant Professor, Faculty of Physical Education and Recreation, University of Alberta, 780-492-9615, [ncavali@ualberta.ca](mailto:ncavali@ualberta.ca)

### Dear Coach,

During the research study, Katrina would like to take pictures of sledge hockey and of the people there. This may include the players, their parents, teammates and coaches. These pictures will be used in the interviews with the children to help them share their experiences. They will not be shown to anybody besides the children being interviewed.

### Authorization to Reproduce Physical Likeness for Research Purposes

I hereby grant to Katrina Wynnyk, the right to:

Photograph Me

\_\_\_\_\_  
Name of Coach

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Coach for personal  
photographic consent

**Appendix 8.0: Participant Demographic Sheet**

**Participant Demographic Information Sheet (for parent to fill out)**

Name of child (first and last):

\_\_\_\_\_

Gender of child (please circle):      Girl              Boy

Age of child \_\_\_\_\_.

Child's birth date (day/month/year) \_\_\_\_\_.

Grade child currently is enrolled in \_\_\_\_\_.

Disability type:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

Brief explanation of your child's disability and equipment they use for mobility  
(if any).

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

How many years has your child been playing sledge hockey?

\_\_\_\_\_.

How did you find out about the program?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_.

Thank you.