A Qualitative Investigation of Barriers and Facilitators to Physical Activity Opportunities for Persons with Disabilities in a Small Southern Alberta City

by

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Abstract

Introduction: Rarely have the barriers and facilitators of PA for persons with a disability (PwD) living in a small city been the focus of researchers, despite the emergence of studies in the last two decades about the importance of PA for PwD. Numerous studies have investigated the barriers and facilitators to PA opportunities for PwD in urban centers, however, little was known about the barriers and facilitators to PA for PwD who reside in small cities.

Methods: The purpose of this study was to perform an in-depth exploration of the barriers and facilitators of PA for PwD living in a small southern Alberta city. Interpretive description was employed with 12 PwD ranging in age from 26 to 71 years old. Using a variety of data collection techniques, information about the PA experiences, as well as, the key facilitators and barriers to meaningful PA engagement for PwD were captured.

Results: The conceptual claim of this study was that PwD recognized that PA was important for their overall health, but there was a lack of PA opportunities within their small city. Through increased involvement in inclusive PA, PwD felt they could become more visible within their community and help change attitudes towards PwD. Participants reported a range of barriers including: (a) accessibility issues, (b) lack of transportation (c) lack of community awareness, (d) limited programming and equipment, (e) financial cost, and (f) health concerns. The facilitators included: (a) awareness, (b) personal perspectives, (c) existing activities, and (d) supports.

Conclusions: These findings added to the growing body of literature about barriers and facilitators to PA for PwD. Within the facilitators, the notion that "everybody knows everybody" appeared unique to living in a small city and highlighted how the nature of small communities can lead to a strong sense of social connectedness (McPhedran, 2011) which was critical to participants' sense of inclusion in PA and community.

Dedication

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has." - *Margaret Mead*

This work is dedicated to all those who have supported me along my academic journey. To my friends and family from back home who inspired me to dig deeper and explore the ponderings that ultimately led to this formalized inquiry. To my academic colleagues, and now friends, who did their best to teach me how to be a graduate student. To my lifelong friends in Edmonton, who showed me the endless possibilities of what we are all capable of when a person is given the support to succeed. And to Derek, thank you for your unwavering love and encouragement. You, along with countless others, have assisted me everyday to make a difference in our community.

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I would first like to thank all of the community organizations and partners that assisted me to connect with the study participants. Conducting this research would have been exponentially more difficult if I had not had great “word of mouth” advertisement about my study. In addition, I would like to thank my 12 participants who freely gave up their time to chat with me about their experiences of living as a person with a disability living in a small community. You welcomed me into your lives, and often your homes, to make my study content-rich and full of great detail. I am forever grateful. I would like to thank my committee members, Dr. Marcel Bouffard and Dr. Nancy Spencer-Cavaliere. Dr. Marcel Bouffard, I was extremely fortunate to have you serve on my committee during your last year before retirement. Your wealth of knowledge, but more importantly, your questions, helped to push me further than I thought I could be pushed within my graduate degree. Dr. Nancy Spencer-Cavaliere, your continued guidance and encouragement allowed me to produce a manuscript that I am proud of. Thank you for not only being a great supervisor, but a great role model for all young female academics.

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Table of Contents

List of Figures

Chapter 1:

Introduction

Personal Background

The ability to take knowledge from an academic setting and incorporate it within real life stories of individuals in the community was what I found most exciting about doing research. One of the biggest catalysts for coming back to school to pursue a master's degree was that I felt some important stories were not being heard. During my undergraduate degree I was fortunate to come across a not-for-profit organization, called the Paralympic Sports Association that provided physical activity (PA) opportunities for people with disabilities (PwD). It inspired me to learn more about one of the largest minority populations in Alberta, PwD.

Combined with my own background and interest in sport, I was further motivated to examine a small, but growing subsection of this minority group in the area of adapted physical activity (APA). As I volunteered and worked more in the APA field, I soon came to learn that there are major gaps in programming for PwD, especially in smaller communities.

I grew up in a small city in southern Alberta that is located three hours from the closest large metropolitan city. When I returned to my hometown, I continuously noticed that the supports available for PwD were much different than what I had become accustomed to in another large metropolitan Alberta city. In particular, when talking to family and friends with disabilities about my work and volunteering, I often felt guilty as the conversation took a turn when they replied how nice it would be to have opportunities to meet their own desires to be physically active. As I engaged in more conversations with these individuals, I started to question why these opportunities were not available in my hometown. I wanted to know more about the reasons why PwD living in this small city appeared not to have PA opportunities available to them. By asking members of the community about their PA experiences or lack of them, I was hopeful that meaningful recommendations to improve PA opportunities for PwD, who live in smaller communities, might emerge.

Background and Significance of Study

In the general population, there is significant evidence that regular PA can help in the prevention of primary and secondary chronic diseases (e.g. cardiovascular disease, diabetes, cancer, hypertension, obesity, depression and osteoarthritis) and premature death (Warburton, Nicol & Bredin, 2006). For PwD, recognition of the importance of PA benefits have primarily emerged in the last two decades (e.g., Cooper et al., 1999; Durstine et al., 2000; Heath & Fentem, 1997; Rimmer, Braddock & Pitetti, 1996; Rimmer, 1999). These studies demonstrate that difficulties associated with an individual's impairment, especially challenges linked to mobility, can be influenced positively by a physically active lifestyle. Through PA, PwD can reduce their incidence of chronic diseases (e.g., type 2 diabetes, coronary heart disease, obesity), improve secondary conditions associated with impairment (e.g., weakness, fatigue, reduced mobility, joint stiffness, social isolation, depression), and maintain a higher level of independence in their daily lives (Santiago, Coyle & Kinney, 1993; Coyle & Santiago, 1995; Petajan et al., 1996; Rimmer, Riley, Creviston, & Nicola, 2000; Rimmer, 2005).

In 2011, the World Health Organization (WHO) indicated that PwD were engaging in higher levels of health risk behaviors. Compared to the general population, PwD were more inclined to smoke, have poorer diets, and have an increased likelihood of not participating in PA. Rimmer and Braddock (2002) determined that although PA decreased the chances for secondary health conditions in PwD, only 12% of adults with disabilities were active on a regular basis. In addition, PwD who lived in small communities may have had poorer outcomes for certain health conditions that may be attributed to higher levels of socioeconomic disadvantage, poorer access to health services, compounded by more difficult environmental, occupational, and transportation conditions (Larson, Bell, & Young, 2004; Dabney & Gosschalk, 2010). The Public Health Agency of Canada (2013) found that for the average small community population, people had higher rates of chronic illness, shorter life expectancies, higher rates of unemployment, lower incomes, and fewer years of education, as compared to people in large urban centers. This suggests that the barriers and facilitators to PA opportunities in small cities may differ from those in large urban centers and this reasoning may also extend to the PA experiences of PwD. Several studies have investigated the barriers and facilitators to PA opportunities for PwD in urban centers (Buffart, Westendorp, Van den Berg-Emons, Stam & Roebroeck, 2009; Martin Ginis & Hicks, 2007; Martin Ginis, Latimer, Francoeur, Hanley & Watson, 2002; Rimmer, Riley, Wang, Rauworth & Jurowski, 2004; Scelza, Kalpakjian, Zemper & Tate, 2005; Vissers et al., 2008; Wilcox et al., 2006), however, little is known about the barriers and facilitators to PA for PwD in small cities.

Purpose of Study

The purpose of this interpretive description study was to perform an in-depth exploration of the barriers and facilitators of PA of PwD living in a small southern Alberta city. The two aims that guided this study were:

(1) To identify the key facilitators and barriers to meaningful PA engagement for PwD living in a small southern Alberta city.

(2) To explore the PA experiences of PwD living in a small southern Alberta city.

It was my intention that the findings of this study not only inform future researcher about potential barriers and facilitators to PA for PwD, but also allow for knowledge translation between academia and community (i.e., the small city where I conducted the research).

Key Definitions

Disability. "The interaction between individuals with a health condition (e.g., cerebral palsy, down syndrome and depression) and personal environmental factors (e.g., negative attitudes, inaccessible transportation, and limited social supports)" (WHO, 2011, p. 1). This definition represents a disability paradigm that has shifted the perspective away from the individual's physical or mental impairment[1], to a situational experience as the root cause of disability (National Institute of Disability and Rehabilitation Research [NIDRR], 2000). To relate this paradigm more closely to barriers and facilitators, the WHO (2000) states,

> An environment with barriers, or without facilitators, will restrict the individual's performance; other environments that are more facilitating may increase that performance. Society may hinder an individual's performance because either it creates barriers…or it does not provide facilitators (p. 20).

Physical Activity. Another important concept in this study was PA. Within the field of APA, there are a range of PA definitions. Cervantes and Porretta's (2010) definition of PA is "…any voluntary body movement produced by muscles resulting in energy expenditure" (p. 174). This definition was specific to PwD as the word "voluntary" had been included to eliminate involuntary movements that may characterize certain impairments (e.g., cerebral palsy). Obrusnikova and Cavalier (2011) described PA as "…when you move your arms and/or legs. Your heart beats faster and you breathe harder. If done long enough, you start sweating" (p. 199). Both definitions were employed in this study to capture a broader range of interpretations of how PA was understood by study participants.

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[1] Impairment is defined by the International Classification of Functioning, Disability and Health (2001), as a "loss or abnormality of psychological, physiological or anatomical structure or function" (p. 27).

Barrier. "…[N]egative factors that restrict or prevent a PwD from choosing to participate in physical activity" (Mahy, Shields, Taylor & Dodd, 2010, p. 798).

Facilitator. "…[P]ositive factors that increase the likelihood of a PwD to participate in physical activity" (Mahy et. al., 2010, p. 798).

Small City. A small city is defined by Statistics Canada (2001) as a Census Division with urban settlements of 50, 000 to 299,999 people. In the method section more detail about how this definition may expand to take on a more rural component by including individuals who live just outside of the small city is provided.

Chapter 2:

Review of Literature

Benefits of Physical Activity

In the general population, there appears to be a linear relationship between PA and health status, where an increase in PA leads to improvements in health (Warburton et al., 2006). Furthermore, Warburton et al. summarized that the greatest improvements in health were usually seen when sedentary people decided to become physically active. When considering PwD and the various health challenges they experience, the benefits of PA could be potentially greater than for the general population (van der Ploeg, van der Beek, van der Woude & van Mechelen, 2004). Various studies have found that there are many physical, psychological, and emotional benefits of participation in PA for PwD (Damiano, 2006; Durstine, et al., 2000; Goodwin & Compton, 2004; Johnson, 2009; Lotan, Henderson & Merrick, 2006; Nosek, Hughes, Robinson-Whelen, Taylor & Howland, 2006; Wind, Schewnd, & Larson, 2004). According to these studies, some of these benefits included improved physical function, increased independence, improved quality of life, self-concept, circulation and aerobic capacity, and reduced pain. One of the most critical PA benefits for PwD was the potential to decrease the risk of secondary impairments such as osteoperosis, osteoarthritis, decreased balance, strength, endurance, flexibility, obesity, and depression (Graham & Reid, 2000; Lahtinen, Rintala, & Malin, 2007). This is significant as secondary impairments may have more detrimental effects than the primary impairment (Sutherland, Couch, & Iacono, 2002). Considering the potential health benefits, it is important that PwD have the opportunity to become physically active. In the next section, I present reasons why these benefits are not always attained.

Barriers to Physical Activity Opportunities

Barriers to PA have been identified for people diagnosed with specific disabilities including arthritis (Wilcox et al, 2006), spinal cord injury (Martin Ginis et al., 2002; Scelza et al., 2005; Vissers et al., 2008), and childhood-onset physical disabilities (Buffart et al., 2009) as well as for people with physical disabilities (Martin Ginis & Hicks, 2007) and disabilities in general (Rimmer et al., 2004). Across these studies a variety of barriers to PA for PwD have been identified. Six of the most commonly cited barriers include: (a) accessibility, (b) cost, (c) equipment-related barriers, (d) lack of information, (e) perceptions and attitudes, and (f) emotional and psychological barriers.

First, accessibility of built and natural environments have been identified as a substantial barrier to PA for PwD. For example, Cardinal, Kosma, and McCubbin (2004) identified that fitness facilities in general were accessible (i.e., accessible washrooms, wide hallways, accessible doors), but only 8% of the facilities provided acceptable accessibility to and around the actual exercise equipment. In regards to natural outdoor environments, PwD are presented with challenges such as bad weather (i.e., snow, ice, mud), a lack of sidewalks, steep terrain, and poorly maintained ramps (Martin Ginis & Hicks, 2007). Second, many PwD identified cost of participating in PA programs as a major barrier. According to the Council of Canadians with Disabilities (2005), 15% of Canadians with disabilities live in poverty, compared to only 7% of Canadians without disabilities. Rimmer (2005) indicated that membership and transportation costs were the primary economic barriers directly affecting access to PA opportunities for PwD. Third, equipment-related barriers also prevent PwD from full participation in PA opportunities. A qualitative study by Buffart et al. (2009) found that participants were unable to take part due to inappropriate equipment which Buffart and colleagues classified as equipment unable to be adapted for a PwD to use. Fourth, there is a general lack of information concerning PA recommendations and opportunities for PwD. Rimmer et al.'s focus groups (2004) indicated that PwD found there was "a lack of information regarding available and accessible facilities and programs in their community" (p. 422). Fifth, perceptions and attitudes related to accessibility and disability are commonly mentioned as barriers to PA. One of the main barriers reported across all categories of PA impediment is the perception that fitness facilities are unfriendly environments (Rimmer et al., 2004). Rimmer et al. (2004) indicated that PwD believed that professionals in fitness and recreation facilities viewed accessibility as unimportant, believing that PwD were not interested in being physically active. Another study by Vissers et al. (2008) found that societal attitudes had the highest impact on levels of everyday PA for people with spinal cord injuries. Sixth, PwD face a variety of emotional and psychological barriers to PA. Noteworthy psychological barriers include fear of pain and injury, lack of self-confidence, worries about physical limitations, fear of failure, and concerns about being humiliated in PA environments (Martin Ginis et al., 2002; Rimmer et al., 2004; Wilcox et al., 2006)

Facilitators to PA Opportunities

Although barriers to PA for PwD have often been the focus of researchers, facilitators that may support PwD to become physically active have also been identified. Martin Ginis and Hicks (2007) stated that when developing strategies to overcome barriers it is critical that the intervention targets change, not just for the PwD, but also environmental and policy factors that can influence PA participation. This idea corresponds with the World Health Organization's (2011) definition of disability in that the individual is not solely responsible for the barriers they face. Rather, it is up to society, with input from PwD, to change the way PA access is gained. Similar to barriers to PA, the facilitators that support PwD to become active vary across the literature. Six of the most common facilitators to PA for PwD include: (a) social network support, (b) accessible PA spaces, (c) educated service providers, (d) collaboration between stakeholders, (e) financial assistance, and (f) awareness of PA opportunities (Wilcox et al, 2006; Martin Ginis et al., 2002; Scelza et al., 2005; Vissers et al., 2008; Buffart et al., 2009; Martin Ginis & Hicks, 2007; Rimmer et al., 2004).

First, PwD are active when supported by a social network (e.g., friends and/or family). For example, Kerstin, Gabriele, and Richard (2006) found that persons with spinal cord injury stayed physically active longer after discharge from a rehabilitation program when they were socially supported. Second, PA opportunities can be facilitated by building or retrofitting fitness centers and PA spaces to be more accessible for PwD. Martin Ginis and Hicks (2007) stated that, "building codes should be established and enforced to remove access barriers associated with built environments" (p. S142). Third, service providers need to be educated about the PA needs of PwD. According to Rimmer et al. (2004) professionals can support the PA engagement of PwD when they are educated on how to work with PwD and present themselves as friendly and motivated. Fourth, collaboration between different stakeholders needs to occur in order to share resources and provide PA opportunities for PwD. Martin Ginis and Hicks (2007) suggested that partnerships between organizations can help PwD gain access to PA opportunities and accessible equipment. Fifth, financial assistance has been identified as a major facilitator to help PwD become active. In Rimmer et al.'s (2004) study, focus group participants suggested that, "owners of fitness facilities provide scholarships and/or sliding fees to persons with low incomes, which often includes PwD" (p. 422). Sixth, awareness of PA opportunities and supports available for PwD are extremely valuable for facilitating program knowledge. Buffart et al. (2009) noted the importance of having more information and knowledge about where and how to exercise, along with what transportation options are available to access these opportunities. These examples of facilitators were relevant for the enhancement of PA for PwD living in urban centers as they were generated through research conducted in major metropolitan areas. There is a need to investigate facilitators of PA for PwD in small cities, as well, given that larger and smaller centres may differ significantly in what they can afford PwD by way of PA opportunities.

Geographical Barriers

The further away PwD live from major metropolitan areas[2], the number of accessible fitness and recreation programs decline (Rimmer et al., 2004). While barriers to PA for major metropolitan areas have been identified, little has been reported about the PA opportunities and experiences of people with disabilities who live in small cities[3]. Two studies conducted in the United States have highlighted rural communities and the barriers PwD, who live there, face in becoming physically active (Anderson & Heyne, 2000; Jones, 2003).

A study by Anderson and Heyne (2000) examined the community recreation needs of PwD in a statewide needs assessment using focus groups. The purpose of conducting a needs assessment was to help service providers (i.e., fitness professionals) to understand the needs of the citizens with disabilities. Although the authors described barriers to inclusive recreation services (e.g., lack of prepared recreation staff, social exclusion, and limited physical access), they did not define what was meant by the term ‘rural community’ thereby limiting the interpretation and transferability of the findings. In addition, the emphasis of the article was on the value of using focus groups, rather than the actual findings of the focus groups.

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[2] Major metropolitan areas are defined by Statistics Canada (2001) as a Census Division with urban settlements of one million or more people.

[3] Small cities are defined by Statistics Canada (2001) as a Census Division with urban settlements of 50, 000 to 299,999 people.

The aim of the second study by Jones (2003) was to conduct an in depth exploration of parents' perspectives on the inclusion of their children with disabilities in community recreation programs in Maine, USA. Two major barriers were highlighted in this study: (a) programs' emphasis on competitive sport and (b) children's behavioural and social skill deficits. These findings importantly contributed to our knowledge of the barriers for children with disabilities in rural communities, however, there still remains a gap in the literature with regard to the experiences of adults with disabilities in these communities. In addition, although Maine is a rural state, the author did not focus on this as a descriptor of the study, making it challenging for researchers interested in rural areas to become aware of this study using common literature search engines.

Although these two studies have provided some insight into my research question, various gaps remain. For example, the benefits of inclusive recreation were discussed by Anderson and Heyne (2000). However, inclusive PA (meaning people with and without disabilities engage in activities together) represents a limited scope of possible PA engagement for PwD. In the current study, I asked participants to share their positive and negative experiences of PA, which sometimes included segregated settings. Focus groups were utilized in the works of Anderson and Heyne (2000) and Jones (2003). While this method of data collection had certain strengths (e.g., introduced participants to one another; gave people an opportunity to exchange ideas; and potentially encouraged networking between participants) it may have also led to group thinking and the silencing of individual voices (Anderson & Heyne, 2000). I wanted to focus on individual perspectives, therefore, I conducted one-on-one interviews with participants to gain a rich in depth understanding of their experiences. Lastly, I focused my study in one small city rather than an entire province or state. In doing so, the generalizability of the findings to other communities of a similar size and/or demographic within the province and potentially beyond it, is more likely. It is critical to explore the barriers and facilitators to PA in small cities from the perspectives of PwD if we wish to include all people to become physically active (Rimmer, 2008). It is my hope that the findings of this study will provide direction for practitioners and policymakers who seek to make PA opportunities more accessible to all people in small Canadian communities. This is essential to PwD achieving better health.

Chapter 3:

Method

Interpretive Description

A qualitative design was selected to guide this research given the focus on individual experiences. Specifically, the method for this research was interpretive description (Thorne, Reimer-Kirkham & MacDonald-Emes, 1997). First used in nursing research, interpretive description (ID) requires "understanding of what we do and don't know on the basis of the available empirical evidence" (Thorne, 2008, p. 35). The method was inspired by the systematic ideas of grounded theory, phenomenology, and ethnography. However, instead of following a prescriptive set of guidelines, ID allows for the choice of suitable analytical steps to be followed depending on the nature of the data. The reason for using ID as the method for this study was due to its ability to create "engagement with the data (that) extends the interpretive mind beyond the self-evident – including both the assumed knowledge and what has already been established – to see what else might be there" (Thorne, 2008, p. 35). The current knowledge surrounding PwD experiences of PA in small cities can be critiqued as based on assumed knowledge due to the limited number of research studies available, as evidenced in the review of literature. Therefore, beginning with what is known about barriers and facilitators to PA experiences of PwD in large metropolitan areas (e.g., Rimmer et al., 2004; Buffart et al., 2009), I explored what was not known about barriers and facilitators to PA experiences of PwD in a small city, or how the same barriers might have been differently experienced. In addition, Thorne (2008) stated that in order to conduct interpretive description with integrity, utility, and quality the researcher must describe their learning and what the lessons mean in terms of practical knowledge.

A key to this approach is acknowledging reflexivity of the researcher with the degree of interpretation based on the researcher and the context or placement of the research subject (Hunt, 2009). For instance, my understanding of barriers and facilitators to PA opportunities as it relates to PwD, has mainly been as an observer and participant observer as a person without a disability, through work and volunteer experiences, in a large metropolitan city. Therefore, in the traditional sense of insider-outsider researcher within disability studies, I may be seen as an outsider due to my lack of disability (MacBeth, 2010). However, one of the most important components of using ID is that it looks for human commonalities, but also recognizes individual expressions of variance within a shared focus of interest (Thorne, 2008). Shakespeare (2006) made an important point about the insider-outsider dichotomy. He stated:

> Just because someone is disabled does not mean they have an automatic insight into the lives of other disabled people. One person's experience may not be typical, and may actively mislead them as to the nature of disability. Because impairments are so diverse, someone with one impairment may have no more insight into the experience of another impairment than a person without any impairment…the idea that having an impairment is vital to understanding impairment is dangerously essentialist (p.195).

In using ID, I attempted to describe, as accurately as possible, the PA barriers and facilitators from the perspectives of the research participants. Labaree (2001) described insiderness as "a result of the person's biographical profile, political activities, research agenda, and the relationship with the community under study" (p. 102). My relationship with the community under study was very strong, as I grew up in the small city under study, and was an active member in various fitness, recreation, and sporting organizations. In addition to this, I have grown up with family members with disabilities, which gave an informal, yet meaningful, perspective of the PA opportunities available to PwD in the small city. While these factors may have provided some insight into the experiences of participants, they did not necessarily mean that my experiences were the same or different from the participants in the study. Overall, I concur with Merriam et al. (2001) who argued that throughout the research process there is a fair bit of slippage and fluidity between the two states of insider and outsider.

Philosophical Framework

I approached this study from a naturalistic interpretivist paradigm, which is consistent with ID. As stated above, ID is not prescriptive but is based on several common features that are bound by the same set of assumptions about human experience and about the nature and production of knowledge pertaining to it (Thorne, 2008). Thorne (2008) stated that ID is grounded in three key axioms of naturalistic inquiry (Lincoln & Guba, 1985) that provided the philosophical underpinnings for research design. First, there are multiple constructed realities that can be studied holistically. Thus, reality is complex, contextual, constructed, and ultimately subjective. This point is discussed further in relation to the interpretivist component of the paradigm. Second, the inquirer and the “object” of inquiry interact to influence one another. Therefore, the knower and the known are inseparable. During this research, I recognized that as participants created their own meanings, I contributed to the construction of these social truths as I interpreted their perceptions of their experiences of barriers and facilitators to PA. In the section titled *Researcher as Instrument,* I expand on this idea of how my own experiences and perceptions influenced the study. Third, no *a priori* theory can possibly encompassed the multiple realities that are likely to be encountered. Instead, theory must emerge or be grounded in the data. Interpretive description acknowledges that individuals may have perceived similar situations or experiences in many different ways. The method captures patterns and themes within these subjective experiences (Thorne et al., 1997; Thorne, Reimer-Kirkham & O'Flynn-Magee, 2004).

With regard to the interpretivist paradigm, Sparkes (1992) stated that the creation of knowledge is based on understanding shared interpretations and aspects of experiences and common understandings that are socially constructed. In other words, truth is negotiated through dialogue created in the social world at the level of subjective experiences. In an ontological sense, Sparkes (1992) proposed that there are both individual and multiple realities that are developed through the meanings and understandings people obtain through their social interactions. These philosophical underpinnings align with ID as Thorne (2008) acknowledged the constructed and contextual nature of human experience that also allows for shared realities. Through this method it was important to capitalize on the individual expressions of variance, but at the same time, recognize the commonalities among people, and the possibility of shared aspects of the perspectives and experiences that were expressed. I recognized that PwD in a small city would have their own unique perceptions and experiences of facilitators and barriers to PA, but that there were also likely to be common themes among participants and thus, some shared realities.

Researcher as Instrument

The role of the researcher is critical in ID as the researcher is the one who frames the research, analyzes and interprets the data, as well as, being the one privileged to share the experiences of PwD. Therefore, it was the aim of my research to describe, as accurately as possible, the phenomenon from the perspective of my research participants. Patton (2002) stated that, to some extent, the quality of the data collected and shared in qualitative research depends on the skills and sensitivities of the researcher. As mentioned previously, the insider-outsider perspective allowed me, as a researcher, to develop rapport more quickly and understand the nuances of the small city. I needed to be aware of my preconceptions and assumptions regarding the phenomenon throughout the course of the study (Patton, 2002). However, ID recognizes that the previous knowledge of the researcher is a useful place to start developing studies, particularly when the area of inquiry has yet to be evaluated thoroughly (Thorne, 2008).

In order to develop my interviewer skills, I took a graduate course in qualitative research methods, and attended a conference on qualitative methods held at the University of Alberta. In addition, I was able to conduct a pilot study on the same topic as this study with two PwD from the small city to improve my interviewing skills and establish the feasibility of the questions. As stated by Thorne (2008), the idea of having the luxury of spending more time with the people who have inspired your study is highly attractive as ID comes from a practitioner's viewpoint where the researcher was comfortable interacting with clients. However, I was also aware that there were aspects of this practical side that needed to be put away in order to become an instrument of credible and meaningful research. In the *Verification* section I have detailed how I worked to maintain credibility within the study.

Participant Selection

The inclusion criteria for the study participants were as follows: (a) over the age of 18 years old; (b) self-identify as having a disability; and (c) be a resident of the southern Alberta small city or live within a radius (100km) of the city for at least 12 months. Being over 18 years of age was selected because I was interested in the experiences of adults, which may differ significantly from children. The reason behind using self-identification was so as not to exclude nor include participants whose personal experiences did or did not reflect the research question.

The third criterion was designed for three different reasons. First, the small city allowed me to connect from an insider perspective as I originated from the small city of 61, 000 people (Sunnyvale (pseudonym) City Consensus Report, 2012). Second, a 100km radius was determined appropriate as the city provides the closest services for PwD in rural settings to access within said radius. Third, a period of 12 months was chosen as a reasonable amount of time for PwD to determine what was in the community for PA opportunities as they would have had the opportunity to experience all the seasons of different sport/recreation/PA opportunities within that time.

It is suggested by Thorne (2008) that in order to justify a study's sample size, a decision must be made as to how much data is needed "to generate a rationale that is consistent with the research question" (p. 94). Thorne (2008) reasoned that it is fair to set a smaller sample size, as long as, the researcher shows recognition that there could always be more to study. Therefore, it was my intention to recruit 12 participants. However, I was also aware that the sample size could be adjusted if interviewees turned out to be poor informants, or my exposure to them was much less in-depth than I might have wished (Thorne, 2008).

Participant Recruitment

Purposive sampling was used to recruit participants for this research study. Purposive sampling as described by Polit and Beck (2008), is when specific individuals are recruited by the researcher based on which individuals might best assist in understanding the phenomenon of interest. I approached disability organizations within the small city in southern Alberta with the desire to recruit PwD who had information to share about barriers and facilitators to PA within their community. These organizations included disability equipment stores (i.e., MediChair, Shopper's Home HealthCare), disability employment services, not-for-profit disability organizations (i.e., Multiple Sclerosis Society of Canada, Canadian Paraplegic Association, Canadian National Institute for the Blind, Parkinson Alberta, Brain Injury Rehabilitation Services), and disability sport organizations (i.e., Special Olympics Canada). Some organizations responded through email, while others invited me to sit down with a staff person in order to explain my study, so that they were able to better relay the information to their clients with disabilities. A couple of these organizations also invited me to their client support group meetings to speak directly to their clients about my study.

One of the most effective connections I made was with the Community Inclusion Liaison who worked for the city. It was through this person that I was able to connect with multiple disability organizations and PwD, who might not be members of these organizations, due to her mass email list. Thorne (2008) referred to this person as an informant who has a connection to many distinct "factions" within the community of study and is able to connect the researcher. In the recruitment posters and brochures (see Appendix 1.0) that I sent to these organizations, I requested contact not only from PwD who were currently physically active, but also from those who were not. This allowed me to gather a wider range of perspectives with regard to barriers and facilitators that different PwD may face.

I also used a snowball sampling approach, which is defined by Miles and Huberman (1994) as sampling that "identifies cases of interest from people who know people who know what cases are information-rich" (p. 28). This type of "word of mouth" recruitment resulted in broader representation of the disability community within the small city. This was essential due to the smaller number of PwD in the population. Of the 12 participants I interviewed, four participants stated that "word of mouth" advertising was how they found out about the study.

Participants

The sample consisted of 12 PwD (six men and six women). The average age of the participants was 50 years old and ranged from 26 to 71 years old. All of the participants resided within the city limits, except one individual, who lived in a small town (i.e., a population of less than 15,000 inhabitants) within a 100km radius of the city. Six individuals had an acquired disability while the remaining six participants had congenital disabilities. Participants self-identified as having the following impairments: Multiple Sclerosis, Parkinson disease, stroke, achondroplasia, spinal cord injury, Cerebral Palsy, Spina Bifida, visual impairment, hearing impairment, osteoarthritis, cognitive and social delay.

Data Collection

In this study, I collected the primary sources of data using semi-structured interviews and photo elicitation. A personal journal and document analysis also helped me to achieve the aims of the study. Semi-structured interviews are useful when the researcher has enough knowledge about the phenomenon to develop questions about the topic, but not enough to predict the answers (Richards & Morse, 2007). This was an appropriate method of data collection for this study as it enabled me to engage in conversation that elicited rich description of the experiences of the participants. Due to having a small sample of participants, I wanted to ensure that individuals could elaborate as deeply as they wanted, and the semi-structured interview format supported this aim. I conducted two semi-structured interviews, in person, with each participant which allowed me to respond to the 'non-verbal-cues' of the interviewee, and move with the pace of the interview (Robson, 2002). Each interview was audio-recorded and ranged in length from 25 min to 2 hours and 28 min, with an average of 1 hour and 10 min. The two longest interviews were a special circumstance because this individual self-identified as Deafblind and requested that an Intervener be employed to share her responses. Therefore, there was the initial communication of American Sign Language from the participant that was then relayed verbally to the me through the Intervener. Interviews were held in a location chosen by the participants to help ensure they were comfortable sharing knowledge in the setting and that it was an accessible space for them. Of the 24 interviews I conducted, 18 took place in the participants' homes, while the remaining six occurred in either their place of work or a local coffee shop.

Interviews. Prior to the outset of the first interview, participants were provided with the study information letter (see Appendix 2.0), given a verbal explanation of the study and asked to sign a consent letter (Appendix 3.0) if they wished to participate. Participants were made aware that all information would be kept confidential, and they had rights, as participants, to withdraw from the study at any point, and not to answer any questions they did not want to. They were also informed that they may ask questions at any time within the study. All of this information was disclosed within the consent letter, along with further information about handling of data (see section *Ethical Considerations)*. The information within these letters was written at a grade eight or lower reading level. Participants were welcome to contact me to ask any questions they may have had before signing the consent letter. The consent letter could be directly returned to me at the first interview. Only participants who provided informed consent took part in the study.

All of the 12 participants who agreed to be in the study completed the first interview. The first interview gave me a chance to get to know the participants and learn about their experiences around barriers and facilitators to PA. To begin the interviews, I asked general questions about their previous PA experiences, and then, inquired more specifically about barriers and facilitators to these experiences in their life (see Appendix 4.0 for Interview Guide #1). Prior to delving into the main parts of the interview, I first explored how participants defined PA in order to delineate the domain of interest. If participants had trouble defining PA, I provided them with two definitions (i.e., Cervantes & Porretta, 2010; Obrusnikova & Cavalier, 2011) as a starting point, and determined whether or not they agreed with these definitions, and/or had anything to add or change. Using this approach allowed the participants to determine what they considered PA to be and also ensured we, the participant and I, had a common understanding of PA. Participants also self-identified as being active or inactive, which allowed me to ask questions that were more relevant to how participants understood PA. It was important to discover how individuals viewed themselves (i.e., active and non-active) as this sometimes led them to discuss barriers and facilitators in different ways.

The remainder of the interview guide covered 6 main areas specifically surrounding the experiences of the participants in the small city. These topics included: (a) current PA, (b) facilitators of PA, (c) positive experiences of PA, (d) barriers of PA, (e) negative experiences of PA, and (f) differences between small and large urban centres. Depending on time, I also asked participants about the benefits and costs of PA for themselves, or PwD in general. If there was not time to answer these final questions in the first interview, I asked them at the start of the second interview. The different sections of the interview guide allowed participants to start off with more general, easy to answer questions, and then slowly narrowed to more specific questions about their experiences in the small city. The questions were open-ended to encourage participants to discuss issues that were personally relevant to them. Open-ended questions "encourage people to talk about their experiences, perceptions, and understandings rather than providing a normative response or text-book-type answer" (Rubin & Rubin, 2005, p. 135). With each open-ended question, multiple probes were included to maintain discussion. Probing encouraged participants to expand on certain ideas, provided further detail without changing the focus of the conversation, and provided clarification to unclear comments (Rubin & Rubin, 2005). As the first interview came to a close, I reminded the participants that I would be taking photographs over the next few weeks in their community, and asked them to help me brainstorm a list of locations, equipment and concepts that were significant to their experiences of PA barriers and facilitators.

To create the first interview guide, I initially brainstormed questions based on the existing literature about PA barriers and facilitators for PwD in large urban centres. I also incorporated the limited literature surrounding barriers and facilitators for PwD in small centres, and added questions based on my own experience living in a small city. Finally, I consulted with my supervisor to discuss the appropriateness of the questions. After I conducted the first interview, I realized the need to build greater rapport with the participants. Following the first study interview, I always began each interview with the general questions about the participants' name, age, how they self-identified, in terms of disability, and where they grew up. This usually led to a casual, but important conversation about a range of issues (i.e., family support, rehabilitation support, community support, etc.) that were useful for probing throughout the interview. I also discovered that most individuals were not comfortable in generalizing answers across other PwD. When asked about the barriers or facilitators in general for PwD in their small city, the majority of participants stated they felt uncomfortable speaking on behalf of all PwD. Therefore, questions that asked participants to generalize were minimized.

In the second interview, I began with a summary of participants' responses from the first interview and then asked about benefits and costs to PA, if I had not had time to ask these questions in the first interview. During the second interview, I also used a technique called photo elicitation. This technique was used to encourage participants to further elaborate on their experiences of PA opportunities. Photo elicitation allowed individuals to communicate in a unique, engaging, and empowering way because they could discuss why they chose to talk about specific photographs and what those images represented for them (Kirova & Emme, 2008). The reason I chose to take the photographs myself, rather than asking the individuals to take them, stemmed from two concerns. First, by taking the photographs myself I could ensure that the photographs did not capture any non-consenting individuals (Epstein, Stevens, McKeever, & Baruchel, 2006). Second, I elected to take the pictures with participant suggestions due to awareness of the potentially large time commitment and potential burden for participants to carry out this activity. In order to limit my own subjectivity, I was guided by participant suggestions of what would be relevant photos to capture. For example, some participants asked me to take certain photographs of objects in their homes, as they wished to discuss them in the second interview. Some participants were very descriptive about what they wished to see in the photographs (e.g., inaccessible ramp from a specific building), whereas others were satisfied with a general representation (e.g., steep ramp from anywhere). In total, participants brainstormed 113 separate ideas for the photographs, which I then categorized into seven different sections: (a) people; (b) weather; (c) transportation; (d) accessibility structures; (e) disability equipment; (f) buildings/places, and (g) abstract concepts. Participants were also free to bring or take their own photographs for the second interview however, this did not occur.

During the second interview, participants were asked to select 5-8 photographs they wanted to discuss from a large album I created using all the photographs. The album was organized into the seven section listed above. These photos were used “to invoke comments, memory, and discussion in the course of the (second) semi-structured interview” (Banks, 2001, p. 87). However, due to the large number of pictures it was difficult for participants to select only

5-8 photographs. Instead, participants preferred to scan the album and discuss photos that interested them as they viewed them. Although this process took significantly longer, I believed it helped participants to feel more at ease with the method of photo elicitation and contributed greater depth to the interviews. I also thought this approach led participants to feel more involved in the research process (Lewis & Porter, 2004). After completing questions related to the photos, an additional three questions were asked based on initial interpretations from the first set of interviews (see appendix 5.0 for interview guide #2).

Reflective journal. Another source of data collection was a personal journal. This journal allowed me to record my assumptions, frustrations, challenges, highlights, and thoughts about how the research was unfolding (Lincoln & Guba, 1985). This technique helped to ensure rigor and was also useful when analyzing data, by referencing what I, as the researcher, had experienced. Instead of using a written journal, I documented my thoughts using an audio recorder directly after completing each interview. In doing so, I was not only able to record my assumptions, frustrations, etc., but also listen to how I sounded at any particular time in the study to help bring me back to the different moments in the research process.

Document analysis. Finally, I examined formal documents (e.g., disability organizations mission statements and aims, promotional material for PA classes, facility accessibility reviews) that were provided to me through the disability organizations, recreation/fitness organizations, or participants I was working with. Formal documents have the advantage of minimizing the extent to which researchers shape their constructs, and also offer a range of subjective and objective knowledge (Thorne, 2008). The majority of formal documentation I received was from disability organizations' websites or information pamphlets regarding their mission statements and values. When I could not find information about facility accessibility, I often contacted the organizations (i.e., fitness centres) and arranged a tour of the facility. This ended up being a very important step in the research process, as I could better understand participants when they were describing specific locations. A few disability organizations or fitness centre representatives, who invited me to sit down with a staff person in order to explain my study, also took the time to give me an overview of what their organizations did for PwD.

I conducted data collection and data analysis concurrently which helped to shape the second interview and allow me to probe more deeply into certain topics. Interviews were audio-recorded and transcribed verbatim. All of the 24 interviews were transcribed by me, as this was an important step to become familiar with the data, and allowed the constant comparative analysis (discussed below) to be done more efficiently. The transcripts were stripped of all identifying information and participants were given a pseudonym to help ensure confidentiality. In typed form, the interviews yielded 401 pages of single-spaced data (148, 347 words).

Data Analysis

Interpretive description often advocates that the researcher adopt a flexible approach to the analysis, one that is in observance with the naturalistic interpretive paradigm (Thorne et al., 2004). Following ID methodology, data analysis seeks to answer questions such as, “[w]hat is happening here?” and “[w]hat am I learning about this?” (Thorne et al., 1997, p. 174). This methodology also recommends that researchers are wise to avoid excessively detailed (line-by-line) coding, as this can detract from the mind’s inherent capacity to see patterns, follow intuitions, and retrace a line of logical reasoning among and between pieces of data (Thorne et al., 2004).

Constant comparative analysis is an approach that compares every piece of data (i.e., an interview, a statement, a theme) with other data that may be similar or different from it, to theorize all possible relations (Glaser & Strauss, 1967). By using constant comparative analysis in my study, I was able to break down the data into discrete 'incidents' (Glaser & Strauss, 1967) or 'units' (Lincoln & Guba, 1985) and code them into categories. This analysis approach created two types of categories: those that were derived from the participants' background and language, and those that I identified as significant to the research question. The goal of the former was to represent the experiences of the participants, while the goal of the latter was to assist me, the researcher, in developing theoretical insights into the social processes within the phenomenon (Lincoln & Guba, 1985). Thus, "the process of constant comparison stimulated thought that led to both descriptive and explanatory categories" (Lincoln & Guba, 1985, pp 334). By using constant comparative analysis, I was able to "capitalize on iterative engagement and reflection to deepen and focus ongoing data collection as themes and patterns were inductively derived from the initial data set" (Thorne et al., 2004, p. 33). In other ID studies using constant comparison, it is suggested that the researcher will read and re-read the data anywhere from 15 to 20 times each, to allow the codes to be generated from the data, rather than be predetermined (Hewitt-Taylor, 2001). Therefore, throughout the course of my data analysis, I repeatedly immersed myself in the data to allow for better "synthesizing, theorizing and re-contextualizing rather than simply sorting or coding" (Thorne et al., 1997, p. 175).

To break this down more simply, first, transcripts were read a minimum of 15 times each to check for accuracy, explore content more deeply, and ensure full immersion in the data (Maykut & Morehouse, 1994). The audio recordings were listened to at least three more times each to reflect back on any nuances from the interviews that may have provided me with further insights behind the participants' data as suggested by Thorne et al. (2004). Memos, or small markings within the columns of the transcripts, were also used to record initial thoughts and comments about the data (Patton, 2002). The transcripts were then coded into meaningful segments of information (i.e., raw data themes) following the guidelines described by Maykut and Morehouse (1994). These raw data themes were then assigned meaning units (Lincoln & Guba, 1985) and grouped by content into themes. Using both the participants' information and my past experiences, I created rules of inclusion for each theme and used constant comparison techniques to help ensure the data included in each theme were similar but distinct from other themes. I then created nine themes under the heading of barriers, and nine themes that were regarded as facilitators. These themes were then sent to my supervisor where we further discussed joining certain themes that had common threads of information to create six primary barrier themes and four primary facilitator themes. It was from these themes and the overall essence of the interviews that an overall conceptual claim emerged capturing the key aspects of the research phenomenon. Thorne (2008) explained that the conceptual claim should not be, "highly abstract, original, or metaphoric, but is one that will powerfully capture the important elements…in a manner that can be grasped, appreciated and remembered in the applied context" (p. 169).

The final step in data analysis was to write and present the findings. Thorne (2008) stated that there are two ways to present ID findings. I chose to use the first method of organizing my findings within an overarching conceptual claim, and allow the subsequent themes to assist in understanding the whole framework. I also used a diagram to help visually represent the overall thematic framework. The findings section contains a multitude of rich quotations from the participants to provide a description of the theme supported by a narrative explaining interpretations and relations between participant data and the themes presented.

Verification Strategies

Thorne et al. (1997) stated that to ensure credibility, "the researcher must explicitly account for the influence of bias upon the research findings as much as possible" (p. 175). Thorne (2008) went on to say that the researcher is obliged to identify appropriate techniques that can be applied to ensure the integrity of the process and product. In this study, there were four specific techniques that I employed. First, I used an audit trail which is defined as, "documentation of the researcher's decisions, choices, and insights…" (Morse & Field, 1995, p. 144). According to Thorne et al. (1997) sufficient information must be available for readers to follow the analytic reasoning process and to judge the degree to which the analysis is grounded within the data. Second, following the suggestions of Thorne et al. (1997) rather than taking raw data (i.e., transcripts) back to participants for a member check, I asked participants for their views on the beginning of conceptualizations of the data. This represented the entire sample of participants rather than the individual and was generally easier for participants to provide insights on what did not fit, rather than what did. I completed this step at the beginning of the second interview with participants. It was a very effective method as participants were eager to weigh in on what I had begun to conceptualize, but also allowed for input of any information that they believed was missed. Third, I used peer debriefing as a means to keep me honest by having a peer ask hard questions about methods, meaning and interpretations (Lincoln & Guba, 1985). Fourth, I used the triangulation of multiple and different sources. Creswell (2007) described this process as involving evidence from different sources to illuminate a theme or perspective. In this study the interview data, a reflective journal, and field notes were used for data triangulation. A reflective journal can be used to document the reactive processes of interpreting or countering bias within the research process (Thorne et al., 1997). By using a reflective journal, reflexivity was brought to the study by acknowledging my own cultural, social, historical contexts, and prior experiences that may have influenced how I perceived data and how I constructed interpretations of the data (Creswell, 2007). I also took field notes to record the context of all data-gathering events and linked those contexts to the phenomena. Thorne et al. (1997) recommended using field notes to retrace the development of conceptualizations and to ensure that the analytic directions are defensible. For example, during the first few interviews, I asked participants what they felt barriers might be for PwD, in general, in the community. It was here that I noted in my journal the unease many people felt in answering on behalf of PwD, and therefore, I chose to remove this part of the question and only probe into it if the person had initiated a conversation whereby they felt comfortable representing other PwD. Using all these methods of verification, brought confidence that the conceptualizations were grounded in data and representative of shared realities rather than artificially created or a result of researcher error.

Ethical Considerations

Ethical approval was obtained through the Research Ethics Board (REB) at the University of Alberta prior to the start of this study using the Human Ethics Research Only (HERO) system. In addition, it followed the Government of Canada's Tri-Agency Framework: Responsible Conduct of Research (2011) which provided ethical research standards for the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC), and the Social Sciences and Humanities Research Council (SSHRC). Due to the size of the small community it was important the identities of the participants were not disclosed to anyone and that each participant was identified by pseudonyms in the write-up. I was the transcriber, so only I had access to the audio interview data. I stored the data on a computer that is password protected along with backing up the data on an external hard drive that was been placed in a securely locked cabinet when not in use (Creswell, 2012). Any hard-copy information, such as field notes or the photograph album, has been stored in a locked cabinet in my home. The data will be destroyed 5 years post-publication.

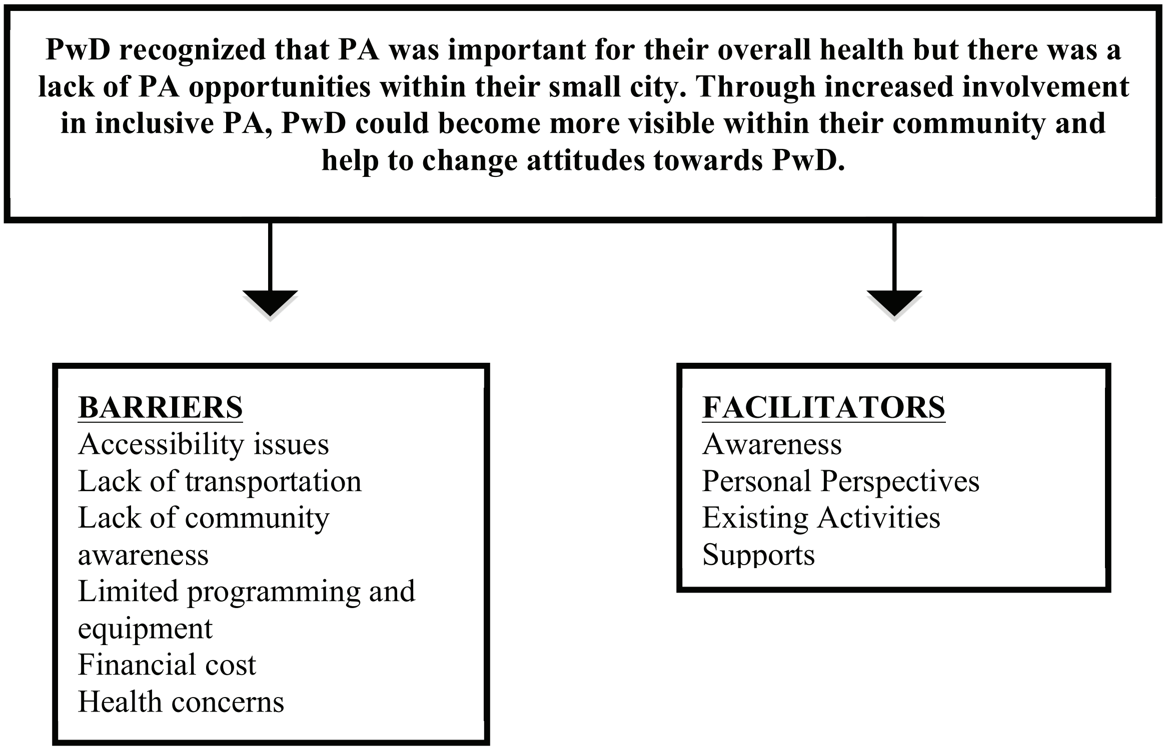
In addition, Stone and Priestley (1996) indicated that for researchers without a disability "the inherent power relationship between researcher and researched is accentuated by the unequal power relationship which exists between disabled people and non-disabled people in the wider world" (p. 700). I used reflexive methods such as, a reflective journal and field notes, to deal with the issue of relationships of power in research to bring self-awareness to the way I presented myself to participants. Finally, ethical considerations recognize the potential benefits and risks to research participants. In this study, the risks that could have occurred could be a potential increase in anxiety or depressive symptoms as a result of sharing negative experiences during the interview process. As the researcher of this study, I prepared a contact list to offer support, by identifying services within the community that could assist with these symptoms. In addition, when working with vulnerable populations, there is a risk of participants sharing information that could cause concern for participants' rights as members of the general community. Therefore, information was also provided about human rights services and the local disability advocacy group located in the city as needed. During this study no one requested this information from me.

Chapter 4:

Results

Conceptual Claim

In ID, Thorne (2008) recommended identifying an overarching theme, also known as a "conceptual claim" that captures the important elements within the practical context. The conceptual claim of this study was that PwD recognized PA as important for their overall health, but there was a lack of PA opportunities within their small city. Participants expressed that through increased involvement in inclusive PA, they could become more visible within their community and help change attitudes towards PwD. To increase their PA, participants identified barriers to PA, along with facilitators, that assisted with some of these barriers. Figure 1 identifies the barriers and facilitators that played an important role in this conceptual claim.



PwD recognized that PA was important for their overall health but there was a lack of PA opportunities within their small city. Through increased involvement in inclusive PA, PwD could become more visible within their community and help to change attitudes towards PwD.

BARRIERS
Accessibility issues
Lack of transportation
Lack of community awareness
Limited programming and equipment
Financial cost
Health concerns

FACILITATORS
Awareness
Personal Perspectives
Existing Activities
Supports

Figure 1. PwD perceived barriers and facilitators to PA

In keeping with the overall conceptual claim of the study, participants mainly viewed PA as being a positive contributor to their overall health. Fred described how PA "definitely benefits health." This type of health was not only physical, but social and mental, as well. Participants spoke about the importance of PA for people with disabilities. For example, Drew felt that PA was critical for wheelchair users. He stated that, "it's a lot easier to be fit to transfer, wheel in and out, and around. Usually your pain is better too." For Tim, it was important to stay healthy as it allowed him to work towards his "goal of independence." Many participants also agreed that better overall health due to PA not only benefitted PwD, but also had positive outcomes for friends, family and even the community at large. Tyler explained:

> "Oh, there are a lot of benefits. Well first of all it is extending life in general. I think also if you are physically active in whatever you deem as physical activity I think in the end it takes less pressure off the medical system. Both for physical problems and for mental problems. This also can help to strengthen communities. It can bring people together. It can break down barriers. People can communicate. It is a tool that can be used in a variety of ways to strengthen different aspects of the community. It just has to be utilized."

As Tyler suggested, an increase in PA opportunities for PwD may also result in increased awareness in the community about the abilities of PwD. Throughout the study there was significant feedback on changing attitudes and increasing awareness of the general public in regards to PwD' desire to be a vibrant part of the community. This was evident in the following quote from Kacey:

> "The biggest thing is exposure. You don't know what you don't know so that is why people are scared all the time. Scared to help...There is a lot of over thinking that comes

> with interacting with someone with a disability. It is hard to just explain to people that you are a person the same as everyone else. I think the more you get out and talk to people and show them how to be around you and show them what you're like, that is going to help."

Inclusive sport was suggested as an important way to include PwD and people without disabilities in the community in activities together, providing much needed opportunities to increase awareness. Tyler, who frequented his local fitness facility, believed that inclusive environments could promote more interaction between people. Tyler further expanded on this when he said:

> "It's interesting circling back to the physical activity aspect of it, when you go down to the gym, basically what it is, is the wheelchair accessible equipment is all in one section. So, people with disabilities have their one section or their one area that they go in to. A lot of people, I especially find this when I go down there with a large group of people or when there is a lot of people with disabilities working out there, people don't stop and talk. You know the people that walk by, you get the stares. People don't say 'Hey, how you doing?' or 'good job'. When I go down there, by myself, when I am just a single individual, for some reason people are more likely to come and chat with me. I think maybe it's because we seem less threatening as individuals."

Having a space for people to see the person, rather than the disability was reiterated numerous times throughout the study. Pam noticed that it "is tough to change people's attitudes" as she stated that, "I have to kind of always prove myself that I am more capable of doing all these things." Pam believed that people were "quick to judge" but it was through her "life experiences that show people who she truly is." From her perspective, there was a need to create more opportunities to share her abilities.

The idea of creating awareness through inclusive PA emerged as an overarching theme in exploring the experiences of PwD in a small city. Participants recognized that PA was important to their overall health and that they wanted more ways to participate within their community. Through their interviews, participants identified barriers to participation and discussed ways to overcome them. In addition, participants recognized a number of facilitators that provided them with a platform to become more engaged in the community through PA.

Barriers

Participants reported a range of barriers they experienced as an individual with a disability living in a small city. These barriers were captured in the following themes: (a) accessibility issues; (b) lack of transportation; (c) lack of community awareness; (d) limited programming and equipment; (e) financial cost; and (f) health concerns.

Accessibility issues. Of all the barriers discussed, the lack of physical accessibility was cited most often. Participants often discussed the exact same accessibility issue (e.g. specific bathroom, sidewalk, building), demonstrating how the experiences of PwD in a small city can converge because of the size. One of the most common accessibility barriers was stairs. Many participants expressed that they were afraid of doing stairs or that it was painful. Betty spoke about stairs being an issue and even creating fear when going to exercise. She said, "the stairs to get to the physical places are a problem. Like I go up to the amenities room to exercise and 50% of it is getting up the stairs and back down as far as exercise."

For other individuals, a set of stairs presented a physical blockade that impeded their ability to access PA. Drew talked about the stairs at Total Fitness that went to the basement to one of the weight rooms. He stated, “[t]hat’s where I used to go all the time when I was able bodied.”

Other physical barriers described by participants included surrounding sidewalks, and paths and curb cutouts encountered while walking or wheeling. The lack of curb cut outs and the slope of the sidewalks within the city was a barrier mentioned by the majority of participants. Fred, whose most common type of PA was going out for a walk to visit neighbours, said, “that is so frustrating! You wheel somewhere and you hit areas where you can’t get off. That’s why most people wheel on roads and get in shit for it!” Tim and his wife often used the road or back alley when going for walks as the sidewalks proved too difficult due to unevenness and slanting.

When asked about things to consider when designing PA opportunities for PwD, participants often referred to having a convenient, accessible washroom, yet this was also mentioned as extremely difficult to come by when they were doing PA. Tim, who participated in almost all of the adapted programs offered in Sunnyvale, said, “[i]f you are in the middle of recreation and you have to go to the washroom. Then what?” Many of the participants referred to the same washroom that posed significant problems. The washroom, which was located in a local fitness centre in an older building, had not been upgraded when the facility began offering programming for PwD. Tyler explained in detail his struggle with this facility.

> The thing is that all the bathrooms there are inaccessible. You go to the one out front that I usually use because I don’t even want to attempt to get in to the men’s change room. That one is terrible. I am so worried sometimes that I am going to rip every tile off on the wall in there. Yeah, for one of the places that is supposedly supposed to promote physical

> fitness and stuff like that for people of all abilities and all ages they really don't have complete facilities for stuff like that.

The "hairpin turn" in the same washroom made it difficult for Tim to access, however, the men's change room was not an option for Tim as his wife, who was also his caregiver, could not assist him in there.

When speaking with participants about accessibility there was much discussion about lifts, specifically two different lifts. One gave access to the adapted fitness program at the local fitness centre, and the other provided access to a gymnasium that was widely used in the community. The first lift at the local fitness centre was discussed by half of the participants. Tyler, who accessed the lift quite frequently, discussed some of the frustrations he experienced:

> The one issue that I have seen is people with disabilities want to be physically active and one of the biggest places to do that as you know is Total Fitness. But, in order to get access to all of their equipment and facilities, you have to go downstairs. In order to do that, you've got a lift. And the lift, because it has such a high population use with the Exercise for Everyone program, and other people using it, it tends to break down. So, we have to wait for those people to come down and fix it for us, and when that happens you've got, I don't know how many people, that aren't able to access those resources.

Some participants like Drew, stopped going to the local fitness facility because he did not want to get there to discover the lift was not working.

Within the context of discussing the numerous physical modifications required to make accessibility possible for PwD, Janice referred to the issue of independence and dignity when trying to be physically active.

> I just don’t like having to do a ramp, call it up and all that. I just want to access places just like everyone else. And when I have to do extra things then I feel more awareness. I think the whole idea of independence is that you can actually easily do it without causing much of an effort or without drawing attention to yourself.

Climate. All participants described how weather, and winter in particular, impacted accessibility and therefore limited PA. For some individuals, it changed the way they scheduled their day, while other people like Sandra found that winter “kind of curbs everything that I do.” Many of the participants who used wheelchairs on a daily basis described how difficult it was just to get out of their house in order to get to a PA opportunity. Tyler explained:

> Weather is extremely important. As you know right now it is winter time. For me, personally, this is the hardest time to be physically active. Not only because of less light but especially for me because I use a wheelchair it is not easy to go out and zip down to Total Fitness. Lots of times I am physically trapped within my house.

Some individuals described how the inclement weather could create safety issues when they left their homes. The fear of falling was something many of the participants, who walked, described as one of their main issues, especially in the winter. Randy described that the weather, combined with other factors like his age, left him feeling very scared walking on the ice. The weather, combined with inaccessible infrastructure, such as sidewalks and curbs, could prevent someone from going outside as Tyler described:

> Snow, sidewalks, and curbs are some things that actually really make it difficult for me to be physically active. Even yesterday, it was minus 25. Usually I head down to the gym, but I am not going to go out during this weather just to bounce around.

Lack of transportation. Transportation was a heavily discussed topic throughout the study interviews. In the context of barriers, the Sunnyvale special transit and general transit were often talked about. With regard to using special transit, one of the biggest drawbacks was the need to book in advance and the associated impact this had on participants' time. As Tyler stated:

> You have to book your time sometimes a week in advance. And here is the thing, if I get up in the morning and I want to go and use my arm bike and get my physical activity on.' It's like shit, okay…Call up the bus and say, "Hi, can I get picked up at this time and this time." And here is the thing, you can't say, let's say if I want to get picked up at 3 o'clock they have to schedule me for the next available transport. I have to be waiting here. I have to be ready for five minutes before and they can be late picking me up and early to pick me up from there. So, I may schedule myself for two hours down at Total Fitness but I may only get an hour and half or an hour, because of all the structural barriers that are in place.

A unique barrier to Sunnyvale was the large older adult population who also used special transit as a main source of transportation. As Tyler explained, this created a barrier for him to access programming on Sunday mornings:

> If you look at the demographic of Sunnyvale you have a very large church going population, especially if we look at the elderly. They have physical challenges so, they will be using special transit. So, I've got to time my stuff before, which is impossible, or after church is done. So that means that I am not getting down there until late.

Most participants assumed that due to the size of the city, Sunnyvale did not have as extensive special transit system as large urban centres. Tim talked about missing a program because "they were down to two buses that day." Although Tim was also able to rely on his wife for transportation, he recognized that, "people that need it [special transportation] all the time, there are limitations of going places."

The use of general transportation by PwD had become more common in the past few years in Sunnyvale due to the upgrading of accessible features on many of the buses. However, this mode of transportation also came with challenges. One very active participant, Pam, described her inability to access the closest fitness facility to her home because of the transit system. Pam described her frustration and associated safety concerns:

> For it to stop in front of the Total Fitness? No, there is nothing. It stops at the police station then, I have to figure out how to walk to the Total Fitness because there is no specific path and no clarity how to get there. And if it is a little darker, then forget about it. And I have to walk through the parking lot, which is very unsafe. Extremely unsafe….that's why any activity that goes on at the Total Fitness, I am completely turned off of that Total Fitness area.

Another issue participants faced, with regard to general transit, was the location of bus stops. Mike, who used the bus on a daily basis, often had trouble in the winter. He said, "Sometimes I have to go to the bus stop over here because this bus stop is too icy." For Tyler, he often had difficulty with the location of bus stops due to limited scheduling:

> …on the weekends we have part time busing. I have to wheel extra long because the one bus stop here isn't yet available for non peak hours. So, if I get caught in a snow drift, it's like, 'Oh, crap!' Like it doesn't matter how physically active I am. I am stuck.

Parking, for those who had their own vehicle or who were driven in a personal vehicle, was also discussed in the context of transportation, as a barrier. Drew stated that there was often a “snowbank or someone parked too close” that he was not able to use his ramp. A further problem with parking was a lack of accessible stalls. A large majority of the PA facilities in Sunnyvale were built in the 1980s or earlier. Therefore, many locations only had one or two accessible stalls for PwD to use. Furthermore, when participants spoke about having their own vehicle, the cost of purchasing and maintaining an accessible vehicle also emerged as problematic.

Finally, within the context of transportation as a barrier, participants also discussed the lack of accessible cabs in Sunnyvale. Fred believed that “if a cab was available that you could just call, that would open up a lot of doors for people. To have easy transportation opens so many more doors.” For Kacey and Pam, who were able to use standard cabs as one of their main sources of transportation, the associated cost of this service was still a challenge.

Lack of community awareness.

All 12 participants discussed there was a lack of awareness on the part of the larger community, about PwD in general, and more specifically, about PwD wanting to be active. In a broad sense, participants felt that PwD were often forgotten about when it came to being part of the community. Sandra shared, “I think Sunnyvale [is] just opening up their eyes to see that there are so many people with disabilities. When you don’t see, you don’t know.” The significance of being visible in the community had different interpretations.

Because she lived in a small city, Janice described how she, “doesn’t see a lot of people out and about using chairs or walkers, unless they’re very elderly.” She shared how having a smaller population meant that people were less likely to be familiar and comfortable with a younger person using an assistive device. Tyler also expressed that the nature of a small city made bringing awareness about PwD more challenging because, “even though you get to have more contact with individuals, the thing is that there is not a diverse population." Tyler described Sunnyvale as a closed community:

> I mean like people, were kind of very self-contained. We don't have a lot of people coming in and out, where if you could look at a hub city like Canton, or one of the larger centres they have people coming in and out all the time. They are exposed to a lot of newer things. In Sunnyvale it kind of slowly trickles down.

Participants shared that PwD needed to be more engaged in the community as this helped others to recognize that "[p]eople are people!" (Sandra), and thus reduced the stigma associated with having a disability. For Kacey, exposure went hand in hand with awareness, "because when someone knows something about you and they tell someone else or they see you, then they have learned something…that's changed their perception and made them more aware of what can and cannot be done." Fred also agreed that visibility was key to awareness, yet he recognized the challenges associated with this. He stated, "…having people out in the community is the biggest thing to educating the community. But how do you get them opportunities to really partake in the community?"

Although being visible was recognized as critical to community awareness, it could also be an uncomfortable experience as illustrated in the following quote from Janice, who used a wheelchair.

> Not that I see it anywhere else either, but I think Sunnyvale could really move forward with awareness. I loved Milton [large city] because people were so diverse and seemed to be so accepting. It wasn't head turning. It's totally different. Here, I've had people walk forever and ever in front of me because they will turn around and stare. Actually,

> physically turn. You think 'Gee, don't you get it?' You have to say hello or something to break that silence. Oh my word. I think they just need more exposure.

Some individuals believed there were many more PwD than the general public realized. When talking to Randy about this barrier, he actually stated that "we don't have that many facilities in the city, if we had more, and more accessible facilities, then we would see more people out in the community." Kacey agreed with this statement believing that "there is a need here" for accessible PA opportunities. She went on to say that "there certainly is a disabled community here. It's just whether or not people see the need to give opportunities to this community."

Limited programming and equipment. Among the different barriers to PA that were discussed, the lack of specialized programming and equipment for individuals with disabilities was seen as a major obstacle to being active. Of the 12 people interviewed, only four were taking part in organized PA opportunities and these were specifically designed for PwD. The most commonly cited activities were wheelchair yoga, wheelchair curling, bowling for PwD, and an adapted exercise program at a local fitness facility. Not only were these programs limited, but finding out about them was also a challenge as only the bowling and adapted exercise program were widely advertised. As Shirley said "…they [physical therapists] make you aware of things, but there isn't too much." Due to the lack of adapted programs in Sunnyvale, many of the participants tried to participate in programs created for the general public. However, as Betty explained, it is not always easy to take part in general classes without adaptations:

> I was actually taking Zumba gold for a while with a friend of mine…I had to quit because I almost fell every time. I would lose my balance. And you know that if you are almost

> falling every time, your luck is going to run out. And my friend couldn't come for a while. I was in a group, but I still felt alone.

Highlighted in Betty's quote was the lack of appropriate programming that led to safety concerns, but also the importance of feeling socially included in the activity.

Pam, one of the younger participants in the study, shared her struggle of deciding whether or not to participate in an activity with a much older participant population because the program met her physical needs but not her social needs. She shared, "…[I] would love to join the seniors' women's team. They curl in the morning, so it is bright, and I could walk there. But, I am not in the senior group either! I am too young for that!"

Throughout the interviews, participants discussed the need to have more sport and recreation opportunities tailored specifically for PwD. Sandra noted that in, "smaller communities you don't have that stuff [APA]. You are lucky if you have regular sports!" Drew thought that in a large urban centre there would be "more people in chairs" and "more opportunities for them." For Shirley, when she was first diagnosed with Parkinson's disease, in her small farming community "there was no one else around in the area with Parkinson's. Nobody at all."

Another concern for the participants was having trained instructors and programmers in disability and sport, recreation or fitness, to support their participation in their small city. Kacey shared that she "doesn't find that there is a lot of people here [Sunnyvale] trained in various physical activities, especially for disabled individuals." She believed that the "larger centres have more access to equipment and knowledge." Tyler thought that having people in the community with specialized knowledge could assist PwD to become active. He stated:

> By having people in the community, who have the knowledge and the things that can help people get moving, and let them know about these sort of things so that it has some legitimacy to it and you know where to look. When people challenge them, the can say, 'No, this is really important, and I am here and I have training.'

For some individuals, it was critical that their instructor or coach understood their specific needs. Pam, who self-identified as deaf-blind, often struggled with communicating with her instructors. For her, it was frustrating as "there is a lot of information missing" when trying to learn an exercise. Pam had discovered that "having that person get to know [her] and what [her] needs are does help [her] to become more involved." Having people trained and knowledgeable about how to implement programs was discussed as very important for PwD to feel comfortable and safe participating in PA. Drew stated that he didn't want "someone just throwing you in and not know what they are doing." Janice agreed, when she talked about trying sit skiing and that she would "feel more comfortable going there if it [the ski program] is not a makeshift thing." She would like to have "actual professionals and people that would come welcome you." Some participants were prepared to travel up to three hours to larger centres, believing they would receive better specialized instruction.

Financial cost. Another barrier to participation for PwD was associated with the cost of PA. This cost included membership fees, purchasing adapted equipment or professional services, such as an interpreter or specialized instructor. Being able to afford programming on a limited budget was a struggle experienced by many participants as Betty explained:

> Price of things can affect you because in a lot of cases if you have a disability you may not have the earning potential and you're on a really restricted budget or income. If you have a disability you are lucky if you can put in a 40 hour work week. If you can't you

> are earning less money and there is never enough money to go around and all of a sudden be able to afford things like a gym membership.

Kacey, who lived in Sunnyvale most of her life, described how cost played a big factor, not only for memberships, but also for getting programs for PwD started in general. She knew that "it does require money to get these things started or have equipment or people available." Kacey felt that this was one of the main reasons why "there isn't much available" in Sunnyvale. Tyler also wondered about the cost to families of PwD. Growing up, as a child with a disability, he stated that, "everything with a disability costs money." He provided the following example:

> If a family has a child with a disability and let's say they are lower income and the kid wants to do sledge hockey. Well, to go and get the sledge, and to get all the special equipment is an extra barrier in itself. I think that is where really having community support for all this stuff is really important.

If individuals wanted to become involved in organized PA programming there is typically an associated cost. Kacey explained,

> [Y]ou are going to need some sort of financial backing because you can't really, unless you just group a whole bunch of people together and just go walking or running, you can't really do much without some sort of finance happening because you need equipment. Even if it is something as simple as a ball, you still need equipment.

Drew, who was fortunate to get a grant for his handcycle, explained that it was "crazy, just crazy" how expensive this equipment can be.

For other participants in the study, it was not the cost of equipment that prevented them from fully participating, but the financial cost of needing someone to assist them in their participation. Pam experienced this issue quite often as she required an interpreter, or more specifically an intervener, to explain to her the instructions of an activity or what the benefits of it were. She often came across the issue that “people refuse to pay for an interpreter because this is expensive.” Therefore, if she wished to participate she had to pay for the interpreter herself, on top of the program or equipment fees.

A commonly discussed solution to the barrier of cost was grants or funding. However, as many participants expressed, securing these alternative sources of funding could be quite difficult. Tyler shared his views on this process:

> Grants! Ugh! To go around, to be able to do any of this stuff, to get grants takes so much time. That is why there needs to be somebody out there that knows how to do these things. You have to go from one hoop to another, to another, just to find things and do all the research. It is time consuming itself.

Betty also shared that she was frustrated with the process of grant writing. The idea of “jumping through hoops to get it” and then, “prove this and that and you know you need 10 doctors notes…<sigh> Because you know what happens? People just go ‘Oh to hell with this!’” Being from a smaller centre was also viewed as a problematic for funding, because there were fewer PwD. Tyler explained, “when you go to look at stuff for provincial funding, at a city level, we are not considered as important. We don't have a strong enough voice to advocate for provincial funding.”

Health concerns. Physical health was a critical barrier captured throughout the interviews**.** Although every participant self-identified as having a disability, it was often secondary health conditions that prevented them from being as active as they wanted to be. Drew, a full time wheelchair user, reiterated that the shoulder injury, he sustained in his accident, had impacted his physical activity choices. Drew stated:

> [W]hen I go to the gym, I try to be pretty careful with it. So, that’s why I wonder about skiing, because you have the outriggers that you have to hold on to. I don’t know how much force it would take to turn or how much pressure it would be on my shoulders.

As a stay at home dad, who relied on the use of his shoulders for activities of daily living, Drew was very conscious of the need to protect his upper body mobility in the physical activities he engaged in.

Common conditions, associated with different impairments were also discussed by participants. For example, Kacey, a younger, female participant, diagnosed with spina bifida, described how struggling with bladder infections on a regular basis was one of the biggest deterrents to being physically active. She stated, “being in public pools, where there is lots of people, and potentially, a lot of germs, it can really increase my infection rate. So, I don’t tend to do it too often to try and alleviate some of that.” For Sandra, arthritis was a primary concern. She explained, “now that I have arthritis, I find that even when I want to [be active], my arthritis doesn’t always let me.” For others in the study, weight gain and aging were described as health related barriers to becoming active. Fred, a long time wheelchair user, stated:

> It’s just some general aches and pains as a guy is getting older. It makes you less likely to try and attempt some things. The excess weight you get, as you get a little older, has put a damper on a lot of it too.

Interestingly, health concerns were not solely tied to the experiences of PwD. In one situation, Tyler, who used a wheelchair due to mobility issues associated with cerebral palsy, shared how the physical health/condition of the person trying to support his engagement at the fitness facility was a factor in his participation. He said,

> I contacted the care company that I use and they were like, 'Oh, he can do it.' Oh, okay. So here is this really nice guy who is as skinny as a rail. ... I have to drop my weights down 15 to 20 pounds so he can physically help me. He is physically out of shape. I have people that are extremely overweight and I mean how can you basically say to these people, or to the care company, 'Hey, I am going down to the gym. I don't need Arnold Schwarzenegger to go down there with me but I do need someone who is relatively physically fit.' I mean, it's very hard thing for people to say.

Facilitators

Participants also reported a range of PA facilitators they experienced living in a small city. Some of these facilitators responded to the barriers previously discussed. The facilitators were captured in the following themes: (a) awareness; (b) personal perspectives; (c) existing activities; and (d) supports.

Awareness. Awareness often emerged as a facilitator of inclusion in the community and PA for PwD, as participants discussed it in several different ways. First, was awareness on the part of the community about the abilities and needs of PwD, second, was awareness on the part of PwD about opportunities to be physically active, and third was how advocacy was critical to creating awareness.

Fred explained the importance of community awareness in the following quote:

> Having people out in the community is the biggest thing to educating the community. It's all about the more inclusive you can make the community, the more people are going to be out there. The more people are going to accept them [PwD] as just a normal part of society instead of keeping them isolated, like a special little group.

The nature of living in a small town led participants to discuss the value of the commonly used phrase, "everybody knows everybody" in creating community awareness. Fred noticed that, "people get to know you fairly fast and will start to make accommodations for you." He also stated,

> It's just the fact that you can know your community. You know what to expect everywhere you go. Sunnyvale still has a small town feel. Here in Sunnyvale, we still have a rural feel about the city and people like to know who their neighbours are and talk. You can learn real fast how to help and take care of your neighbours.

Similarly, Tim found that within a small community "people are less likely to be rude because there is a good chance you are going to run into them the next day." Pam, who had been exposed to a variety of physical activities, had come up with her own rule about others' attitudes. She stated, "if people's attitudes are mostly positive, and I can notice their comfort level, then that is fine. If I notice their awkwardness or they are uncomfortable, then I won't get involved." Something that tied in very closely to Pam's rules about attitude was patience that individuals assisting the PwD needed.

Living in a small centre also created awareness, among PwD, about PA opportunities as "word of mouth" is the most used form of advertisement" (Betty). The nature of a small town was something Kacey felt helped with awareness of specialized programs because "everyone almost literally does know everyone so, it is pretty easy to get messages going." This was evident at an adapted sport event she recently helped promote:

> I know from sledge hockey, people that I told have told other people and they don't even realize it. I have also had people approach me and say I have saw this or that, and tell me

> I should go check it out. That’s kind of important. Word of mouth and knowing people so you can get the ideas out there.

Randy identified that social media platforms, like Facebook and Twitter, helped to inform PwD about PA opportunities, and Kacey suggested that advertising such as the newspaper and radio stations in small towns, were more likely to promote adapted events because there were fewer organizations competing for the publicity. The role of the disability community was also critical to communicating information. Tim said, “once you get in [to the disability community], you hear of things, but if you are never introduced to the right people or don’t stay in touch, you miss out.”

Finally, advocacy was discussed in the interviews as critical to increasing community awareness and opportunities for PwD to be active. Although described as endless work by several participants, it was a key factor that allowed people to “break down barriers, and get to know the environment that they want to participate in” (Pam). Other participants spoke about disability advocacy groups or organizations that work towards “educating the community on how to deal with disability”, and recognize “that people are different, but yet, they are not. They are still people” (Fred). It is through some of this advocacy work that some of the city recreation facilities have become more accessible thus, allowing more PwD to become active.

Personal perspectives. A number of participants shared how their own attitude, motivation, and desire to be independent facilitated their engagement in an active lifestyle and PA. Kacey shared how a person’s attitude was critical to their decisions to take part and persist in activities. She said,

> I think attitude is a big factor because like they say, ‘whether you think you can or you can’t, you are right’ so, if you don’t believe you can do something, you won’t try. And, if

> you think you can, you usually won't let anything stop you regardless of what it takes to get to that particular thing.

Tyler thought that patience wasn't just something for other people, but also for the PwD. He felt that everything takes longer with a disability, and that this attribute was a requirement for PwD, if they are looking to be successful in their life.

Throughout the study, participants mentioned a variety of things that motivated them to become physically active. Kacey mentioned that, for her, PA is important because "you usually have to leave your house to be physically active and go somewhere specific like the gym, hockey or curling rink." The motivator that was mentioned by all the participants, in the study, was the idea of maintaining independence by being physically active. Drew stated, "being in a chair, it's a lot easier to be fit to transfer and usually your pain is better. It's just easier. It gives you a better self-esteem. It changes the way you look at yourself." For Janice, being able to be independent during her PA determined whether she would continue with the activity or not. She liked swimming best as this was "something that [she] can do on [her] own and does not have to rely on other people to do things." For Kacey, independence was one of the most important things to her, although she stated that, "everyone needs help from someone." She believed that, "there is sometimes a misconception that, if you are disabled, you absolutely need help for everything."

Growing up in the smaller centre of Sunnyvale also revealed the a PA facilitator associated with the physical labour of farm life. Many participants lived their early life on farms or in rural communities where they were expected to contribute to daily tasks which were often physically demanding. This applied to both participants who acquired their disability, as well as, participants with a congenital disability. Fred described how his experience growing up on a farm played a role in becoming active after his injury, and staying involved in the daily activities of running a farm. He stated, “I always hated missing out on anything. I just wanted to help out with the farm. I learned how to drive right away because I knew that would be the best way that I could help.” Tim, another participant who was raised on a farm, credited his strength during recovery from his stroke to growing up on the family farm. Janice, who acquired her disability later in life, talked about her past experiences with PA, before her accident, and how they helped her after.

> Having that desire. It [PA] was part of my lifestyle then. It was a natural thing to seek it out and include it again. Just because you know how good you feel. You’ve had that experience. If you’ve seen the benefits at one time you just think it’s worthwhile.

Existing activities. Although the lack of programming opportunities were highlighted in the barriers to PA, participants also spoke about the few specialized programs that existed for PwD in Sunnyvale, in addition to a few general programs and activities. The most commonly cited specialized activities were wheelchair yoga, wheelchair curling, bowling for PwD, and an adapted exercise program at a fitness facility. Tim, who attended wheelchair yoga and curling, shared that his reasons for participating included that “[t]he instructors are so helpful and very friendly. Also, the social aspect of it and the stretching.” The most important thing for Betty, when she is out in a group activity was to “feel comfortable that you are not out of place.” She thought that the perception of a program was very important, as it could affect whether or not that person wanted to come back again. Other individuals, Randy and Fred, also participated in organized activities but in a coaching capacity. Randy, a long time coach of club volleyball, explained that coaching created a “good environment that allows me to be more a part of the community.” Another significant benefit consisted of the close location of these organized activities, which was viewed as a result of living in the small city. Betty explained, "[n]othing is that far away. Even if you need to grab a cab, it is not going to cost you that much."

Daily physical activity (DPA) was often discussed by participants as a way they were physically active. Many individuals described the tasks of cleaning their homes, getting groceries or walking their dog as their primary engagement in PA. Sandra described her PA in the following way:

> Not spending your whole day sitting, doing nothing, except maybe using your brain. It's actually using the movable parts of your body. That doesn't necessarily mean exercise even cleaning up, making beds, washing floors, and making meals can be physical activity. Actually, exercise is probably easier!

Sandra also stated that her dog was a primary contributor to her PA, "the dog needs to be walked 3 times a day."

Other individuals described getting outdoors or doing more recreational activities, like swimming or fishing, as their favourite forms of PA. Many participants used the accessible paths that the city of Sunnyvale had to offer. Getting out on his handcycle and accessing the paths behind his house was one of Drew's favourite activities. Kacey enjoyed being outside in the spring and summer, and shared, "Sunnyvale has quite a few parks that are nice to walk around in and just enjoy nature." Fred, an avid outdoorsman, described his love of fishing and hunting as reasons for getting active. He credited his accessible fishing and hunting equipment as important facilitators to him being able to take part in these activities. As a busy volunteer in his community, Mike talked about getting from place to place by wheeling in the summer, as a way for him to keep active in performing his daily task.

Relationships. The final facilitator, relationships, encompassed a few different types of support systems. The first type of relationships, described by participants, included the people closest to them (i.e. family and friends), who assisted them in everyday life, which included being physically active. Betty stated that her husband was her, "…biggest walking aid. You learn each other's body movements and he just knows if I need help without even saying anything." Mike described his mom as someone who helped him to take care of his money and also "makes sure [he] can get to places when [he] can't use the bus." Fred credited his mom as the person who pushed him to get back driving a vehicle after his accident. He said, "She would never let me say 'I can't.' Never." Children were also acknowledged as sources of support in various ways. Janice talked about her sons and fiancé assisting her on the ski hill. Drew talked about how his little girl was his biggest motivation. He provided an example of when he played sledge hockey with his wife and daughter, and it was "so much fun for the 3 of us."

Friends were another frequently mentioned source of social support. Pam described how having a friend was an important support because she "needs a buddy system because of [her poor] vision and balance without a friend it is boring and challenging." Randy shared that his close friends were instrumental in encouraging him to continue to stay active. He also indicated that his co-workers influenced him to stay in shape and taught him different ways to take part in activity. Kacey shared that friends and family provided support when they helped to run programs and take part in adapted activities because they "are open to trying it with you."

Another type of support system that was often mentioned was of a more professional nature. For example, having friendly and knowledgeable instructors, to support different needs, made a big difference as to whether participant would continue in an activity program or not. Kacey described it as one of her biggest facilitators:

> Having people that have an open attitude, and are willing to put in the time to do it with you, or introduce you to something that you've maybe never done, or even helping you to implement something, so that it is available to you, is so important.

Individuals talked about how their health care providers and different professional organizations in the community assisted them to maintain an active lifestyle. A number of the participants highlighted homecare in Sunnyvale as a professional support. Betty described the homecare attendants as "very helpful" and "treated you like a person, not a job." Kacey described the convenience of knowing where to go when she needed a service. She said,

> I know where to take my wheelchair to get serviced. The people know me there. You have good rapport with the services you need, so it works efficiently. I found in the larger centres they didn't know me. And they didn't really want to anyways. Here, they know you by name.

Public transportation, which was sometimes seen as a barrier in Sunnyvale, also had many positive attributes. One of the characteristics, mentioned by many participants, was that transit or taxi workers treated you like a person, and not just a number. Kacey who has used the transit system all her life said,

> I know the transit system inside and out. They know me, so they provide great service, which is one of the things I didn't find about Milton. In the larger centres, to try to run more efficiently they have numbers assigned to people.

Pam, who received public transportation for free, due to the nature of her disability, believed that without this transportation "…life would be finished. It would be over." It allowed her, to not only get to PA classes, but also, to work. Sandra, who grew up in Sunnyvale, discussed how accessible public transportation was, "…getting way better than what it was before because before there was none.” The city of Sunnyvale had smaller, accessible buses that could be booked, along with, all of their general public transportation buses being accessible.

Having various sources of support, whether they were friends and family, or of a professional nature, were critical to participants’ engagement in PA, both in their daily lives, and in their deliberate efforts to take part in recreational and sport programs.

Chapter 5:

Discussion

The overall purpose of this study was to perform an in-depth exploration of the barriers and facilitators of PA, for PwD, living in a small southern Alberta city. Of particular interest, was finding out (a) what were the key facilitators and barriers to meaningful PA; and (b) what were the PA experiences of PwD. Several studies have investigated the barriers and facilitators to PA opportunities for PwD in large urban centers (Buffart et al., 2009; Martin Ginis & Hicks, 2007; Martin Ginis et al., 2002; Rimmer et al., 2004; Scelza et al., 2005; Vissers et al., 2008; Wilcox et al., 2006) however, little was known about the barriers and facilitators to PA for PwD in small cities.

This was an exploratory study and I did not impose any pre-determined theoretical framework on the data. As articulated by Thorne (2008), ID methodology draws inspiration and useful insights from the theoretical world, but does not fully commit to theory, as the practical problems being investigated demand that research also be firmly planted in the "real world". Therefore, it was my intention to draw support through theoretical ideas and insights, while still providing practical support through descriptive pieces of literature.

Conceptual claim and interpretive description

In previous studies exploring the barriers and facilitators to PA for PwD, researchers have primarily focused on reporting the results, often by listing the barriers and facilitators to PA, with little to no description about their impact on the lives of PwD. Checklists of barriers and facilitators provide a practical lens that can be applied to "real world" situations, however, they are limited to the degree that they can address issues underlying barriers at an individual level. Using the method of ID, in this study, allowed me to engage with research participants in greater depth which, while contributing to the ‘list’ of barriers and facilitators, also enabled a deeper understanding of how these impacted peoples’ lives. Seeking to understand opportunities, experiences, and meaningful engagement from the perspectives of participants afforded richer descriptions and interpretations of the meaning of PA for PwD living in a small city.

Through the process of ID, I was able to “organize and present findings such that something below surface meaning – beyond the self-evident – could be explored and elucidated” (Thorne, 2008, p. 175). In this regard, the conceptual claim, ‘PwD recognized that PA was important for their overall health but there was a lack of PA opportunities within their small city. Through increased involvement in inclusive PA, PwD could become more visible within the community and help to change attitudes towards PwD’, was formulated. The process of ID began with an initial interview that helped create rapport and trust with participants as they responded to the two main aims of the study. The process of photo elicitation assisted in deepening their thinking about the interview topics during the second interview. Because many barriers and facilitators had already been identified by participants in the first interview, I was then able to go beyond this information to engage in conversations with participants about the “assumptions of what an ideal future might look like, which is a logical outgrowth of the problem that drives it” (Thorne, 2008, p. 175).

In the second interview, I focused on the stories underlying how and why the barriers and facilitators identified in the first interview impacted peoples’ lives. This also gave me an opportunity to delve into how participants would change their current situations, and better understand their perceptions of “an ideal future” (Thorne, 2008, p. 175). It was in these conversations, where participants spoke about the importance of being visible in their community, as active citizens, taking part in meaningful activities. Participants expressed the value of PA in their lives, not only because of the physical and psychological benefits accrued, but specifically, how the social benefits were vital to impactful experiences (Anderson & Heyne, 2000; Carruthers & Hood, 2007; Devine & Lashua 2002). Participants discussed how they felt they would be more willing to take part in community PA opportunities if there were more options available, especially around participating in PA opportunities with individuals without disabilities. The term "inclusive" PA was characterized as an important tool that brought about greater disability awareness in the community. Similarly, the participants in Mayer and Anderson's (2014) study indicated that inclusive recreation helped change attitudes and contributed to greater acceptance when PwD were seen participating in the community. Physical activity has been advocated as a vehicle toward creating greater inclusion within society (Dattilo, 2002; Lord, 1997; Pegg & Compton, 2004; Stumbo, Wang, & Pegg, 2011) and this was supported by the perspectives of the participants in this study.

The conceptual claim of the study provided a critical lens through which to engage with the barriers and facilitators to PA experienced by PwD and a necessary starting point toward understanding that participation in PA, for PwD, was interwoven within a larger discourse about the exclusion and inclusion of PwD in society. Maintaining this lens is critical to creating change.

Barriers to physical activity

The barriers to PA identified in this study were as follows: (a) accessibility issues; (b) lack of transportation; (c) lack of community awareness; (d) limited programming and equipment; (e) financial cost; and (f) health concerns. As indicated in the literature review, barriers to PA for PwD have been explored in larger centres, but little evidence was available for small cities. Supporting previous research, (e.g., Buffart et al., 2009; Martin Ginis et al., 2002;

Martin Ginis & Hicks, 2007; Rimmer et al., 2004; Scelza et al., 2005; Vissers et al., 2008; Wilcox et al, 2006) the general barrier themes found in this study are widely acknowledged in larger centres.

The two most commonly discussed barriers in this study were accessibility issues and lack of transportation. These two barriers, which also included the subcategory of weather, are well represented in previous studies (e.g., Buffart et al., 2009; Martin Ginis et al., 2002; Martin Ginis & Hicks, 2007; Rimmer et al., 2004; Scelza et al., 2005; Vissers et al., 2008; Wilcox et al, 2006). However, transportation in Sunnyvale had a few key features that appeared to be unique to living in a small city. The lack of independent accessible transportation options, such as wheelchair accessible taxi cabs, created a significant gap in services for people wishing to access PA programs outside the hours of public transit, or for those who wanted a direct route of transportation. The general public transit buses were all outfitted to be accessible. However, location of bus stops proved to be difficult for many users, especially, in the winter. Many of the PA spaces did not have bus stops directly outside of participants' departure and/or arrival destinations, or, due to decreased demand for transit service in the small city, many bus stops were only available on a modified schedule during peak hours. A recent study by Jansuwan, Christensen, and Chen (2013) found that PwD in small cities had less access to available and flexible transportation options which resulted in decreased community participation.

The issue of lack of awareness has often been categorized in previous studies as a lack of knowledge of PA staff, or inaccurate perceptions of people without disabilities about PwD (Martin Ginis et al., 2002; Martin Ginis & Hicks, 2007; Rimmer et al., 2004). While participants in the current study also acknowledged these barriers, within the context of being in a smaller centre, they felt further disadvantaged. This was explained by participants' perceptions that small towns had less diversity and were, therefore, less accepting of differences and less likely to make changes (e.g. to transportation) to include PWD, than were larger centres. However, this finding was contradicted when participants discussed the benefits of living in a smaller centre where "everybody knows everybody."

Programming and equipment were identified as a barrier similar to reports of large centres. However, the findings of this study stressed an intensified lack of programs and equipment for PwD compared to larger centres, but similar to issues faced by PwD in rural settings who experience significant difficulty in accessing health services (Iezzoni, Killeen, & O'Day, 2006). Having a lower number of PwD in smaller communities has been identified as problematic in justifying the need for equipment and specialized community services and programs (Dew et al., 2014). The cost associated with programming and equipment also appeared to be a factor in small centres. This was evident in Sunnyvale as there were few organizations (e.g., non-profits, disability support organizations) available to assist with costs. When participants indicated a need for financial aide to assist with programming or equipment costs, they shared that they either had to find the support on their own or connect with organizations in larger centres. Again, this barrier was representative of previous findings (Hoogsteen & Woodgate, 2013; O'Callaghan, Allister & Wilson, 2005).

The barrier of health concerns most closely resembled how previous research has characterized this issue in larger centres. Specifically, it was viewed as an individual level barrier, emphasizing a person's impairment and/or secondary health conditions, rather than outside influences. While the majority of health related discussion was of an individual nature in the study, one participant also spoke about how the health of support workers was critical to his opportunities to engage safely in PA. Specifically, support workers needed to be able to perform physically demanding tasks in order for PwD, who require greater support, to be able to fully participate in PA. While this concern may have also arisen in large urban centres, it is likely compounded in smaller centres, where there is increased difficulty in finding support staff that are knowledgeable and capable of providing the services required by PwD (Hoogsteen & Woodgate, 2014).

The significant overlap in barriers to PA, in large and smaller centres, reinforces their relevance for PwD. In addition to the common barriers, the present study also highlighted a few additional barriers that were compounded by the nature of a small city, and that may have differentially affected the lives of PwD who resided there.

Facilitators to physical activity

The PA facilitators identified in this study included the following: (a) awareness; (b) personal perspectives; (c) existing activities; and (d) relationships. Similar to barriers, facilitators to PA for PwD have been explored in larger centres, but little evidence was available for small cities. As was the case with the barriers, there was significant overlap in the facilitators, described in this study, and those highlighted in previous research. There were, however, several novel findings that appeared to be connected to the experience of living in a small city as a PwD.

The notion that "everybody knows everybody" in a small city, was a relevant and unique facilitator to the positive PA experiences and opportunities of PwD in Sunnyvale. Participants expressed how the nature of a small city encouraged opportunities for repeated interactions with others that led to a sense of familiarity and trust among residents. McPhedran (2011) used the term "social connectedness" in her study to describe the phenomena where PwD in small communities had stronger perceived neighbourhood relationships regarding people being close knit, willing to help one another, and trustworthy. Participants experienced this social connectedness both within their immediate circles of friends and family, but also, with others with whom they engaged in their daily lives (e.g., taxi drivers or support service workers). Because they lived in a small city, participants were more likely to have repeated interactions with the same support workers and transportation operators, leading to a sense of trust, comfort, and connection. Drawing from contact theory (Allport, 1979) may also help to elucidate the importance of the "everybody knows everybody" notion in the positive PA experiences of people in Sunnyvale. According to contact theory, recurring opportunities for interaction with others could lead to the adoption of more positive attitudes (Allport, 1979). Participants expressed that awareness and the positive attitudes of others were critical to their positive engagement in PA. Having regular interactions with members of the community through PA were viewed as significant ways to create opportunities for others, in Sunnyvale, to think differently and more inclusively about PwD. In this sense, PA participation, and the interactions it afforded, were viewed as important vehicles that created awareness and the potential for people without disability to value the person, not in spite of, but inclusive of his/her differences (Anderson, Schleien, McAvoy, Lais, & Seligmann, 1997; Bedini, 2000; Cameron, Cook, & Tankersley, 2012). Accessible PA and inclusive sport and recreation, from the perspectives of participants, had the potential to create more inclusive communities through increased opportunities for interaction between people with, and without disability, and by challenging assumptions of difference. This was viewed as possible because of the nature of living in a small city.

Awareness was also positively associated with living in a small city when it came to learning about PA programming and services. The advantage of being able to learn about opportunities by "word of mouth" enhanced the likelihood that PwD would engage in PA. Participants explained that, because they were more likely to be known to others in their community, information about PA opportunities was often relayed to them personally rather than through happenstance or formal advertising. The personal nature of this knowledge sharing increased the likelihood that participants would follow-up on these opportunities. While word of mouth knowledge translation was mostly seen as positive, some participants did note that if you were not socially connected with the right people, the chances of hearing about PA programs became limited because “word of mouth” was the primary form of advertisement.

The facilitator, personal perspectives, contained several subcategories including the importance of having a positive attitude and personal motivation, on the part of the PwD, to be active. These subcategories have also been acknowledged in previous studies (Kinne, Patrick, & Maher, 1999; Mahy et al., 2010; Nosek, Hughes, Robinson-Whelen, Taylor, & Howland, 2006; Putnam et al., 2003; Stephens, Neil, & Smith, 2012). However, a unique aspect of participants’ personal perspectives resulted from their experiences growing up on a farm or living in a farming community, which were more conventional, from those living in a small city. Four participants shared how farm life positively contributed to their ability to manage the challenges associated with disability. Specifically, they spoke about how growing up on the farm instilled values of hard work and contributing to the greater good. In a similar way, the work of Friesen, Isfeld, Ringaert, and Krassikouva-Enns (2010) highlighted the reciprocity that existed within farming communities and how neighbours relied on one another to get things accomplished. Growing up with this type of mentality, coupled with the notion that ‘everybody knows everybody’ previously described, facilitated PA opportunities, as well as, continued involvement in community life.

The final two facilitators, existing activities and relationships, has also been identified in the literature (Jones, 2003; Kerstin et al., 2006; Rimmer et al., 2004). While there were a select few organized specialized activities for PwD, the majority of PA involvement described by participants was of an unorganized nature and consisted of such things as daily physical activities or being active outdoors. Although limited opportunities were highlighted, participants in this study found multiple other ways to be active that did not rely on formal or organized recreation. Relationships with others featured prominently in making this a possibility, although participants also demonstrated a desire and ability to be independent in a number of their activities. The types of relationships participants talked about as beneficial to being physically active included family, friends, and community services. Strong personal relationships with community services were also identified as important to PA engagement. This was somewhat different than what has been reported in the literature with regard to larger centres. For example, Rimmer et al. (2004) found that PwD wanted professionals to present themselves as friendlier and more motivated in their interactions with PwD. The importance of relationships reiterates how the nature of a small centre where everybody knows everybody had a significant positive impact on the PA engagement of PwD.

Recommendations

The results of my study, regarding the barriers and facilitators to PA for PwD living in a small city, were largely consistent with previous research conducted in major urban centres. However, the current findings, which demonstrated the relevance of the larger body of literature to the barriers and facilitators in a small city, also expanded on this knowledge base. A sense of community and social connectedness were critical facilitators for the participants in this study, as described, within the various themes. Although the importance of relationships and professional support have been identified in previous literature (Kerstin et al., 2006; Rimmer et al., 2004) the possibility for greater social connectedness within a small centre, as described by participants, appeared to hold a somewhat different potential for inclusion in PA, as well as, in the broader community, for small cities in particular, but also, for larger centres in general. The ease of becoming known to and connecting with others in Sunnyvale illustrated how proximity and small centres more naturally leads to repeated opportunities to get to know people beyond their differences. While more likely to occur on a regular basis in small centres, the need for people to find connection and to feel included is relevant to all communities.

Another aspect of the current findings that offers an important contribution to the barriers and facilitators literature is the conceptual claim that: PwD recognized that PA was important for their overall health but there was a lack of PA opportunities within their small city. Through increased involvement in inclusive PA, PwD could become more visible within their community and help to change attitudes towards PwD. The notion of inclusion is essential to this conceptual claim. The importance of engagement in PA was recognized by participants for health reasons, but also, as an important mechanism by which to challenge assumptions of disability and to create more inclusive communities. Although specialized programming for PwD may fill a critical void, the importance of inclusive programming toward the end goal of more inclusive communities cannot be undervalued. According to Devine (2004), inclusion can allow for PwD, and people without disabilities, to increase knowledge of one another and also may lead to an increase in confidence, for PwD, when participating with others beyond their family or similar peer group. The need for specialized knowledge and support was evident, however, the greater agenda of full inclusion in society should guide both policy and practice in the area of PA for PwD.

Interpretive description was an effective methodology with which to explore the question of facilitators and barriers to PA for PwD living in a small city. The majority of literature about facilitators and barriers to PA for PwD has emanated from studies where the experiences of PwD have not received significant attention. According to Thorne (2008), the nature of interpretive description often leads to a significant amount of contextual and background information that may be relevant to study participants, but not always relevant to the intended purpose of the study. In many instances, it was this information that brought to life the stories of participants and led to greater understanding of their experiences in PA, but also in everyday life. The conceptual claim of this study emphasized both the value of PA for health, but also, its potential role in contributing to the agenda of more inclusive communities.

Chapter 6:

Conclusion

Summary

Rarely have the barriers and facilitators of PA for PwD living in a small city been the focus of researchers, despite the emergence of studies in the last two decades about the importance of PA for PwD (e.g., Cooper et al., 1999; Durstine et al., 2000; Heath & Fentem, 1997; Rimmer et al., 1996; Rimmer, 1999). Numerous studies have investigated the barriers and facilitators to PA opportunities for PwD in urban centers (Buffart et al., 2009; Martin Ginis & Hicks, 2007; Martin Ginis et al., 2002; Rimmer et al., 2004; Scelza et al., 2005; Vissers et al., 2008; Wilcox et al., 2006), however, little was known about the barriers and facilitators to PA for PwD who reside in small cities.

The purpose of this study was to perform an in-depth exploration of the barriers and facilitators of PA for PwD living in a small southern Alberta city. Interpretive description was employed with 12 PwD ranging in age from 26 to 71 years old. Using a variety of data collection techniques, information about the current PA opportunities, PA experiences, as well as, the key facilitators and barriers to meaningful PA engagement for PwD were captured.

The conceptual claim of this study was that PwD recognized that PA was important for their overall health, but there was a lack of PA opportunities within their small city. Through increased involvement in inclusive PA, PwD felt they could become more visible within their community and help change attitudes towards PwD. Importantly, the conceptual claim highlighted the potential for PA to serve as a vehicle toward social change and greater inclusion of PwD in society. This claim also served as an overarching theme through which to view the barriers and facilitators.

Participants reported a range of barriers including: (a) accessibility issues; (b) lack of transportation; (c) lack of community awareness; (d) limited programming and equipment; (e) financial cost; and (f) health concerns. Participants also reported a range of PA facilitators, some of which responded to the barriers previously discussed. The facilitators included: (a) awareness; (b) personal perspectives; (c) existing activities; and (d) supports. These findings added to the growing body of literature about barriers and facilitators to PA for PwD. Within the facilitators, the notion that "everybody knows everybody" appeared unique to living in a small city and highlighted how the nature of small communities can lead to a strong sense of social connectedness (McPhedran, 2011) which was critical to participants' sense of inclusion in PA and community.

Limitations

There were several limitations to this study. The first was with regards to the location of the interviews, which was selected by participants. Most commonly, participants requested that interviews take place in their homes or in a public setting (e.g. work place or coffee shop). Because there were often others present in these locations, this may have limited the degree to which participants shared intimate details about their experiences. Second, I prepared interview guides for the first and second interviews in advance. The scripts were flexible and allowed me to guide each interview individually, based on the participants' responses, and I was also able to adjust the second interview guides in response to how the first interview went. However, not uncommonly, some participants found it easier to expand on their responses than others, and I too, found it easier to probe on certain questions depending on the participants' responses. Although the initial timeframe for the interviews was 60 minutes each, for participants who were willing and able to continue the interview past this time constraint, greater depth and detail in their responses emerged. This may have led to the over or under representation of some participant perspectives. Third, the time of year I conducted the interviews appeared to influence participants' responses to the questions about barriers and facilitators. The first interview took place in the fall, while the second interview took place in the winter. Understandably, participants emphasized weather and its corresponding barriers as highly relevant to their PA participation. To counter this, I also asked questions about other seasons of the year, however, the presence of winter remained prominent in the second interviews.

Fourth, there were several limitations with regard to the use of photo elicitation. This technique contributed greatly to the conversation with participants as it allowed for memories of various experiences to be easily triggered in the second interview. However, due to the limitations imposed by study ethics, photographs of other people could not be used. Stock photos were used instead. Words such as "spouse, parent, child" were written beside these photos. While this reminded participants of the suggestions they provided to me of what photographs I should take, the stock photos did not represent actual people and it is possible this limited the sharing of experiences and memories in regards to the role of others. In addition, using photo elicitation and the opportunity to select specific photographs helped participants to share their stories, and helped me to better understand their descriptions. However, it would have also been interesting to understand why participants selected some photographs to talk about and not others. For example, one individual stated he did not choose the photograph of a sports team because he had never been able to be a part of a team due to the nature of his disability, and because there were no wheelchair sports in the city of Sunnyvale when he grew up. Due to the large number of photographs, I did not question why individuals skipped over pictures unless I remembered from their previous interview something relevant about a photograph that they did not speak to.

Finally, when discovering the types of PA opportunities that were available for PwD in the small southern Alberta city, it was not completed until halfway through the interview process. As stated in my findings, Sunnyvale advertised programs mainly through “word of mouth”, so it was through my meetings with disability organizations, participants and being out in the general public, that I was able to discover all that Sunnyvale had to offer. Although I felt like I had a strong connection with the disability community in Sunnyvale, there still may be PA opportunities out there that I was unaware of due to the nature of “word of mouth” advertising.

Future Directions

This study represented one of a handful of research studies that focused on the PA experiences of PwD and the barriers and facilitators they encountered living in a small city. An important facilitator that emerged from the study was how the nature of a small city, which led to the positive descriptor, “everybody knows everybody,” led to a sense of inclusion in PA and the broader community for participants. A recommendation for future research is to consider how to build smaller communities within large urban centres, so that individuals who reside there may also find the sense of connection that current study participants valued so much.

A second recommendation is to also consider the experiences, barriers and facilitators to PA of children, youth and families living with disability. During participant recruitment, I was contacted by several families of children with disabilities willing to participate in the study. This demonstrates a potential need for knowledge of, not only adults, but also how children and families experienced PA in small cities and rural communities. Informal conversations with these families and documented conversations with adults, who grew up in the small city of study, indicated there was also a gap in PA opportunities for children and youth with disabilities. This may have been a contributing factor to why adults with disabilities, who grow up in smaller centres, may not have been as active later in life.

Finally, the methodology used in this study led to a rich collection of data about the barriers and facilitators PwD encountered when accessing PA, and also their experiences, which helped me to better understand what afforded and limited PA for PwD. However, the conceptual claim of this study, which was made possible because of the nature of ID, highlighted how PA and the experiences of PwD could not be reduced to a simple list of barriers and facilitators. Solutions to the issues faced by PwD in society were more complex than creating a ramp or accessible PA equipment. Qualitative approaches that seek depth of information and that provided critique in search of solutions to complex problems are needed in future research examining the inclusion/exclusion of PwD in community.

Personal Reflection

My initial desire to pursue the topic of barriers and facilitators to PA for PwD in a small city was born out of my personal frustration with the apparent lack of PA resources for my friends and family living in Sunnyvale. As an individual who volunteered and worked extensively with a variety of inclusive and segregated sport settings in a large urban centre, I wanted desperately to find out why these opportunities were not available in Sunnyvale. Obviously, I could have made assumptions as to why this was, but I felt that if anything was ever going to change, I needed to sit down with PwD in the community, beyond my family and friends, and discover what they experienced as the most significant and biggest barriers and facilitators to PA. As such, this research study was conducted to explore their experiences, and hopefully bring knowledge translation to the community of interest.

Returning to Sunnyvale proved to be more difficult than I first thought. I had been removed from the community for 5 years, and now, had to re-establish myself as an active citizen. My first instinct was to offer my time and resources through volunteering with the organizations I wished to connect with. If I could be seen as someone who cared about the organization and the people they serve, then I knew I could build a better relationship of trust when asking them to give some of their time to my study. This relationship building also assisted with recruiting participants because they knew me not just as a researcher, but as a volunteer and someone who wanted to understand the perspectives of others.

I remember sitting in my vehicle after my first interview and actually being overwhelmed by emotions. The individual I had just interviewed lived with an impairment that I was very familiar with through a previous employment experience. The interview and topics discussed resonated strongly with the ones I had encountered in my previous employment. However, as my conversation with the study participant occurred in her home, it was of a personal nature I had experienced in the office setting where I worked. As I sat in her kitchen, and then my car afterward, I was struck by the realization of how much this person had voluntarily shared with me about her personal life, and that she trusted me to represent her experience to the best of my ability. I felt welcomed back into my community, but also, into the lives of people I had never met before.

The interviews continued, and I continued to be surprised by the participants' openness and willingness to share. From the first time one of my participants swore, to the time a participant called me by my first name, I was reassured about my original intentions to respect and represent the participants in ways they wanted to be. I drove just under 100 kilometres to meet the oldest participant who had agreed to take part in the study. She treated me more like a grandchild than a person who had come to interview her. I looked forward to her second interview, wishing that distance and transportation was not such a barrier for her as there were some programs in Sunnyvale I knew she would enjoy. My favorite interview may have been when I was greeted by a 3 year old girl and a massive pit bull at the front door of one participant. The stay-at-home dad, who I was interviewing, quickly rushed over to greet me and invited me in. The interview that day ended with the following phrase, which was captured on my tape recorder: “Jill, get your pants back on! Tara does not want to see your undies! Sorry about this…” I laughed as I transcribed the interview later on and realized how fortunate I was to share in these brief moments of these people’s lives.

I wanted to be able to report that all of the interviews were easy, but it wasn’t so. One of the participants, who I knew from one of my volunteer activities, had difficulties expressing his thoughts when it came to chatting in the more formalized setting. I typically viewed him as an outgoing guy who liked to joke and encourage everyone around him, but when it was a one on one conversation he kept his answers very short, even after probing questions. He sometimes had difficulty understanding certain phrases or words I had used with other participants, so I often had to re-think how to present my questions using other terminology. I was very grateful for his input and we gave each other a celebratory high five after the interview was done. However, it was in moments like these that I wished I had more interviewer experience; I felt he had so much more to say.

After the interviews were completed, I found it very challenging to sit down with the massive amount of data and wrap my head around all that I had heard. In addition, the relationships I started to build through my study not only continued, but grew exponentially throughout the coming months. Participants asked me to “keep them in the loop” if I knew of any activities going on in the community. As a result, I often saw them and their families at events I was a part of. They viewed me as someone who, “has the knowledge and experience to make an impact” (Tyler), and I felt a responsibility to them to do my best to take what they had shared with me and make even small changes where I could. Participants provided my name to organizations they were a part of to do presentations, write articles, or contribute in whatever ways made sense. The “word of mouth” notion that was ever so present in the research was now applying to me.

Some of the participants openly told others they were in my research study, and for me, that was fine, as I knew this was their decision to do so. Others, who I bumped into around town would smile and wave. As I continue to live in the small city, I am careful how I describe examples from my research, as I made a promise to both my participants and the academic community of confidentiality. However, I am also aware that I made a promise to my participants and myself to share the findings of this study with the community, so that knowledge translation could indeed occur.

It was my intention that the findings of my study make a difference, not only to my friends and family and my participants, but also to future research studies about PwD living in a small city. I have been slated to present at city council, multiple disability organizations, and report back to the fitness facilities I originally contacted. It is my full intention to do so. I sat down with a director of one of the fitness facilities, part way through writing the findings, about starting an adapted sport program. Near the end of the meeting, he asked how the research was going and if I found anything that might help his facility. I knew a list of things that were mentioned, but chose just one to start with…so as not to scare him. Two weeks later, during the adapted fitness class, two more accessible parking stalls were allocated in front of the building.

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Appendices

Appendix 1.0: Recruitment Poster

UNIVERSITY OF ALBERTA

Physical Activity for People with Disabilities in a Small City

Would you like to share your experience of physical activity in Sunnyvale?

WHAT:	This research study is to identify the factors that promote and prevent participation in physical activity for people with disabilities.
WHY:	We want to understand why people with disabilities in a small city are or are not physically active.
WHO:	Individuals with a disability who are: (a) 18 years of age or older and; (b) have been a resident of Sunnyvale and surrounding area for over 12 months.
WHERE:	Interviews will be held at location of your choice.
TIME:	2 individual interviews Interview length: approximately 60 minutes each

DETAILS:

People with disabilities over the age of 18 are being recruited to participate in this study. We want to ask these people about their experiences of physical activity in a small city. We want to learn about the factors that promote or prevent participation in physical activity for people with disabilities. By identifying what supports and prevents taking part in physical activity, this project may be able to provide direction to policy makers and service providers about how to improve access and programming for people with disabilities in small communities.

Interested in participating? Questions?
Please contact Tara Chisholm (Principal Investigator):
tchishol@ualberta.ca or 587-253-5300